



# Perfect Schedule

Andrea Seguya, Mustafa Jama & Raghava Matta

Andrea Seguya, Raghava  
Matta and Mustafa Jama

11/3/20

T INFO 220

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# Executive Summary

## **Perfect Schedule Employee Management System:**

The portfolio consists of documentation written for the University of Washington Tacoma T Info 220 class project. Our team includes people from different backgrounds who have skills to produce the final product for our client. As a team, we hold values like hard work, integrity, teamwork, relatability, commitment, and diligence. This portfolio consists of the work done in creating the perfect schedule with the implementation of readily available software. The manager was previously using an hand written schedule where it was difficult to see who checked in or didn't check in for shifts and who cannot check in for their shifts. Additionally, Employees are not able to trade shifts easily. This lack of communication with the employees and manager made it extremely difficult to work together. This application will allow the client to manage schedules for employees, specifically shift times, sick leaves, and the possibility of trading shifts. The client will also be able to communicate with employees using this application. This new product will ease the workflow for the manager and simplify the way that they communicate.

## **Main Focus and Client**

The main focus of this project is to help our client Kaylin who is a manager at Jimmy Johns in Tacoma. Our main goal is to provide the company with an interface that is easy to manage when it comes to scheduling their employees. The client is currently facing difficulties to manage employee's schedules and the managers as well as the employees are having hard time to maintain a smooth relationship when it comes to schedules. As a team, we wanted to ensure the client that we would implement an interface where the manager can easily manage schedules and the employees to receive their schedules on time. This application will help improve the overall functionality of the company when it comes to scheduling and other communication features.

## **Context**

The context of this document includes stages our team went go through such as, observations of the current situation, research of readily available software, ideation of our team's potential solutions, prototyping to improve our final product, delivery and feedback from the client.

## **Conclusion**

With a finalized product, we hope that the manager of Jimmy Johns can utilize our product to the best of its ability to simplify the scheduling process at the restaurant

# Team Charter

## Common Goals:

Our common goals for this project are to collaborate with each other and get the project done in a timely manner. We plan to work hand-in-hand to overcome any obstacle we face regarding the project. We also plan to broaden our scope of knowledge regarding client service and application research.

## Core Values:

- ❖ Hard work
- ❖ Integrity
- ❖ Diligence
- ❖ Teamwork
- ❖ Reliability

## Potential Obstacles:

There were obstacles faced during this period of time where we all had a hard time when it comes to completing the project. Some of the obstacles faced include:

- ❖ Time/ schedule conflict
- ❖ Personal reasons/ family
- ❖ Losing a team member
- ❖ Client requirements/ employee opinions

## Ground Rules:

### Communication Rules:

We hold zoom meetings or conference calls at least once a week. We also have a group drive on both google drive and one drive.

### Communication Avenues:

- ❖ Google drive
- ❖ One drive
- ❖ Zoom
- ❖ Phone calls

# Team Charter Profile Contract& Responsibilities

**Name:** Andrea Seguya

**Strengths:** Creative, Assertive, Attentive to detail, Fast learner& Diligent

**Weaknesses:** Impatient, Procrastinator, Strong willed.

**Email & Phone:** [seguya@uw.edu](mailto:seguya@uw.edu) &206-530-9991

**Availability:** Tuesday and Thursday nights

**Personality Quiz Result:** Introvert (34%) Sensing (31%) Thinking (34%) Perceiving (9%)

**What goals do you hope to achieve in being a part of this team?**

I hope to brush up on my leadership skills and be confident that I can successfully lead a team.

**Are there any expectations you would like from this team?**

I would like for every team member to play their role and complete delegated tasks. I would like for team members to contribute to the creation of the interface.

**Are there barriers that would prevent you from achieving the team goals?**

I currently work 3 jobs and so finding the time to fully focus on this class can be overwhelming.

**Other/Any Comments:**

I, **Andrea Seguya**, will be committed to the times listed above and if I do not uphold my title as the "Project Manager" and "Team Member", I understand that I will be reported to Professor West, in which I understand that I will accept the consequences of my actions. I will try my best to meet all deadlines and if I cannot, I will communicate this to the rest of my team. I agree to our created Team Charter and the given requirements as well.

**Sign: Andrea N Seguya**

Date: 11/03/2020

**Name:** Mustafa Jama

**Strengths:** communication, taking action, hard work, problem solving, creativity, organization

**Weaknesses:** procrastination, loss of focus at times

**Email & Phone:** [mjama8@uw.edu](mailto:mjama8@uw.edu) / 206-712-0282

**Availability:** Tuesday's, Thursday's and Saturday's

**Personality Quiz Result:** Extravert (9%) Intuitive (19%) Feeling (12%) Judging (9%)

**What goals do you hope to achieve in being a part of this team?** I would give all my best to make this project work and get the client their app at the recommended time. I also hope to achieve team work skills as well as gaining knowledge from each other.

**Are there any expectations you would like from this team?** Better communication and participation for better results. Equal work load and more members.

**Are there barriers that would prevent you from achieving the team goals?** The loss of one group member that would have been really helpful in the completion of the overall project.

**Other/Any Comments**

None

I, **Mustafa Jama**, will be committed to the times listed above and if I do not uphold my title as the "Designer", "technical writer" and "Team Member", I understand that I will be reported to Professor West, in which I understand that I will accept the consequences of my actions. I will try my best to meet all deadlines and if I cannot, I will communicate this to the rest of my team. I agree to our created Team Charter and the given requirements as well.

SIGNATURE: Mustafa Jama

DATE: 11/03/2020

**Name:** Raghava Matta

**Strengths:** Imaginative and Observant, Good Practical Skills

**Weaknesses:** Humble and Shy

**Email & Phone:** [rmatta2@uw.edu](mailto:rmatta2@uw.edu) / 424-393-5293

**Availability:** Tuesday and Thursdays

**Personality Quiz Result:** ISTJ-D/ISTJ - Introvert (79%), Observant (63%), Feeling (53%), Judging (60%)

**What goals do you hope to achieve in being a part of this team?** I would be focused on getting the client the product they need to improve their business. I'll be consistent in the work I am given as a team member and I will make sure to get it completed.

**Are there any expectations you would like from this team?** I'd like for each team member to be consistent when it comes to work being done and when we can communicate.

**Are there barriers that would prevent you from achieving the team goals?** As of right now, I am unsure.

**Other/Any Comments**

N/A

I, **Raghava Matta**, will be committed to the times listed above and if I do not uphold my title as the "Project Programmer" and "Team Member", I understand that I will be reported to Professor West, in which I understand that I will accept the consequences of my actions. I will try my best to meet all deadlines and if I cannot, I will communicate this to the rest of my team. I agree to our created Team Charter and the given requirements as well.

SIGNATURE: Raghava Matta

DATE: 11/03/2020

# Team Diversity Assessment

Diversity has been repeatedly shown to improve team effectiveness in problem-solving, decision-making, and creative tasks. There are three sources of diversity based on personal characteristics: (1) Demographic Diversity and (2) Personality-Based Diversity and (3) Experience-Based Diversity.

**Three brief descriptions combining all the team member's diversity profiles will be listed below:**

## **Demographic Diversity:**

Our team is quite diverse and we all come from different places. Our age group ranges from 20-24. There were 3 males and one female in this team but because one of our members left, our gender composition is comprised of two males and one female.

## **Personality-Based Diversity**

Our team has a lot of similarities as well as some differences. When it comes to personality, there are two extroverts and one introvert in the team.

## **Experience-Based Diversity**

We are all juniors in the IT major and have part time jobs. We all have some coding skills in java and python.

# Customer Requirements

Every Requirement/goal was discussed and agreed upon by the Team Manager and the manager of the Jimmy John's on Pacific Avenue on October 6, 2020 in person.

## Essential Requirements

- Seamless delivery of the weekly schedule digitally.
- Employees have easy to access to the schedule so they can see who has what shifts, who doesn't have shifts, who has checked in, who needs to trade shifts, and who is unable to check-in.
- The ability to trade shifts between employees.
- Communication is seamless between employees and the manager.
- Readily available documentation of sick time and hours worked.

## Discretionary Requirements

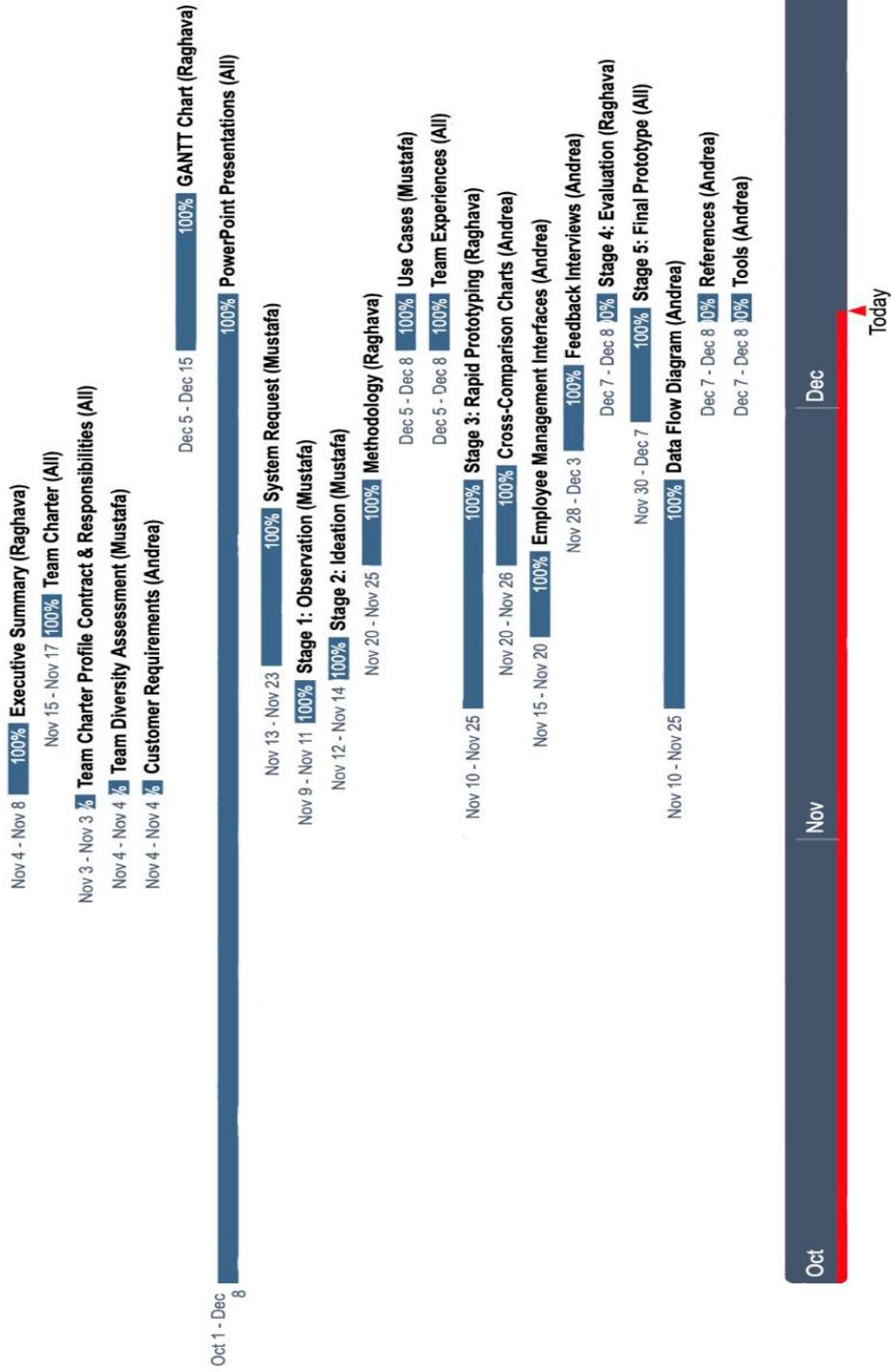
- The schedule can be edited/updated in real-time
- Announcements made by the manager will be updated as soon as they go up so employees can see.
- Clean style/aesthetic for the product.

## Project Plan

THINGS TO ACCOMPLISH		DATE	PERSON RESPONSIBLE	STATUS
<b>Milestone 1: Observation</b>	Personality Tests	10/4/2020	Everyone	Complete
	Team Names	10/6/2020	Everyone	Complete
	Generate Ideas	10/7/2020	Everyone	Complete
	Project decision	10/7/2020	Everyone	Complete
	Member responsibilities	10/7/2020	Everyone	Complete
	Mission Statement	10/8/2020	Everyone	Complete
	Team Goals	10/8/2020	Everyone	Complete
	Schedule implementation	10/8/2020	Everyone	Complete
	Milestone creation	10/9/2020	Andrea & Mustafa	Complete
	PowerPoint for 5 min presentation	10/10/2020	Andrea	Complete
	PowerPoint for 15 min presentation	10/11/2020	Everyone	Complete
<b>Milestone 2: Ideation</b>	Decide on method (App Vs. Website)	10/12/2020	Everyone	Complete
	Search for Apps	10/18/2020	Everyone	Complete
	Ask for specific requirements	10/20/2020	Andrea	Complete
	Analyze the problem in hand	10/23/2020	Everyone	Complete
	Select approaches to tackle problem	10/24/2020	Everyone	Complete
<b>Milestone 3: Rapid-prototyping</b>	Make a research on first App	10/25/2020	Raghava	Complete
	Make a research on second App	10/25/2020	Raghava	Complete
	Make a research on third App	10/26/2020	Mustafa	Complete
	Make a research on fourth App	10/26/2020	Mustafa	Complete
	Compare pros and cons of Apps	11/3/2020	Everyone	Complete
	Match requirements with features	11/4/2020	Everyone	Complete
	Select the App with the most resemblance	11/5/2020	Everyone	Complete
<b>Milestone 4: Evaluation Phase</b>	Test App for errors	11/9/2020	Andrea	Complete
	Use prototype for functionality test	11/19/2020	Andrea	Complete
	Test with fake employees and managers	11/22/2020	Andrea	Complete
	Give the survey	11/25/2020	Andrea	Complete
	Conduct interviews	11/28/2020	Andrea	Complete
	Data analysis	11/28/2020	Everyone	Complete
	Make adjustments	11/29/2020	Everyone	Complete

<b>Milestone 5: Final Prototype Phase</b>	Finalize prototypes	11/30/2020	Andrea	Complete
	Conduct final test as employee & manager	12/1/2020	Andrea	Complete
	Adjust according to feedback and data	12/2/2020	Andrea	Complete
	Finalize project deliverables	12/2/2020	Everyone	Complete
	Complete final PowerPoint	12/5/2020	Everyone	Complete
	Prepare for Final Presentation	12/7/2020	Everyone	Complete

# GANTT Chart



# PowerPoint presentations

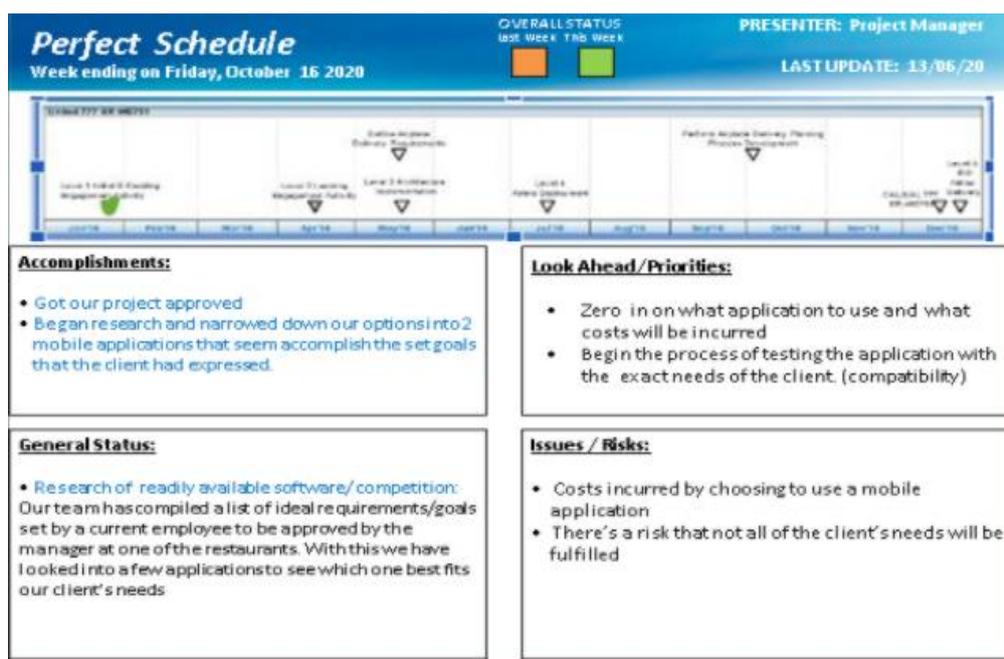
## Week One



Perfect Schedule

Andrea Seguya, Mustafa Jama, Ermias Getahun, Raghava Matta

10/16/2020



**Perfect Schedule**  
Week ending on Friday, October 16 2020

OVERALL STATUS  
Last Week: TND Week

PRESENTER: Project Manager  
LAST UPDATE: 13/06/20

Task 1: Initial Feasibility Research on Viability  
Task 2: Initial Feasibility Research on Viability  
Task 3: Initial Feasibility Research on Viability  
Task 4: Initial Feasibility Research on Viability  
Task 5: Initial Feasibility Research on Viability  
Task 6: Initial Feasibility Research on Viability  
Task 7: Initial Feasibility Research on Viability  
Task 8: Initial Feasibility Research on Viability  
Task 9: Initial Feasibility Research on Viability  
Task 10: Initial Feasibility Research on Viability

**Accomplishments:**

- Got our project approved
- Began research and narrowed down our options into 2 mobile applications that seem accomplish the set goals that the client had expressed.

**Look Ahead/Priorities:**

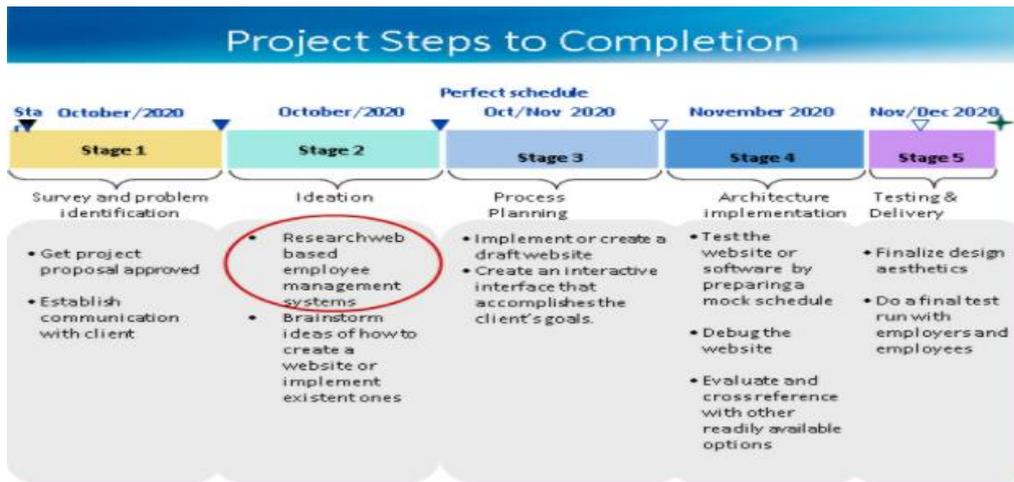
- Zero in on what application to use and what costs will be incurred
- Begin the process of testing the application with the exact needs of the client. (compatibility)

**General Status:**

- Research of readily available software/competition: Our team has compiled a list of ideal requirements/goals set by a current employee to be approved by the manager at one of the restaurants. With this we have looked into a few applications to see which one best fits our client's needs

**Issues / Risks:**

- Costs incurred by choosing to use a mobile application
- There's a risk that not all of the client's needs will be fulfilled



## STP

Hurdle or Barrier we are addressing:

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

## Situation

Defining the Situation:

Customers receive their food a lot later due to the delays in changing over. This often leads to Complaints which in most cases results in compensation which is a loss for the restaurant. Time delays also lead to frustration and loss of customers as it is stated on the website that the Goal of the restaurant is to deliver food in a timely manner.

Employees end up calling in sick with no replacement because they are unable to find someone To work their shift. The restaurant inevitably suffers because they become understaffed usually in the busiest times.



## Target

Identifying the Target: A restaurant on the Pacific avenue Strip.

- The state we are in right now is the general design phase and we are planning to introduce an app for the company.
- This app enables the managers to have a smoother and professional relationship with the employees.
- The App contains features like scheduling, abandoning shifts, announcements, timesheets, unavailability and
- The outcomes we are looking for are the provision of an ideal workplace where employees get their schedule
- Change shifts under proper authorization.
- We are also looking to increase the proper exchange of information among management and other branches
- This app will help in aiding everyone towards a common understanding and a harmonious collective goal.



## P - Plan

Action Planning Worksheet

Date: 10/08/2020

Champion: Andrea Seguya

Team : 5

In order to successfully complete the development of an employee management system (app) for our clients that supports their business to grow quickly and gain an advantage from technology that's usable and reliable, we prepared the following action plan. Our action plan is based on time frame, action steps, team members names with assigned work to them separately, and conditions of tasks.



In addition to our team continuous effort and dedication to launch the new system that enables our clients to manage their employee information, engagement, and performance effectively, we are also going to use a project milestone tracking for the precise scheduling, and to stay on track.

Action Checklist	Assigned To	Date	Status
Create Team	All	10/05/2020	Completed
Define the Situation and Targeted Goal	All	10/06/2020	Completed
Access and Review Current Websites	Mustafa and Ermias	10/12/2020	Completed
Examine Competitor Websites	<u>Musrafa</u> and Ermias	10/12/2020	Completed
Create Lay outs			
Content Writing and Assembly			
Coding			
Test the Created Website			
Upload the Website to Server			
Final Testing and Launch			
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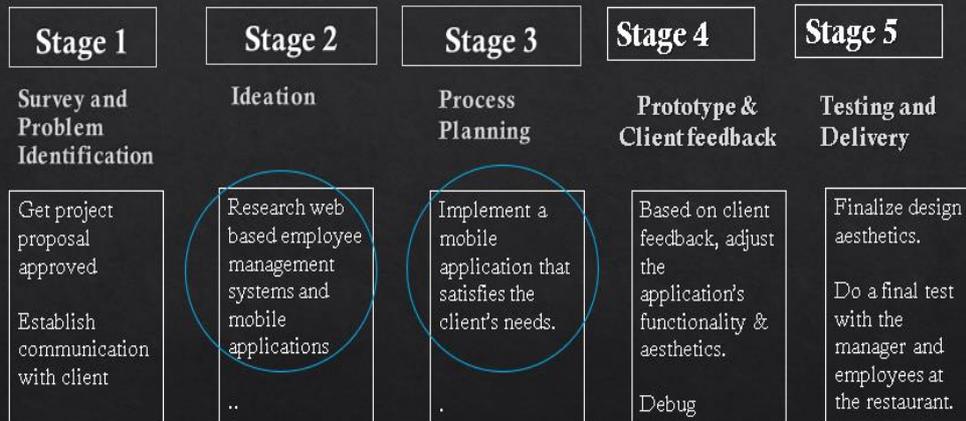
## Week Two

# Perfect Schedule

Andrea Seguya and Mustafa Jama

10/23/2020

## Project Steps to Completion



# Perfect Schedule

Week ending in 10/23/2020

Overall status: ■



- Accomplishments:**
- Narrowed down our search to four applications
  - Implemented a mock schedule to test functionality

- Look Ahead/Priorities:**
- Continue to implement mock schedules, sick times and test the general functionality of ONE application

- General Status:**
- We are testing the four said applications for the one that achieves the client's needs the best. We are testing for the design principles. The application should be easy to use.

- Issues/Risks**
- Finding an application that satisfies the client's needs and abides by the design principles we've learned this quarter.

## STP

### Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

### Target

The target restaurant is Jimmy John's

### Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

## Applications to choose from

- Deputy
- Homebase
- When I Work
- Clockify



## Week three

# Perfect Schedule

Andrea Seguya, Mustafa Jama, and, Raghava Matta  
10/30/2020

## Project Steps to Completion

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<b>Survey and Problem Identification</b>	<b>Ideation</b>	<b>Process Planning</b>	<b>Prototype &amp; Client feedback</b>	<b>Testing and Delivery</b>
<ul style="list-style-type: none"> <li>Get project proposal approved.</li> <li>Establish communication with client</li> </ul>	<ul style="list-style-type: none"> <li>Research web based employee management systems and mobile applications</li> <li>..</li> </ul>	<ul style="list-style-type: none"> <li>Implement a mobile application that satisfies the client's needs.</li> <li>.</li> </ul>	<ul style="list-style-type: none"> <li>Based on client feedback, adjust the application's functionality &amp; aesthetics.</li> <li>Debug</li> </ul>	<ul style="list-style-type: none"> <li>Finalize design aesthetics.</li> <li>Do a final test with the manager and employees at the restaurant.</li> </ul>

## Perfect Schedule

Week ending in 10/23/2020 Overall status: ■

<p><b>Accomplishments:</b></p> <ul style="list-style-type: none"> <li>○ Evaluated each of our applications for design principles as defined in class using evaluation charts provided to us by the TA Jenifer</li> </ul>	<p><b>Look Ahead/Priorities:</b></p> <ul style="list-style-type: none"> <li>○ Implement functionality with Deputy</li> </ul>
<p><b>General Status:</b></p> <ul style="list-style-type: none"> <li>○ We are testing the four said applications for the one that achieves the client's needs the best. We are testing for the design principles. The application should be easy to use.</li> </ul>	<p><b>Issues/Risks</b></p> <ul style="list-style-type: none"> <li>○ Costs associated with using Deputy</li> </ul>

# STP

## Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

## Target

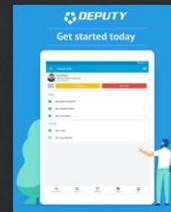
The target restaurant is Jimmy John's

## Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

## Applications to choose from

- Deputy
- Homebase
- When I Work
- Clockify



## (Android) Clockify

- ◆ Pros:
  - ◆ Includes Google sign in for easy access.
  - ◆ Simple and clean Interface.
  - ◆ Dark Mode
- ◆ Cons:
  - ◆ Clunky user experience. In order to login or sign up, it needs to access an app that uses the Internet but in doing so, it redirects you back to the app for no apparent reason.
  - ◆ Leaves out, Yahoo, Outlook, and Apple logins.
  - ◆ It needs external use of other apps like Chrome or Gmail to perform tasks like "Help" and "Support". Nothing 'in app' is ever done.
  - ◆ Boring and "lifeless" (No animations, icons, and a limited amount of graphics \*Only 1\*).



## (Android) When I Work

- ◆ Pros:
  - ◆ Includes Google sign in for easy access.
  - ◆ Simple and clean Interface. Plentiful amount of animations.
  - ◆ Everything is done 'in app'. Logins, and support is done within the app.
  - ◆ Live emails and notifications are up to date.
  - ◆ Dark Mode
  - ◆ Chat is easy to use.
- ◆ Cons:
  - ◆ Tends to lag when using keyboard.
  - ◆ Leaves out, Yahoo, Outlook, and Apple logins.



## (Android/iPhone) Homebase

- Pros
  - Extremely user-friendly and easy to edit once the schedule is made.
  - Makes it easy for employees to switch schedules on their own.
  - Makes it easy to adjust hours that have been incorrectly clocked.
- Cons
  - The messaging features are not consistent across the platform.
  - The roles for employees and how to navigate them can be confusing especially when trying to schedule one employee in two different departments.
  - Separation of departments is a bit rigid and makes it difficult for universal employees to be scheduled easily.



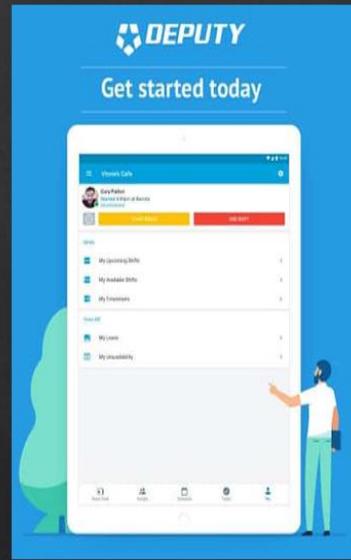
## (Android/iPhone) Deputy

### Pros

- ◆ Easy login.
- ◆ Accurate punch times.
- ◆ Accessible through any web browser.

### Cons

- ◆ Break duration on Chrome sometimes does not display properly.



## Week four

# Perfect Schedule

Andrea Seguya, Mustafa Jama, and Raghava Matta

11/05/2020

# Agenda

- ◊ Introduction
- ◊ Project Milestone
- ◊ Project Steps to Completion
- ◊ Situation, Target & Proposal
- ◊ Updated Project Goals and requirements
- ◊ Team Charter
- ◊ Personality Profiles
- ◊ Update on Client engagement
- ◊ Clean up plan
- ◊ Top employee management systems
- ◊ Summary

## Perfect Schedule

Overall status: ■

Week ending in 11/06/2020



### Accomplishments:

- Started to implement functionality with Deputy

### Look Ahead/Priorities:

- Fully implement client's needs and produce an interface that can be used as a prototype

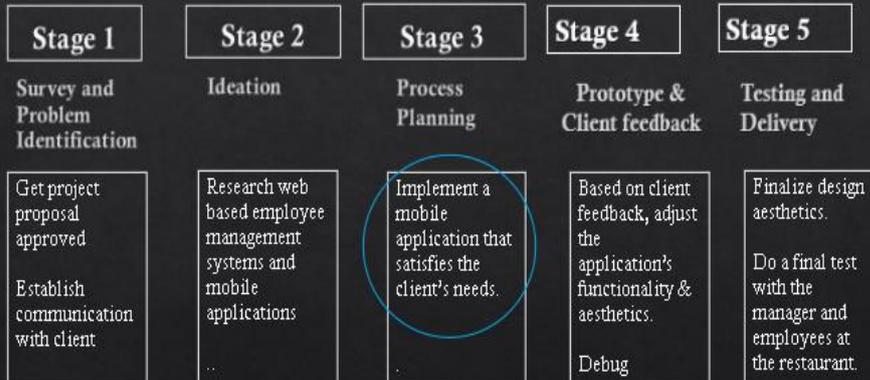
### General Status:

- We are working to add schedules to the application

### Issues/Risks

- Costs associated with using Deputy
- Deputy not being able to fulfill all of the client's needs

## Project Steps to Completion



# STP

## Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

## Target

The target restaurant is Jimmy John's

## Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

## Project goals and requirements agreed by our client

### Essential Requirements

- Focusing on creating a schedule in which employees have an easier time when following a schedule. They can follow it without having to hit any hurdles in terms of delivery timing, sick days, tradeable shifts, and non-shifts.
- The manager has easy to access to the schedule so they can see who has what shifts, who doesn't have shifts, who has checked in, who needs to trade shifts, and who is unable to check-in.
- Communication is seamless between employees and the manager.

### Discretionary Requirements

- The schedule can be edited/updated whenever.
- Announcements made by the manager will be updated as soon as they go up so employees can see.
- Clean style/aesthetic for the product.

## Team Charter

### ◆ Common Goals

Our common goals for this project are to collaborate with each other and get the project done in a timely manner. We plan to work hand-in-hand to overcome any obstacle we face regarding the project. We also plan to broaden our scope of knowledge regarding client service and application research.

### ◆ Core Values

- Hardwork    Integrity    Teamwork
- Diligence    Commitment    Reliability

### ◆ Potential Obstacles

There were obstacles faced during this period of time where we all had a hard time when it comes to completing the project. Some of the obstacles faced include:

- Time/schedule conflict                      - Personal reasons/family
- Losing a team member                        - Client requirements/employee opinions

## Team Charter (Ctd)

### ◆ Ground Rules

Expectations set for the entire team:

- Keep tabs on the amount of work being done by each member.
- Assign certain tasks for each member to do before certain due dates set by the project manager.
- Up to date with the members of the project by communicating through message or email.
- Respecting ideas passed on by any member of the group.

## Team Charter (Ctd)

### ◆ Communication Plan

We hold zoom meetings or conference calls at least once a week. We also have a group drive on both google drive and one drive.

### ◆ Communication Avenues

- Google drive
- One drive
- Zoom
- Phone call

## Project Manager: Andrea Seguya

### ISTP

Introvert (34%) Sensing (31%) Thinking (34%) Perceiving (9%)

### Strengths

- ◆ Creative
- ◆ Attentive to detail
- ◆ Fast learner
- ◆ Assertive/ Confident

### Weaknesses

- ◆ Procrastinator
- ◆ Not the best communicator
- ◆ Impatient



## Project Designer & Technical writer: Mustafa Jama

### ENFI

Extravert (9%) Intuitive (19%) Feeling (12%) Judging (9%)

#### Strengths

- Team Player
- Problem Solver
- Creativity
- Organization and risk taking

#### Weaknesses

- Focusing
- Procrastination



## Project Programmer: Raghava Matta

### ISFJ-A / ISFJ-T

Introvert (79%) Observant (63%) Feeling (53%) Judging (60%)

#### Strengths

- Imaginative and Observant
- Good Practical Skills

#### Weaknesses

- Humble and Shy



## Update on Client Engagement

Most recent Interaction with the client (manager of the restaurant):

October 30th 2020

#### Face to face conversion:

Updated the client on our progress so far and expressed concerns over the cost of implementation a mobile application. I also described the selection process and why we ended up picking Deputy. I expressed some concerns about Deputy as well.

Her response:

She said she was onboard with whatever we come up with and is willing to connect me to someone that could implement the interface for the website. She was also slightly concerned with the cost and the learnability of the application

# Current Employee Management System

JIMMY JOHN'S SCHEDULE

	SUNDAY 10/25/2020	MONDAY 10/26/2020	TUESDAY 10/27/2020	WEDNESDAY 10/28/2020	THURSDAY 10/29/2020	FRIDAY 10/30/2020	SATURDAY 10/31/2020
EMERSON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
...	...	...	...	...	...	...	...

# Top Employee Management Software

Mobile App Name	App Store Rating	Learnability	Monthly Cost	Utility	Biggest Issues
<a href="#">Clockify</a>	4.7/5	6/10	30\$	6/10	Clunky user interface
When I work	4.7/5	5/10	67\$	4/10	Laggy and tends to randomly close
HomeBase	4.8/5	7/10	50\$	7/10	Employees can't work 2 roles
Deputy ★	4.8/5	8/10	30\$	8/10	

## (Android) [Clockify](#)

- ◆ Pros:
- ◆ Includes Google sign in for easy access.
- ◆ Simple and clean Interface.
- ◆ Dark Mode
  
- ◆ Cons:
- ◆ Clunky user experience. In order to login or sign up, it needs to access an app that uses the Internet but in doing so, it redirects you back to the app for no apparent reason.
- ◆ Leaves out, Yahoo, Outlook, and Apple logins.
- ◆ It needs external use of other apps like Chrome or Gmail to perform tasks like "Help" and "Support". Nothing 'in app' is ever done.
- ◆ Boring and "lifeless" (No animations, icons, and a limited amount of graphics \*Only 1\*).



## (Android) When I Work

- ◆ Pros:
- ◆ Includes Google sign in for easy access.
- ◆ Simple and clean Interface. Plentiful amount of animations.
- ◆ Everything is done 'in app'. Logins, and support is done within the app.
- ◆ Live emails and notifications are up to date.
- ◆ Dark Mode
- ◆ Chat is easy to use.
- ◆ Cons:
- ◆ Tends to lag when using keyboard.
- ◆ Leaves out, Yahoo, Outlook, and Apple logins.



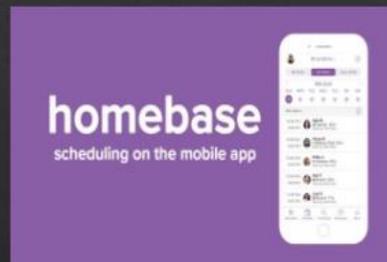
## (Android/iPhone) Homebase

### Pros

- Extremely user-friendly and easy to edit once the schedule is made.
- Makes it easy for employees to switch schedules on their own.
- Makes it easy to adjust hours that have been incorrectly clocked.

### Cons

- The messaging features are not consistent across the platform.
- The roles for employees and how to navigate them can be confusing especially when trying to schedule one employee in two different departments.
- Separation of departments is a bit rigid and makes it difficult for universal employees to be scheduled easily.



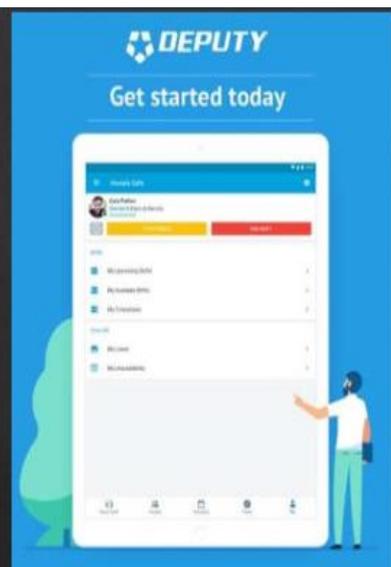
## (Android/iPhone) Deputy

### Pros

- ◆ Easy login.
- ◆ Accurate punch times.
- ◆ Accessible through any web browser.

### Cons

- ◆ Break duration on Chrome sometimes does not display properly.

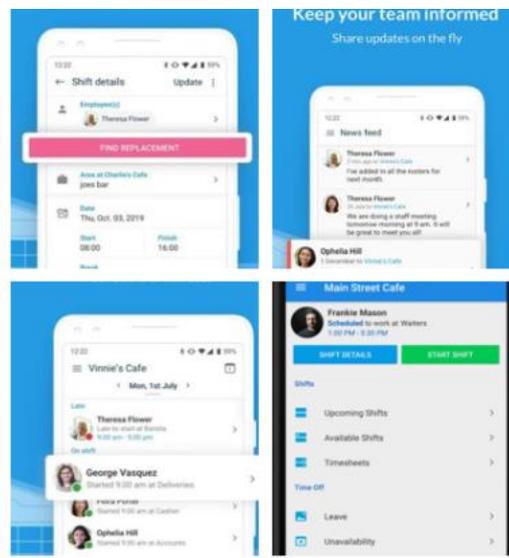


# Clean-up Plan

- ◆ We plan to solve this situation by introducing the scheduling app called Deputy to help smoothen the situation between the managers and employees. The app has a "News Feed" page where managers make announcements and all the employees who want to communicate with everyone including shift offers can use that platform.
- ◆ It has a "People" section where the user can look at other employee's schedule and what time they clock in.
- ◆ Deputy also has a "Tasks" section where the managers can assign specific tasks to the employees.
- ◆ And finally the app has a "Me" section where you can clock in to your shift, clock out for lunch and end your shift. An employee can also look at upcoming shifts for the next two weeks, available/abandoned shifts, timesheets(hours worked weekly). This app also enables an employee to take a leave or report unavailability on time. Employees can also use this platform to exchange shifts with just one or two clicks.

## Inside the Deputy App

- ◆ These pictures are examples of how the deputy app looks like and these specific illustrations show:
  - Shift details/exchanges
  - News feed/Communication
  - People/Schedule
  - "Me" section which includes all the shift information.



## Summary Points

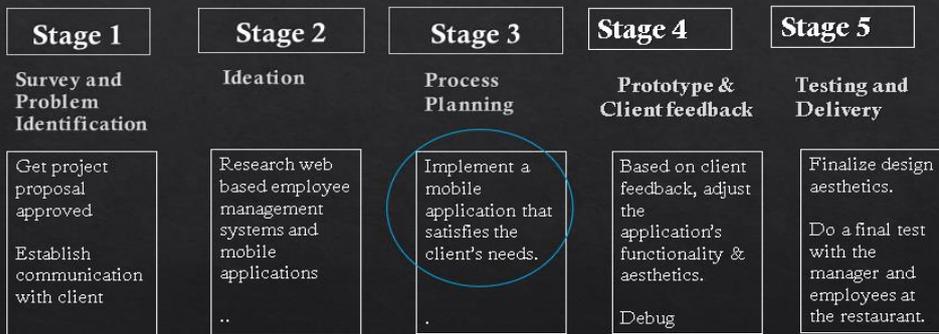
- ◆ As we progress with the project, we plan to:
  - Compile more info on how we could make the interface easier for both the manager and the employees.
  - Create as many versions as possible to see which works the best for the client.
  - Design and focus on a clean aesthetic/style for our client when they interact with our product.
  - Work towards completing the final application for the client.
  - Continue to look into various interfaces to help inspire style and functionality of our product to progress development.



Week Five



# Project Steps to Completion



## Perfect Schedule

Week ending in 11/14/2020

Overall status: ■



### Accomplishments:

- Gathered employee information and constructed a framework for which the application will run. Examined sample schedules and created a team account for deputy

### Look Ahead/Priorities:

- Implement functionality with deputy

### General Status:

- We are entering mock schedules and times and trying to figure out the best way to use the application

### Issues/Risks

- Costs associated with using Deputy
- Busy work/school schedules and limited time

## STP

### Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

### Target

The target restaurant is Jimmy John's

### Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

## Week six

# Perfect Schedule

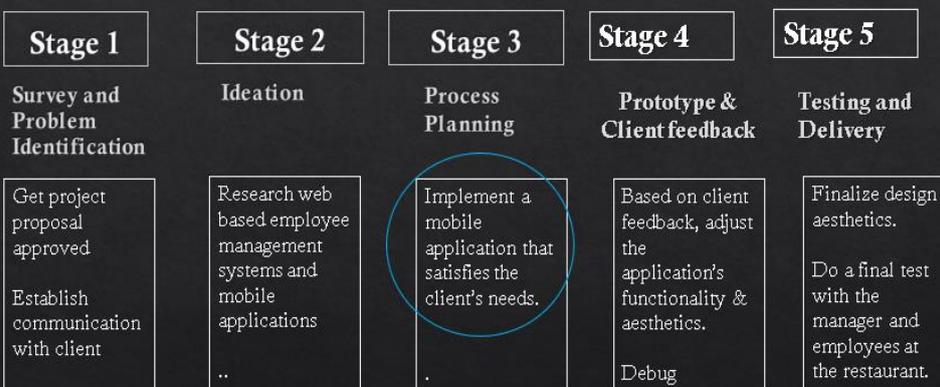
Andrea Seguya, Mustafa Jama, and, Raghava Matta

11/21/2020

## Agenda

- ◇ Recap
- ◇ Project Steps to Completion
- ◇ Four Square Chart
- ◇ Schedule review on the website
- ◇ Schedule review on the application
- ◇ Breakdown into app features and future implementation

## Project Steps to Completion



# Perfect Schedule

Week ending in 11/21/2020

Overall status: ■



**Accomplishments:**

- Implemented a basic schedule

**Look Ahead/Priorities:**

- Continue to implement functionality with deputy and present prototype to the client

**General Status:**

- We are working on making the schedule a lot more realistic

**Issues/Risks**

- Costs associated with using Deputy /End of the free trial
- Busy work/school schedules and limited time

## STP

### Situation

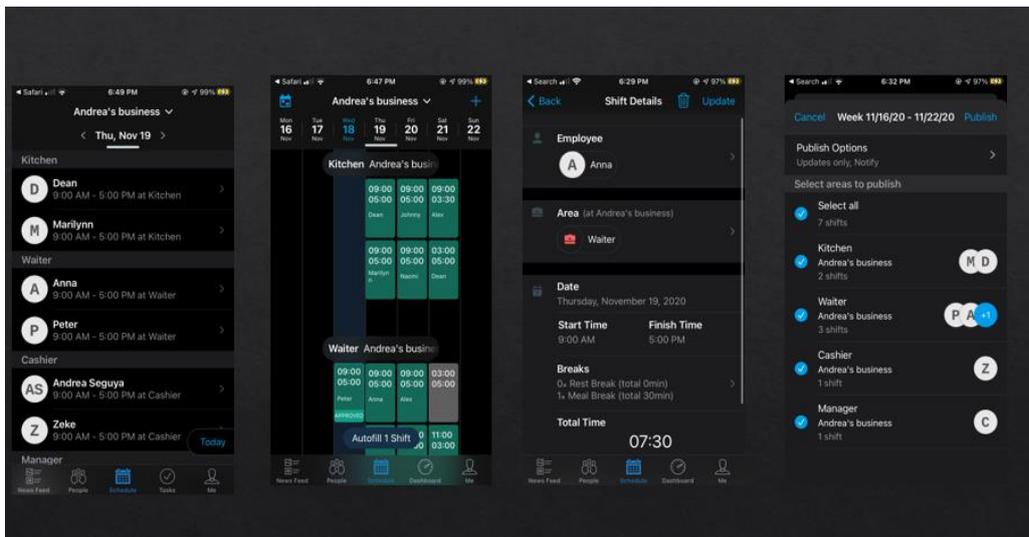
At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

### Target

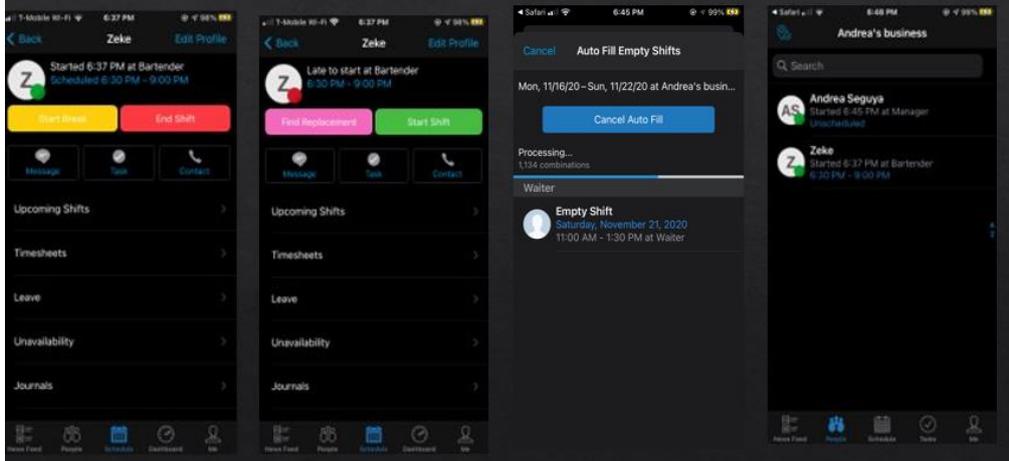
The target restaurant is Jimmy John's

### Plan

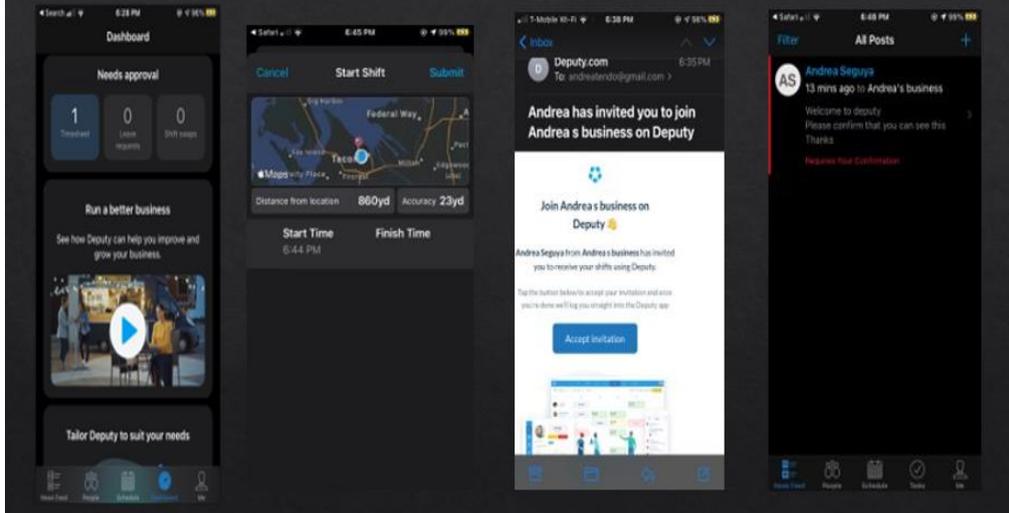
Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.



## Employee Control features.



## Real-time cool features



## Week seven

# Perfect Schedule

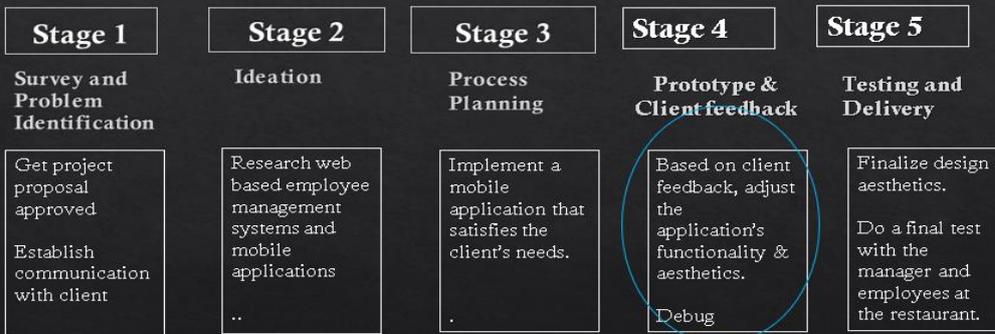
Andrea Seguya, Mustafa Jama, and, Raghava Matta

11/28/2020

# Agenda

- ◊ Recap
- ◊ Project Steps to Completion
- ◊ Four Square Chart
- ◊ Website's current state
- ◊ Mobile application's current state
- ◊ Additional features

## Project Steps to Completion



## Perfect Schedule

Week ending in 11/28/2020

Overall status: ■



### Accomplishments:

- Implemented a realistic schedule and added tasks that employees usually do for closing

### Look Ahead/Priorities:

- Meet with the client for a feedback interview

### General Status:

- We are adding finishing touches to the website and are hoping to deliver it to the client next week

### Issues/Risks

- Costs associated with using Deputy /End of the free trial
- The client's busy schedule and change of management

# STP

## Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

## Target

The target restaurant is Jimmy John's

## Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

## Current Schedule Page

The screenshot shows a web-based scheduling interface for 'Andrea's business'. The interface includes a navigation bar with options like 'Me', 'News Feed', 'Tasks', 'Locations', 'People', 'Schedule', 'Timesheets', and 'Reports'. Below the navigation bar, there are filters for 'View: Employees | Week' and 'Auto' settings. The main area displays a weekly schedule grid from Monday to Sunday. Each day's column shows shifts for various employees, including roles like 'Driver', 'Manager', and 'Line'. Shifts are color-coded (green for Driver, red for Manager, yellow for Line) and include details like start/end times and hours worked. A search bar is visible at the top left, and a 'Hello, Andrea Seg...' notification is at the top right.

## Current Schedule (mobile)

The three screenshots show a mobile scheduling application interface. The first screenshot is for a 'Manager' view, showing a weekly schedule grid with columns for days (Mon-Sun) and rows for employees (Carol, Johnny, Andrea, Matthew, Andrea). The second screenshot is for a 'Driver' view, showing a weekly schedule grid with columns for days (Mon-Sun) and rows for employees (Alex, Anna, Becca, Carol, Dana, Matthew, Becca, Mary, Lina, Anna). The third screenshot is for a 'Line' view, showing a weekly schedule grid with columns for days (Mon-Sun) and rows for employees (Peter, Andrea, Becca, Dana, Alex, Becca, Becca). Each screenshot includes a search bar, a date selector, and a bottom navigation bar with icons for 'News Feed', 'People', 'Schedule', 'Dashboard', and 'Me'.

Week eight

# Perfect Schedule

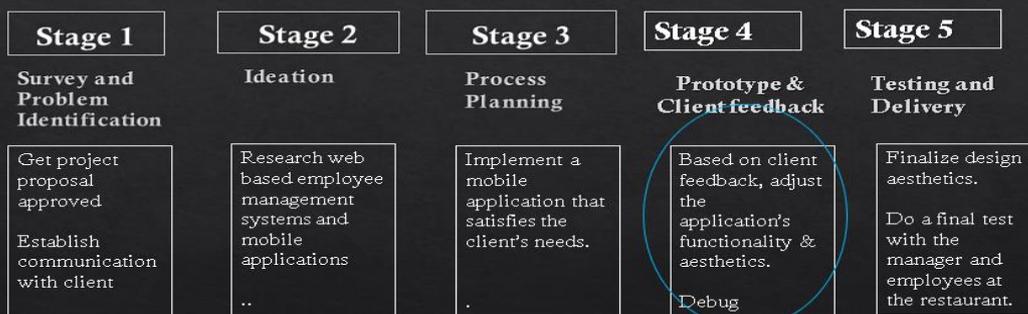
Andrea Seguya, Mustafa Jama, and, Raghava Matta

11/28/2020

## Agenda

- ◇ Recap
- ◇ Project Steps to Completion
- ◇ Four Square Chart
- ◇ Website's current state
- ◇ Mobile application's current state
- ◇ Additional features

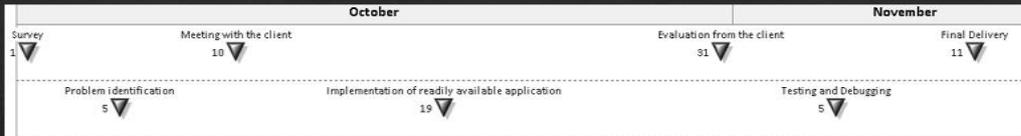
## Project Steps to Completion



# Perfect Schedule

Week ending in 11/28/2020

Overall status: ■



### Accomplishments:

- Implemented a realistic schedule and added tasks that employees usually do for closing

### Look Ahead/Priorities:

- Meet with the client for a feedback interview

### General Status:

- We are adding finishing touches to the website and are hoping to deliver it to the client next week

### Issues/Risks

- Costs associated with using Deputy /End of the free trial
- The client's busy schedule and change of management

# STP

## Situation

At a particular restaurant, the manager struggles with scheduling and delivering schedules to delivery drivers on time. Schedules are often delivered late and drivers are not aware of how many hours they have worked until they are paid. They are also unaware of sick time and have no sure way of reaching other drivers in case they would like to trade shifts.

## Target

The target restaurant is Jimmy John's

## Plan

Implement an interface where the manager can easily manage schedules. The employees can easily trade shifts, view their sick time and clock in. The manager is also able to post announcements and have an open line of communication with employees.

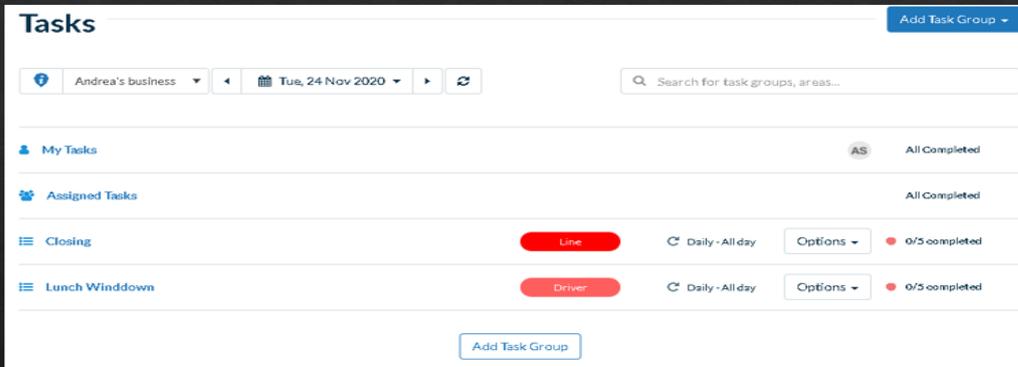
# Current Schedule Page

Employee	Mon 23rd	Tue 24th	Wed 25th	Thu 26th	Fri 27th	Sat 28th	Sun 29th
Open/Empty Shifts		11am - 1:30pm Driver	11am - 1:30pm Driver	7:45am - 5:45pm 4 Shifts, 23.25 Hrs	9am - 5pm 5 Shifts, 13.50 Hrs	11am - 6:30pm 2 Shifts, 14.00 Hrs	
Alex (25.25 Hrs / \$340.88)	9:45am - 3pm Driver	4pm - 10pm Driver		9am - 10:30am Line	9:30am - 5:15pm 4 Shifts, 6.50 Hrs	10:15am - 5:45pm Line	
Andrea (20.00 Hrs / \$0.00)	1pm - 4:45pm Manager	1pm - 4:45pm Manager	9am - 8:45pm 3 Shifts, 10.50 Hrs	9am - 10:30am Manager		9am - 10:30am Manager	
Andrea Seguya (28.00 Hrs / \$805.00)	1pm - 4:45pm Manager	1pm - 4:45pm Manager		10:15am - 5:45pm Cashier	9am - 5pm Line	10:15am - 5:45pm Manager	
Anna (24.50 Hrs / \$330.75)	11:30am - 1:30pm Driver	8am - 1pm Driver		9:30am - 6pm 2 Shifts, 8.00 Hrs	9am - 5:30pm 2 Shifts, 3.50 Hrs	10:45am - 6:15pm Driver	
Becca (23.50 Hrs / \$0.00)	1pm - 5am Manager		9:30am - 3:15pm Driver	10:15am - 5:45pm Line	10:15am - 5:45pm Line	9am - 3:45pm Line	

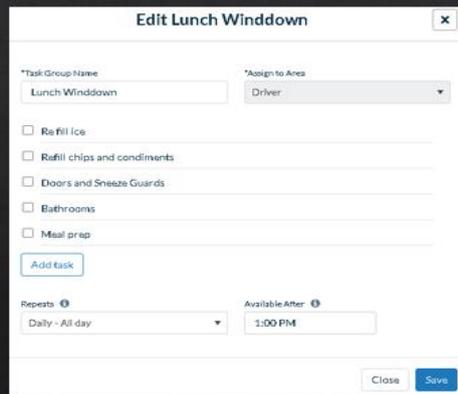
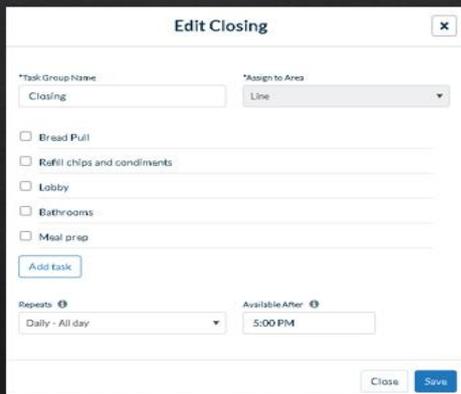
# Current Schedule (mobile)



# Closing Tasks and Lunch Shift changes



# Deeper look into tasks



Week nine

# Perfect Schedule

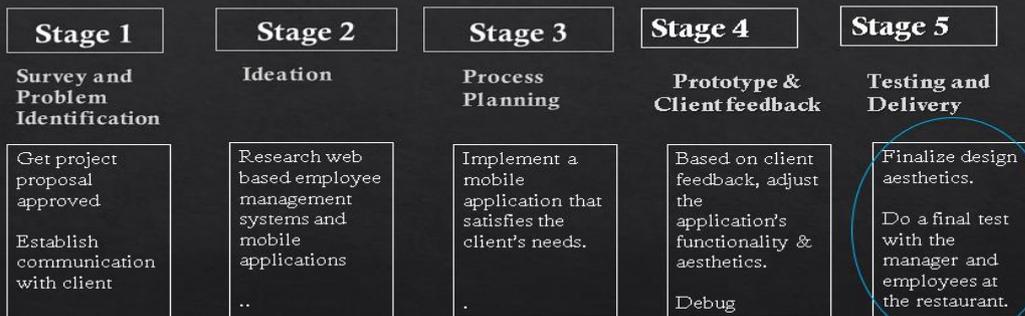
Andrea Seguya, Mustafa Jama, and, Raghava Matta

12/05/2020

## Agenda

- ◆ Recap
- ◆ Project Steps to Completion
- ◆ Four Square Chart
- ◆ Feedback interview
- ◆ Portfolio documents
- ◆ Website's current state
- ◆ Additional features

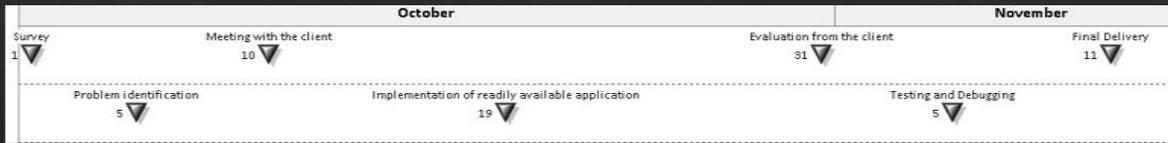
## Project Steps to Completion



# Perfect Schedule

Week ending in 12/05/2020

Overall status: ■



## Accomplishments:

- Conducted a feedback interview with the client and delivered the product to the client

## Look Ahead/Priorities:

- Continue to check in and try to implement the use of the product with the new management
- Finish up the portfolio

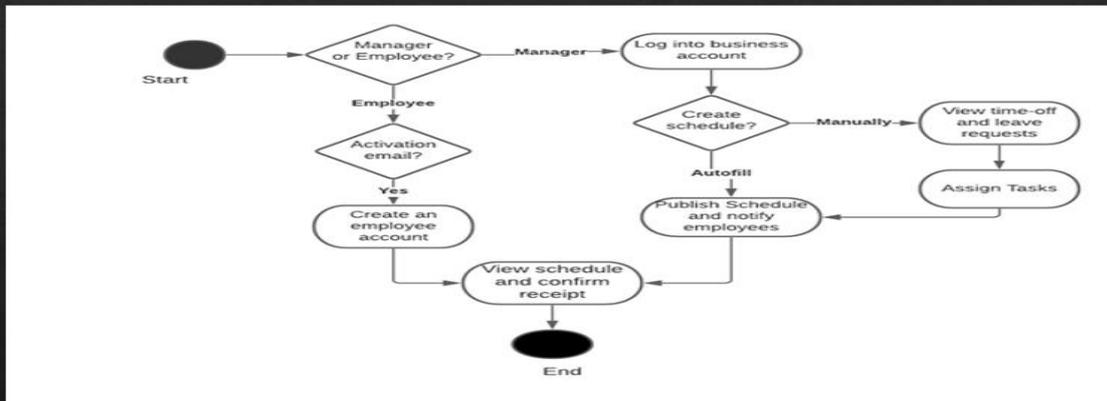
## General Status:

- We were able to meet with the client and discuss some concerns with the application.

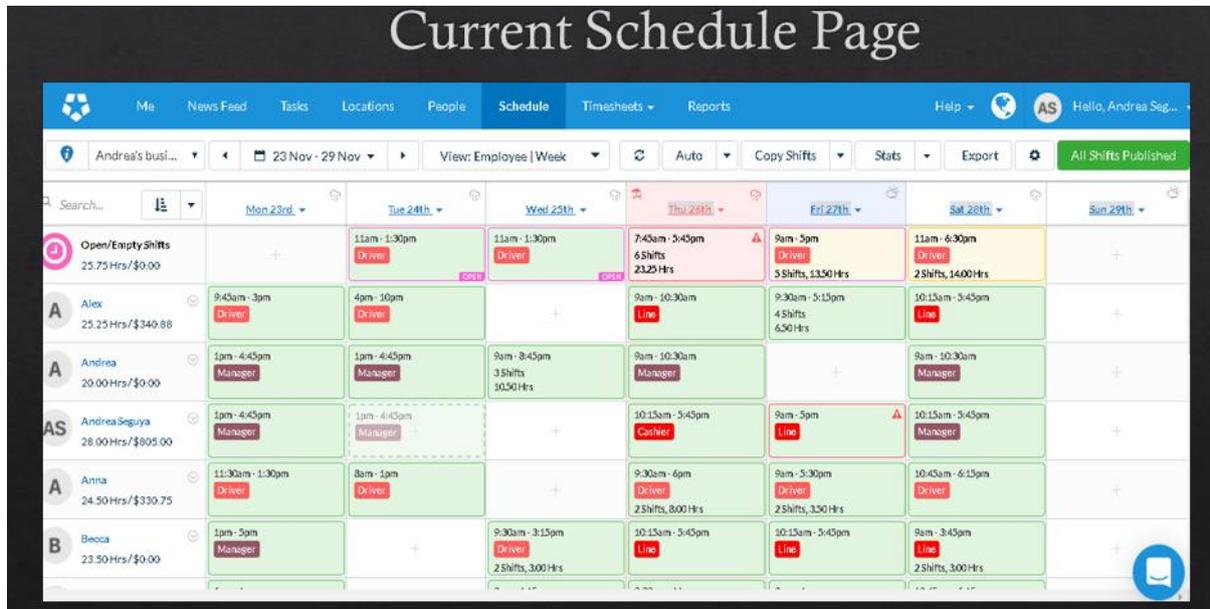
## Issues/Risks

- Change in management

# Data flow chart



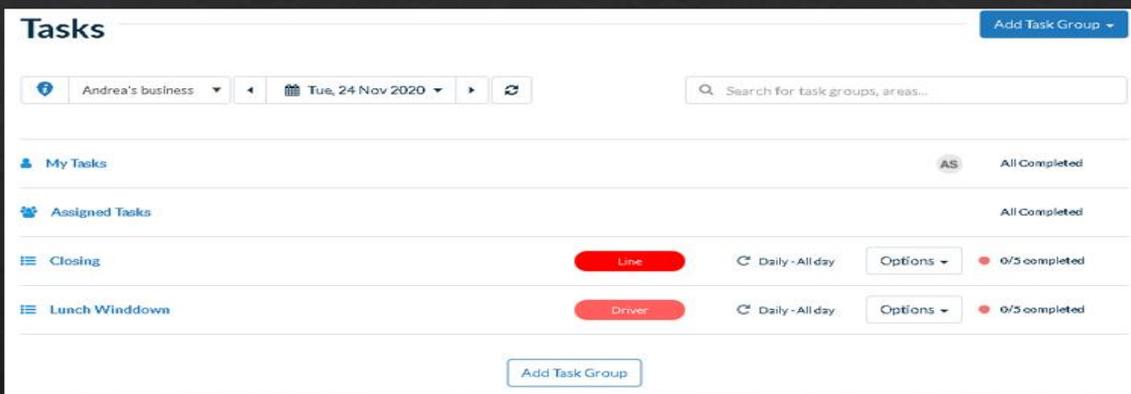
# Current Schedule Page



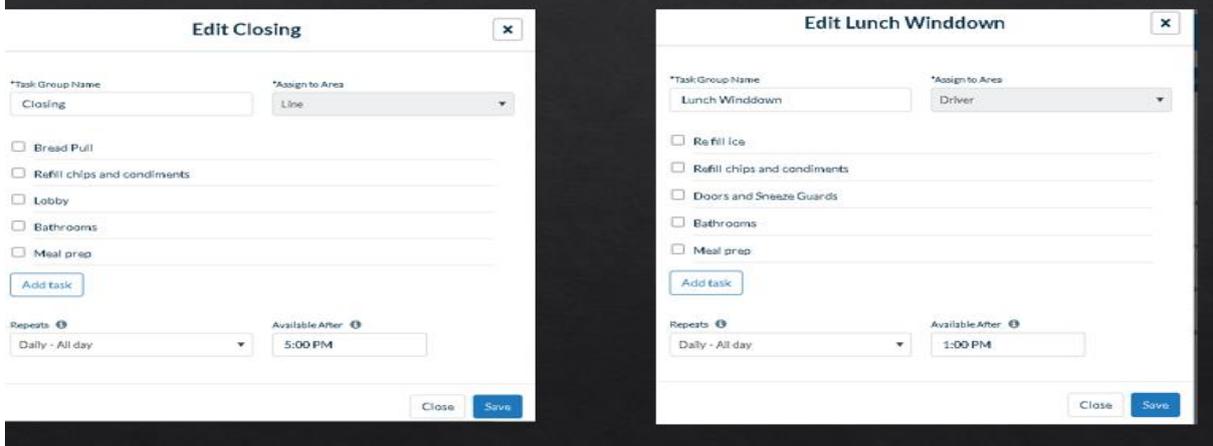
# Current Schedule (mobile)



# Closing Tasks and Lunch Shift changes



# Deeper look into tasks



## Week Ten



# Perfect Schedule

Andrea Seguya, Mustafa Jama, and Raghava Matta

12/12/2020

## Introduction

Speaking to you today is Team 5. It comprises of:

Andrea Seguya as the Project manager

Raghava Matta as the Project programmer

Mustafa Jama as the project designer and technical writer

Our goal is to implement an employee management system that allows the supervisor to manage schedules in an organized and timely manner.

## Agenda

- ◇ Introduction
- ◇ Final Project Steps to Completion
- ◇ Final Four Square Chart
- ◇ Demonstration of the final product
- ◇ Individual team member roles
- ◇ Lessons learned & team experiences
- ◇ Final product delivery
- ◇ Project reflections
- ◇ Questions

## Project Manager: Andrea Seguya

### ISTP

Introvert (34%) Sensing (31%) Thinking (34%) Perceiving (9%)

#### Strengths

- ❖ Creative
- ❖ Attentive to detail
- ❖ Fast learner
- ❖ Assertive/Confident

#### Weaknesses

- ❖ Procrastinator
- ❖ Not the best communicator
- ❖ Impatient



## Project Designer & Technical writer: Mustafa Jama

### ENFI

Extravert (9%) Intuitive (19%) Feeling (12%) Judging (9%)

#### Strengths

- Team Player
- Problem Solver
- Creativity
- Organization and risk taking

#### Weaknesses

- Focusing
- Procrastination



## Project Programmer: Raghava Matta

### ISFJ-A / ISFJ-T

Introvert (79%) Observant (63%) Feeling (53%) Judging (60%)

#### Strengths

- Imaginative and Observant
- Good Practical Skills

#### Weaknesses

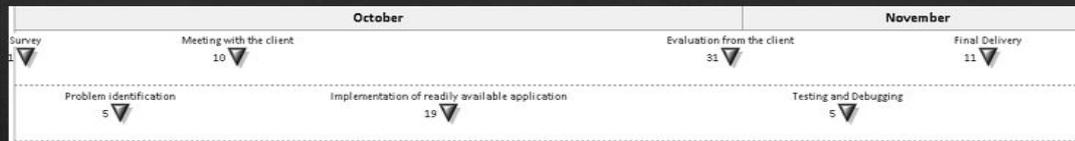
- Humble and Shy



# Perfect Schedule

Week ending in 12/12/2020

Overall status: ████



## Accomplishments:

- Conducted a final feedback interview with an employee
- Delivered the product to the client

## Look Ahead/Priorities:

- Check in with the client occasionally.

## General Status:

- Completed the portfolio and successfully delivered the product to the client.

## Issues/Risks

- None

## Project Steps to Completion

### Stage 1

#### Survey and Problem Identification

Get project proposal approved  
Establish communication with client

### Stage 2

#### Ideation

Research web based employee management systems and mobile applications

### Stage 3

#### Process Planning

Implement a mobile application that satisfies the client's needs.

### Stage 4

#### Prototype & Client feedback

Based on client feedback, adjust the application's functionality & aesthetics.

Debug

### Stage 5

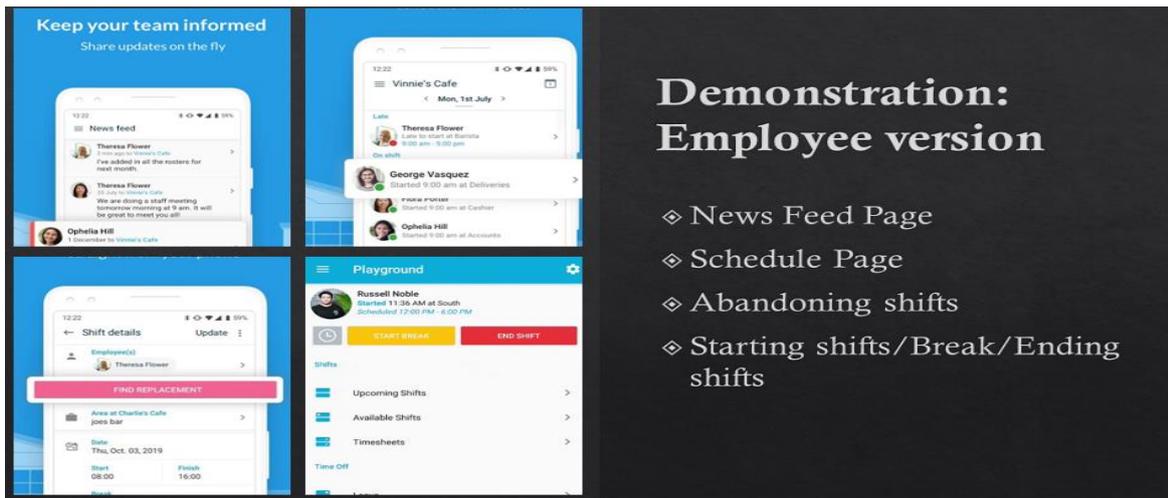
#### Testing and Delivery

Finalize design aesthetics.

Do a final test with the manager and employees at the restaurant.

## Demonstration of the Manager version

◇ <https://ea1ae908052603.na.deputy.com/#>



## Demonstration: Employee version

- ◊ News Feed Page
- ◊ Schedule Page
- ◊ Abandoning shifts
- ◊ Starting shifts/Break/Ending shifts

## Team Member Role (Andrea)

- ◊ Project Manager.

**Throughout the quarter, my responsibilities as project manager have been:**

- ◊ Delegate weekly tasks
- ◊ Create templates for the portfolio and weekly presentations
- ◊ Create weekly presentation sheets and update four square charts
- ◊ Update schedules on deputy and communicate with the client
- ◊ Ensure that other teammates and doing their part

## Team Member Role (Mustafa)

- ◊ Developer and Technical Writer
- ◊ Everyone did an equal share of their part but some notable parts that Mustafa did include:
  - Product research
  - Project plan
  - System request
  - Use Cases
- ❖ Many course concepts have been used when comparing products and during other important stages .

## Team Member Role (Raghava)

- Project Programmer

Main Parts Completed:

- ❖ Stage 3 (Prototyping) and Stage 4 (Evaluation)
  - ❖ Methodology
  - ❖ GNATT Chart
  - ❖ Executive Summary
- ❖ There were parts where the team had to complete them together such as the Team Charter on the portfolio and Team Experiences among other things.

## Final Deliverables

### Requirements Analysis

- ❖ Employee two week schedule
- ❖ Swap shifts
- ❖ Announcements
- ❖ Tasks
- ❖ Unavailability

### Testing

- ❖ Since we chose the Agile approach:
- ❖ The client did not need the GPS Clock-In, we did not set-up this feature on the clients behalf.
- ❖ The client had trouble switching between 4 roles so our project manager went ahead and set it to 2.

## Final Deliverables

### Customer Feedback

After having conducted an interview with the client, Kaylin. She appreciated:

- The auto scheduling feature
- Easier delegation of tasks
- Organized Leave/Time-off requests

### Opportunities for Improvement

Within this interview, we were able to discern the following things could be improved/removed;

- GPS clock in
- Easy switch of employment roles

# Lessons Learned

## Andrea

- Delegation
- Team work
- Communication
- Compromise
- Responsibility

## Mustafa

- Team work
- Patience
- Dedication
- Respect/compromise
- Consistency

## Raghava

- Consistency
- Communication
- Team Work
- Dedication
- Respect

# Final thoughts and reflection

- ◆ **Outcome:** - Solved scheduling issue  
- Delivered product on time
- ◆ **Issues:** - Time  
- Team member leaving  
- Communication/zoom  
- Change of manager/client
- ◆ **Staying on track:** - Team work  
- Patient collaboration

Any Questions?

# System Request

## Work Scheduling system

<b>Project Sponsor</b>	University of Washington, Tacoma, Jim West
<b>Project Client</b>	Jimmy Johns, Tacoma
<b>Business Need</b>	The project has been initiated by Employees and managers (Clients) at Jimmy Johns. The employees that work there do not have a solid way of acquiring information about their present and upcoming weekly schedule. This causes confusion and sometimes even leads to shift-cancellation. The client is looking for a solution for this problem because the employees are fed up and the client herself thinks that there should be a solution for this problem.
<b>Business Requirements</b>	<p>The client is looking for a sufficient and well-designed application and some of the features she demands include:</p> <ul style="list-style-type: none"> <li>• Should preview clock-in time and clock-out time.</li> <li>• Should contain a communication page for announcements.</li> <li>• Should include a task feature where managers can assign specific tasks to specific employees.</li> <li>• Should be able to give access to all roles.</li> <li>• Should provide employees with the option of swapping schedules or abandoning shifts earlier.</li> <li>• Provision of break clock-out option whilst considering the location of the person when he/she was clocking out for a break.</li> <li>• Previous week timesheets to make it easier for employees to calculate their weekly hours.</li> <li>• Location of items/people while on the clock.</li> <li>• Easy access and smooth transition.</li> <li>• Low cost and wide availability.</li> </ul>
<b>Business Value</b>	<p>The business value for this project includes:</p> <ul style="list-style-type: none"> <li>• Less last-minute schedule announcement or notification.</li> <li>• Reduced number of callouts.</li> <li>• Smoother communication and more clear instructions, especially because it is written somewhere.</li> <li>• Big profit for the company when it comes to manager and employee satisfaction. This in turn leads to higher customer satisfaction.</li> <li>• Easy and quick access through mobile phone.</li> <li>• Reliable and proper administration and management of employees.</li> </ul>
<b>Special Issues or Constraints</b>	<ul style="list-style-type: none"> <li>• The app might be rejected by the higher figures of the company.</li> <li>• Potentially not making it on time due to the time constraint caused by the lack of close communication due to COVID-19.</li> <li>• Losing out on one group member on the second week of class.</li> <li>• Application cost and subscription.</li> <li>• Must be completed by class deadline.</li> <li>• Information protection</li> </ul>

## Stage 1: Observation

- The project manager has been facing scheduling problems at her work place (Jimmy John's) and this project came along. She noticed that this problem could be solved if she did it with her group members as a proper project.
- The group discussed the idea with both the client and Dr. Jim West and the project was approved.
- Had to take some survey's and questionnaires on how the employees feel and what they would like to see change.
- Interviewed and talked with the client over a possible development/search of an app that can solve this problem.
- The current scheduling system was on a paper and it was usually posted late even as far as the date scheduled for an employee to come in sometimes.
- Meeting with client to speak about any special requirements for the app. Separated the list to must-haves and bonus features.
- Agreed upon finding an app that fulfills:
  - basic clock-in/clock-out features
  - Upcoming schedules and timesheets
  - Announcements
  - Increase productivity
  - Low cost and reduces downtime

## Stage 2: Ideation

We decided to look for existing scheduling apps that fulfill the requirements stated by the client.

The app should be compatible with both android and iPhones.

Some of the apps we used as a comparison before we picked our main app had some limitations:

- Major glitches
- High cost
- Limited role exchange
- Basic design and aesthetic value of the apps

### **Essential Requirements**

Mobile friendly (Android or IOS)

Low cost

Schedule visibility

Easy access and understandability

Adjustable

Shift offers

Task assignment

Announcements and breaks

### **Discretionary Requirements**

Assign schedules efficiently for up to one or two weeks ahead

Allow sharing pictures

Automatic Alerts

GPS while on the clock

Filter posts

Show other people's schedule

Specify roles in case of a switch of roles

## Methodology

We are using Agile Development since our current project aligns with the numerous elements that make up an Agile Development model. Our product requires us to create an app where it will be easily accessible to look into times and shifts of fellow employees. Our focus was offering a schedule to a manager at a Jimmy John's an easier way to manage their employees in terms of when they would check in for their shift, if they would ever need to trade their shifts to other employees, and if they couldn't make it to their shift. All of this focused on the delivery driving department of the restaurant which is vital. Being able to offer this application to the manager would increase productivity and reduce any complication with their schedule. The structure of our schedule aligned with the Agile Development Model which is why we chose to go through with it. With this methodology, it allows us to create a few versions of our app before we can deliver a final version to the manager. In other words, we have time to allocate so we can make a prototype to see if it is feasible for our client. To make sure that the scheduling app for our client works to the best of its ability, going with the Agile Development Model would be the most suitable option.

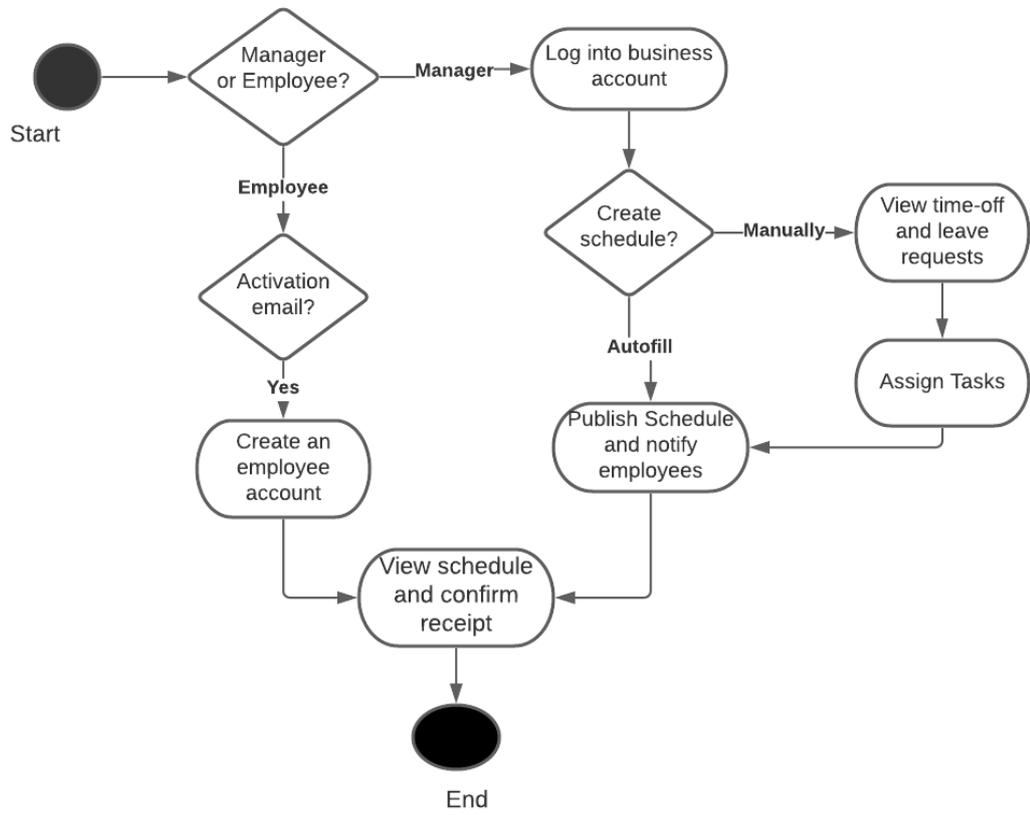
## Use Cases

Use Case Name	Scheduling employees
Description	The employee scheduling system should allow the manager to make weekly/monthly schedules for employees to help them clock in, trade shifts and know their schedules beforehand.
Priority	High
ID	SCH-001
Actor	Jimmy John's Manager
Trigger	External
Pre-condition	<ol style="list-style-type: none"> <li>1) Employees to have an account</li> <li>2) Manger to have an account</li> <li>3) Manger to be logged in</li> </ol>
Post-condition	<ol style="list-style-type: none"> <li>1) Employees receive their upcoming schedules</li> <li>2) Manger issues final schedule</li> </ol>
Normal Course	<ol style="list-style-type: none"> <li>1) Manager communicates about availability with employees before posting new schedule.</li> <li>2) Manager exchanges information with employees and makes a layout.</li> <li>3) Manager posts upcoming schedules using App.</li> </ol>
Alternate Course	<ol style="list-style-type: none"> <li>1-a) - <i>New account is not valid/not accessible</i> <ul style="list-style-type: none"> <li>- Message that shows that account is not valid</li> <li>- Employees asked to re-enter account number/access the app again</li> <li>- Normal course resumes</li> </ul> </li> <li>2-a) - <i>The employee roles are registered wrongly</i> <ul style="list-style-type: none"> <li>- Response from employees about problem</li> <li>- Check and balance</li> <li>- Notification on App</li> </ul> </li> </ol>

Use Case Name	Exchanging Shifts
Description	Picking up abandoned shifts by other employees and giving them your shift upon mutual consent.
Priority	Medium
ID	SCH-002
Actor	Jimmy John's employee
Trigger	External
Pre-condition	<ol style="list-style-type: none"> <li>1) Employees must be scheduled</li> <li>2) Another employee with the same role must be available</li> <li>3) There must be some form of verbal or written form of mutual consent</li> </ol>
Post-condition	<ol style="list-style-type: none"> <li>1) The exchange/transfer is recorded on the database</li> <li>2) Shifts are re-assigned/exchanged between employees</li> <li>3) Employees log out of system</li> </ol>
Normal Course	<ol style="list-style-type: none"> <li>1) Employee offers shift that he/she wants to abandon</li> <li>2) Employee agrees to pick up other employees shift and offers his/her shift in return by abandoning it.</li> <li>3) Other employee accepts and exchange is complete</li> </ol>
Alternate Course	<p>1-a ) – <i>Exchange is not supported by employer for personal reasons</i></p> <ul style="list-style-type: none"> <li>- Manager approaching employee regarding the exchange</li> <li>- Normal course resumes</li> </ul> <p>2-a) – <i>Employees involved in the schedule exchange have different roles/positions</i></p> <ul style="list-style-type: none"> <li>- Manager might not approve</li> <li>- Message denying the exchange comes up</li> <li>- Cancel of exchange is a possibility</li> </ul>

Use Case Name	Making Announcements
Description	Making announcements for others on the news feed posts
Priority	High
ID	SCH-003
Actor	Anyone included in the organization or the App (mainly shift employees & managers)
Trigger	External
Pre-condition	<ol style="list-style-type: none"> <li>1) Employees/managers having access to their account</li> <li>2) Employees/managers are given access to the page &amp; can access the post feature</li> <li>3) Employees/managers posting appropriate content</li> </ol>
Post-condition	<ol style="list-style-type: none"> <li>1) Person delivers announcement</li> <li>2) Others read and confirm or act accordingly</li> <li>3) If there are questions, people ask questions in the comment section</li> <li>4) Person replies to questions in comment section accordingly</li> </ol>
Normal Course	<ol style="list-style-type: none"> <li>1) Employee/manager makes relevant post</li> <li>2) Receivers of the message ask questions</li> <li>3) If there are no questions, receivers confirm that they have read the message by pressing 'Confirm'</li> </ol>
Alternate Course	<p>1-a ) – <i>Person does not have access to 'News Feed' page</i></p> <ul style="list-style-type: none"> <li>- Message that shows the person is not allowed to post on the page</li> <li>- Person is asked to contact manager to get access</li> <li>- Normal course resumes upon approval</li> </ul> <p>2-a) – <i>Person posts inappropriate posts</i></p> <ul style="list-style-type: none"> <li>- Post might be removed</li> <li>- Person might be banned from 'News feed' page.</li> <li>- Job might be at risk</li> <li>- Cancellation of person's contract might also be a possibility</li> </ul>

# Data Flow Diagram



## Stage 3: Rapid Prototyping

As a group, we are choosing to explore application that focus on schedule maintenance among a large organization. We decided to do this because we did not want to run into any issues or problems of any sort while creating the schedule. With this known, we went ahead and talked to the manager of the organization. After talking to the manager, they told us that they simply needed something that would simply work. With our focus on creating a schedule, we took what they said in consideration when we were working towards a final version of our product. Most importantly, every member was assigned an application to look into. These applications would serve as inspiration to expand our outlook as a group on how we would execute our group's idea of a "perfect schedule". We went ahead and formed a cross-comparison chart with each application that was used. We also marked aspects of every app that would help us in the long run to make the best product possible for our client.

## Cross-Comparison Charts.

Listed below are the criteria's that we decided is most important to create an interface that satisfies the client's needs.

<b>Essential Requirements</b>	<b>Deputy</b> ★	<b>Clockify</b>	<b>When I Work</b>	<b>HomeBase</b>
Online scheduling system	✗	✗	✗	✗
Simplified Time-Off, leave and call out procedure	✗		✗	✗
Access to employee records like hours worked & sick time	✗	✗	✗	✗
Clear communication medium between managers and employees	✗		✗	✗
Password Protected and Secure	✗	✗	✗	✗
Cost per month	\$30	\$30	\$67	\$49
Exportable for Payroll purposes	✗	✗		✗

<b>Discretionary Requirements</b>	<b>Deputy</b>	<b>Clockify</b>	<b>When I Work</b>	<b>HomeBase</b>
Real-time updates about shift changes/open shifts	✗	✗	✗	✗
Alerts	✗	✗	✗	✗
Aesthetically pleasing	✗			✗

Learnability	X		X	X
Automated scheduling system	X			
Task assignment assistance	X			
Mobile friendly	X		X	X
GPS Clock in	X			X

# Employee Management Interfaces

## Clockify



### Pros:

- Includes Google sign in for easy access.
- Simple and clean interface.
- Dark Mode

### Cons:

- Clunky user experience. In order to login or sign up, it needs to access an app that uses the Internet but in doing so, it redirects you back to the app for no apparent reason.
- Leaves out, Yahoo, Outlook, and Apple logins.
- It needs external use of other apps like Chrome or Gmail to perform tasks like "Help" and "Support". Nothing 'in app' is ever done.
- Boring and "lifeless" (No animations, icons, and a limited amount of graphics \*Only 1\*).

## When I Work



### Pros:

- Includes Google sign in for easy access.
- Simple and clean Interface. Plentiful amount of animations.
- Everything is done 'in app'. Logins, and support is done within the app.
- Live emails and notifications are up to date.
- Dark Mode
- Chat is easy to use.

### Cons:

- Tends to lag when using keyboard.
- Leaves out, Yahoo, Outlook, and Apple logins.

## HomeBase

### Pros:

- Extremely user-friendly and easy to edit once the schedule is made.
- Makes it easy for employees to switch schedules on their own.
- Makes it easy to adjust hours that have been incorrectly clocked.

### Cons:

- The messaging features are not consistent across the platform.

- The roles for employees and how to navigate them can be confusing especially when trying to schedule one employee in two different departments.
- Separation of departments is a bit rigid and makes it difficult for universal employees to be scheduled easily.

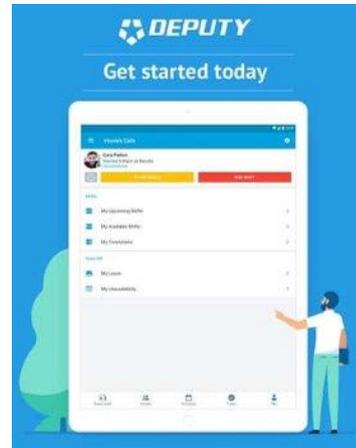
## Deputy

### Pros

- Easy login.
- Accurate punch times.
- Accessible through any web browser.

### Cons

- Break duration on Chrome sometimes does not display properly.



## Feedback Interviews

Below are questions and answers of an interview conducted at Jimmy Johns on the first of December with the former general store manager and our client, Kaylin.

### **What would you say has been the biggest challenge once again in managing schedules?**

I would say not hearing back soon enough about receipt of the schedule or leave/call out requests. Not hearing soon enough causes such a tremendous delay in delivering food because time is spent trying to cover the labor lost at that particular shift.

### **After having used deputy, what would you say is your favorite thing about the application?**

I enjoyed the auto scheduling the most. Having a system go through everyone's particular leave requests and take into account their emotions and hours worked, is very useful. I also liked the fact that I could hear from the crew about their time-off requests and their leave blocks ahead of time.

### **What do you like least about the application?**

It's pretty great but I do not see myself using the GPS clock in feature or manually starting/ending breaks.

### **How long do you think it will take you make a weekly schedule?**

It will take a little longer using deputy simply because I would have to re-assign tasks every single week but other than that I think it is a small price to pay to have the schedule/shifts run in a more organized manner.

### **Is there anything that you would change about the application?**

They preferred employee system for sure. When auto scheduling, the system automatically schedules preferred drivers. At the restaurant, you know everyone is able to do each other's job so it's a hassle to have to manually adjust schedules.

## Stage 4: Evaluation

As mentioned earlier, as a team, we chose to conduct interviews. Andrea went ahead and interviewed Kaylin, who is the former general store manager of Jimmy Johns and our client. This was held on the first of December. The interview focuses on asking the client what type of issues they had faced when managing their current schedule, a possible look into alternatives, and how an alternative can help them be more productive. As the interviewer, Andrea helps our client open up about the main concerns they ran into with their current schedule and how it has hindered their workflow. With our product given to the client, we received a lot of valuable feedback. Even with the given time and feedback attained, we were able to get our product finalized.

The questions Andrea formulated for the client helped us as a team understand what the client wants and needs, and what issues they encountered during the testing of our product. The questions are clear and direct, making the feedback we would be given relevant. Important aspects that the client pointed out were dealt with quickly such as their need for easier role switches. We had 4 before and the client needed 2 and we went ahead and set that up. They also did not need GPS clock-in, so we took care of it and did not setup that feature. Our development was smooth because of the interview and feedback from testing. We knew that our pre-selected product was good enough and the client was satisfied with only a few features they did not need. We settled and finalized our product for the client to use, that software was Deputy.

# Stage 5: Final Prototype.

**Calendar**

07 Dec - 13 Dec | 3 Upcoming Shifts | Available Shifts | Request Time Off

Weekly Total : 14.50 Hours

Mon 07 Dec	Tue 08 Dec	Wed 09 Dec	Thu 10 Dec	Fri 11 Dec	Sat 12 Dec	Sun 13 Dec
Unscheduled	Unscheduled	4pm - 8pm 1 x Meal Break (...) at Driver Jimmy Johns	Unavailable School days	4pm - 8pm 1 x Meal Break (...) at Driver Jimmy Johns	Unscheduled	9am - 5pm 1 x Meal Break (...) at In Shop Jimmy Johns
Scheduled this day B A J +2	Scheduled this day A S K +3	Scheduled this day E Z K +2	Scheduled this day Z E S +3	Scheduled this day B M K +2	Scheduled this day A J B +3	Scheduled this day E R Z

**News Feed** | Create Post

All posts | Important posts | Your Posts | Locations: Jimmy Johns

Search News Feed...

AS Andrea Seguya  
a day ago to Ben  
Hey could you cover my shift on thursday?  
Write a comment... | Comment

AS Andrea Seguya  
a day ago to Jimmy Johns  
Please confirm that you have access to the schedule  
0 / 11 have confirmed  
Write a comment... | Comment

Teams: All locations | Late (2): Joey (4pm at In Shop), Andrea Seguya (4pm at Driver)

**Tasks** | Add Task Group

Jimmy Johns | Wed, 9 Dec 2020 | Search for task groups, areas...

My Tasks | AS | All Completed

Assigned Tasks | All Completed

Opening | Driver | Options | 0/9 completed

Add Task Group

Teams: All locations | Late (2): Joey (4pm at In Shop), Andrea Seguya (4pm at Driver)

Me News Feed Tasks Locations People **Schedule** Timesheets Reports Help AS Hello, Andrea Seg...

Jimmy Johns 07 Dec - 13 Dec View: Employee | Week Auto Copy Shifts Stats Export All Shifts Published

	Mon 7th	Tue 8th	Wed 9th	Thu 10th	Fri 11th	Sat 12th	Sun 13th
Open/Empty Shifts 0.00Hrs/\$0.00	+	+	+	+	+	+	+
AS Andrea Seguya 14.50Hrs/\$195.75	+	+	4pm - 8pm Driver	UNAVAILABLE + ALL DAY	4pm - 8pm Driver	+	9am - 5pm InShop
A Angelo 21.00Hrs/\$283.50	9am - 3:30pm Driver	9am - 5pm InShop	+	+	+	9am - 5pm InShop	+
B Ben 14.50Hrs/\$195.75	+	+	9:30am - 5:30pm Driver	+	+	4pm - 8pm Driver	4pm - 8pm Driver
B Bernard 30.00Hrs/\$405.00	9am - 5pm InShop	+	+	9:30am - 5:30pm Driver	9am - 5pm InShop	9:30am - 5:30pm InShop	+
E Emmie 37.50Hrs/\$506.25	+	+	9am - 5pm InShop	9am - 5pm Driver	9:30am - 5:30pm Driver	9:30am - 5:30pm Driver	9am - 5pm Driver

0 Unallocated 41 Published 0 Unpublished 0 Open Shifts 1 Warnings 0 Leave Approved 0 Leave Pending 1 People Unavailable

Me News Feed Tasks Locations People Schedule **Timesheets** Reports Help AS Hello, Andrea Seg...

Jimmy Johns Mon 12/07/20 - Sun 12/13/20 + Add Time Sheet Approve All

Search	Date	Status	Progress	Area of Work	Time	Hours
AS Andrea Seguya 1 time sheet	Wed, 12/9	Pending	Possible Absentee	[EA1] Driver	4:00 pm - 8:00 pm   0:30	-

Time Sheet History Comments

Time sheet ends in the future. You may approve it but not into the future, unless it is a leave time sheet.

Scheduled Details: Wed 12/09/20 [EA1] Driver | 4:00 pm - 8:00 pm | 0:30  
Meal Break: Break (30 mins)

Import scheduled details

Date:

Area of Work:

Approve Time Approval Pending Discard Time Sheet Message Andrea Seguya Map Satellite

17 Time Sheets | 0.00 hrs

Me News Feed Tasks Locations People Schedule Timesheets **Reports** Help AS Hello, Andrea Seg...

## Reports

### Contact Tracing Report



Trace potential exposure of employees to unwell colleagues

[View full report](#)

### Employee Details

— This Week

Birthdays	0	Missing Emails	11
6 Months Tenure	12	Missing Mobiles	11

[View full report](#)



Ben

No scheduled shifts

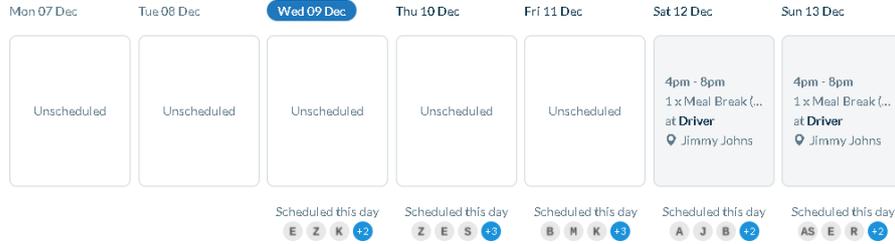
Start Shift

Dashboard

Calendar

< 07 Dec - 13 Dec > 3 Upcoming Shifts Available Shifts Request Time Off

Weekly Total : 14.50 Hours



Jimmy Johns | 07 Dec - 13 Dec | View: Area | Week

	Mon 7th	Tue 8th	Wed 9th	Thu 10th	Fri 11th	Sat 12th	Sun 13th
<b>In Shop</b>							<b>In Shop</b>
9am - 5pm Bernard							
9am - 5pm Angelo							
9:30am - 5:30pm Joey							
9:30am - 5:30pm Killian							
9:30am - 5:30pm Killian							
9:30am - 5:30pm Sandy							
9:30am - 5:30pm Killian							
4pm - 12am Zack							
4pm - 12am Zack							
4pm - 12am Joey							
4pm - 12am Ryan							
4pm - 12am Joey							
4pm - 12am Ryan							
4pm - 8pm Ron							
<b>Driver</b>							<b>Driver</b>
9am - 3:30pm Angelo							
9am - 5pm Sandy							
9am - 5pm Zack							
9am - 5pm Emmie							
9am - 5pm Mike							
9am - 5pm Joey							
9:30am - 5:30pm Sandy							
9:30am - 5:30pm Ben							
9:30am - 5:30pm Bernard							
9:30am - 5:30pm Emmie							
9:30am - 5:30pm Ben							
9:30am - 5:30pm Emmie							
9:30am - 5:30pm Zack							
4pm - 12am Mike							
4pm - 8pm Ron							
4pm - 8pm Andrea Seguya							
4pm - 8pm Mike							
4pm - 8pm Andrea Seguya							
4pm - 8pm Ben							
4pm - 8pm Ben							

0 Open Shifts

## Team Experiences

### **Lessons Learned: Andrea Seguya (Project Manager)**

This is the quarter that I decided to pursue a leadership role. I decided to step out of my comfort zone and do something that I usually shy away from. My experience has been challenging but very rewarding. Being a project manager has taught me to work with a diverse group of people cohesively to achieve a common goal. It has taught me the true definition of, “stepping up.”

There has been a lot that has happened this quarter. With the state of the world and how things are going, I am proud to have team members that have overcome adversity to play their part in making this project a success. We have had our ups and downs this quarter. Specifically, the loss of a valuable team member in the second week of the quarter and the complications with having to survive through a global pandemic. Majority of the team members had to work 2 jobs in addition to being a full-time student. Each team member had a burden to overcome and they did a magnificent job in catching up, putting their work in and ensuring that this project is ready before the deadline.

This role has taught me the core values that a project manager needs to possess to successfully lead a team. It has taught me how to be assertive, creative, and responsible. Although I learned a lot from being a leader, I feel that my greatest weakness was the lack of the ability to delegate tasks which often left me doing the bulk of the tasks or passing them on to others after having spent a lot of time trying to figure it out. I was able to figure it out in the end but it definitely would have saved a lot of time.

The greatest lesson I have learned from being a project manager is the value of teamwork. It genuinely takes a herd to build a village. Involving everyone in a project not only makes it easier to manage but it also allows members to add their unique & creative input. I know that in the future, from the lessons that I have learned from this class, I will welcome leadership opportunities. I would genuinely like to thank Dr. West and Jennifer for the help that they have provided throughout the quarter. I look forward to applying these lessons in my day-to-day life.

### **Lessons Learned: Mustafa Jama (Project Designer and Technical Writer)**

This project was one of the most challenging and yet rewarding projects I have participated in for a while. The time frame given along with the other courses and materials we had to cover; it was hands down one of the most challenging things this quarter. As a designer and technical writer, I have learnt a lot from participating in this project. I have seen what it would look like to get something done in a given deadline with team members you have never worked with before.

Like every other team we have also had our ups and downs throughout this process. From losing one of our group members to time insufficiency for completion. Other challenges faced throughout this project include mainly personal problems like being busy with two jobs, falling behind on other classes, health issues, family problems, in availability of study spaces due to COVID, oversteering, lack of communication, financial problems and many more.

Throughout this project I have become more resilient, responsive and more optimistic. The responsibilities in this group were shared we all worked together to get things done. We tackled every obstacle that came against us hand in hand and tried to make the best out of any misfortunes. From a personal point of view, I was facing some personal problems outside school. I had to quit one of my jobs to make time for school work, even after doing that having a full-time job and being a full-time student is not easy.

I also tested positive for COVID-19 a couple of weeks before school started and that left some negative side effects on me both physically and psychologically. The fear of transmitting it to a family member was just unimaginable especially when it comes to big families like mine who live in one house. This year had some unusual events and coping to them could be challenging at times. At the end of the day, I am still grateful because there are others that have been affected worse.

In conclusion, this project has strengthened me both as a person and as an IT student. With the help of our very responsible and hardworking project manager, as well as my other hardworking humble team-mate, we have managed to complete our tasks and learn something along this project. From being professional with real life clients, to finding real-life applicable solutions to real-life problems. I am grateful to have participated in such an amazing project and I would like to thank Dr. Jim West, TA Jennifer & TA Mark for making this a smooth and enjoyable experience.

### **Lessons Learned: Raghava Matta (Project Programmer)**

This project tested my ability to manage my time and how comfortably I can adapt to a handful of classes that take place on the same days respectively. I learned that focus is the most important attribute to have as a team member for a big, lengthy project. It took me awhile to get comfortable with my current schedule and the work that was given to us early on made it hard for me to communicate with my group. There were times I couldn't meet for zoom calls and that lack of communication hurt my performance to start the quarter.

The project helped me understand my strengths and weaknesses. Because of personal matters and my struggle to get attuned with my new schedule, I saw this as my biggest weakness. It would hinder my ability to communicate with my members at a given time. My strength was being able to adapt when I could. Losing a member early on was tough, but as a team, we were able to adapt and overcome that loss. I'm happy that I was able to at least take part in a project that could open up my strengths and weaknesses.

My role needed my attention and with what I understood over time, I tried my best to get in sync. One of those most work intensive projects I've had in a while showed me that communication and responsibility are important. Personally, I managed my time terribly and have had trouble trying to get back into the groove of things whenever I run into problems outside of school. My position, albeit a small one, made it clear that I was still an important member. I've been trying my best since the beginning of the quarter.

Overall, this was an interesting experience and something I needed in a while as a wakeup call when it comes to communication, responsibility, and focus. I've never worked on a group project that started from the beginning of the quarter, all the way to the end. I learned a lot of valuable information when it came to working on long projects. I will make sure to utilize the lessons I learned in this class in other ventures that may be needed. I'd like to thank Dr. West and TA Jennifer for expressing their concern and helping me throughout this project.

## References

Sharp, H., Preece, J., & Rogers, Y. (2019). *Interaction Design: Beyond Human-Computer Interaction* (5th ed.). Wiley.

## Tools

Kidasa Tool Management System

Officetimeline.com

Lucidchart.com

Deputy.com