



Iteration 1

MAVS IN JAPAN

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Team 4

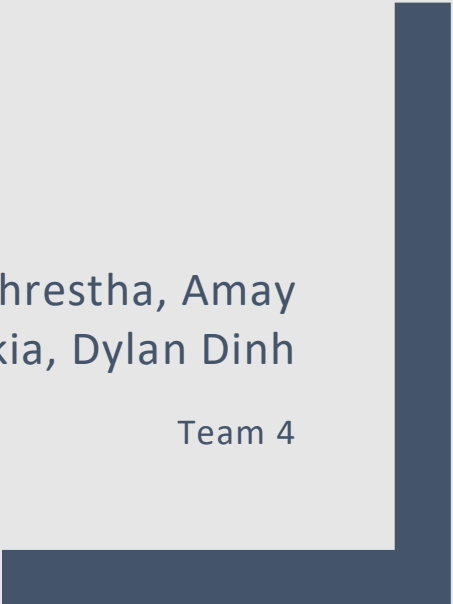


Table of Contents

Project Plan.....	2-4
Competitors.....	2
Risks.....	3-4
Specifications & Design.....	4-8
Changes.....	4
MoSCoW Requirements.....	4
Use Case Diagram.....	5
Transition Diagram/Screen Shots.....	6
Code & Tests.....	7-9
Important Links.....	7
Test Cases.....	7-9
Customers & Users.....	9
Description.....	9
Feedback.....	9

Project Plan

Iterations

Considering our MoSCoW requirements (later discussed on Pg. 4), we then separated the four requirements into our different iterations.

Iteration 1:

- Initial web app
- Offline Functionality
- Contact Information

Iteration 2:

- Translations
- Itinerary
- Maps (Begin)

Iteration 3:

- Maps (Finish)
- Admin Logins

Iteration 4:

- Itinerary Management
- Image Sharing (If time permits)
- Messaging Feature (If time permits)

Sticking to our strict plan and implementing deliverable dates will allow us to minimize our risk exposure and allows us to deliver a higher quality user experience.

Competitors

Two of our biggest competitors for our application are Google Travel and Wanderlog.

Below is a table with key differences among the tools:

Mavs In Japan	Google Travel	Wanderlog
Allows for a group itinerary	Does not have group itinerary capabilities	Allows for group itinerary
Able to access offline (Progressive Web App)	Unable to access offline (Only Website)	Able to access offline (Application)
Do not need an account	Need an account	Need an account
Has a central location for announcements for travelers	Nowhere to post important details or announcements	Nowhere to post important details or announcements

Risks (With Ranking)

1. **Risk:** Due to our lack of web development and front-end experience and learning how to do so can take much time which can take up the short time we have to work on the application.

Management: We will work ahead of schedule to make sure we have time to learn how to work on our web-development skills through utilizing online sources such as YouTube.

Probability: 100%

Effect: 30 hours

RE = $1.0 * 30 \text{ hours} = 30 \text{ hours}$

2. **Risk:** We could over scope our capabilities and unrealistically try to complete more than what we can achieve.

Management: By utilizing the MoSCoW requirements to prioritize our functionalities, we will plan out the essential capabilities our website absolutely needs, and we will diversify that work among the 4 iterations, working on through the “must-haves” and saving the “could-have” extra features for the end. Furthermore, by communicating effectively to the group and post updates on our progress, we can also have a better idea on what we have done. By also working ahead, we can allow for iteration 3 and 4 as a recovery iteration.

Probability: 50%

Effect: 20 hours

RE = $0.5 * 40 \text{ hours} = 20 \text{ hours}$

3. **Risk:** Due to our group members all being full-time CSE students and balancing jobs, it can be hard for us to meet during the times we are all free.

Management: We created a Microsoft Teams chat as well as a GroupMe to stay connected and post updates about our projects progress. We also have committed to making weekly goals for this project and meeting every week to showcase our progress.

Probability: 80%

Effect: 15 hours

RE = $.8 * 15 \text{ hours} = 12 \text{ hours}$

4. **Risk:** The requirements that Professor Aiken would like in her project could change, as new ideas are come up with every day. She could want a feature to be removed or added.

Management: To mitigate this risk, we will work ahead of schedule and showcase our progress to Professor Aiken and ask for feedback on if she would like a change in functionalities.

Probability: 100%

Effect: 10 hours

RE = $1.0 * 10 \text{ hours} = 10 \text{ hours}$

5. **Risk:** Since our website is running on the uta.cloud servers, if those servers go down, we will lose access to our website, causing us the inability to test our website.

Management: We will work ahead of schedule to make sure we have time to recover and continue working on our website. We also have the contact information of uta.cloud if needed.

Probability: 50%

Effect: 20 hours

RE = .5 * 20 hours = 10 hours

Specification and Design

Changes

After discovering that utilizing WordPress could cause us to have to pay a fee to utilize the progressive web app extension, we decided to switch to the open-source Drupal, as it is just as capable and furthermore, it is also supported by UTA hosted servers (uta.cloud).

We will also be utilizing MySQL instead of Firebase since Drupal and uta.cloud support MySQL seamlessly.

MoSCoW Requirements

When constructing our project plan (Pg. 2), we began by considering the MoSCoW requirements.

After discussing with Professor Aiken, we decided that we...

Must Have:

- Offline Functionality (Progressive Web App)
- An Itinerary
- A Map
- Login Requirement (For Admins)

Should Have:

- Key Translations (English to Japanese)
- Emergency Contact Information

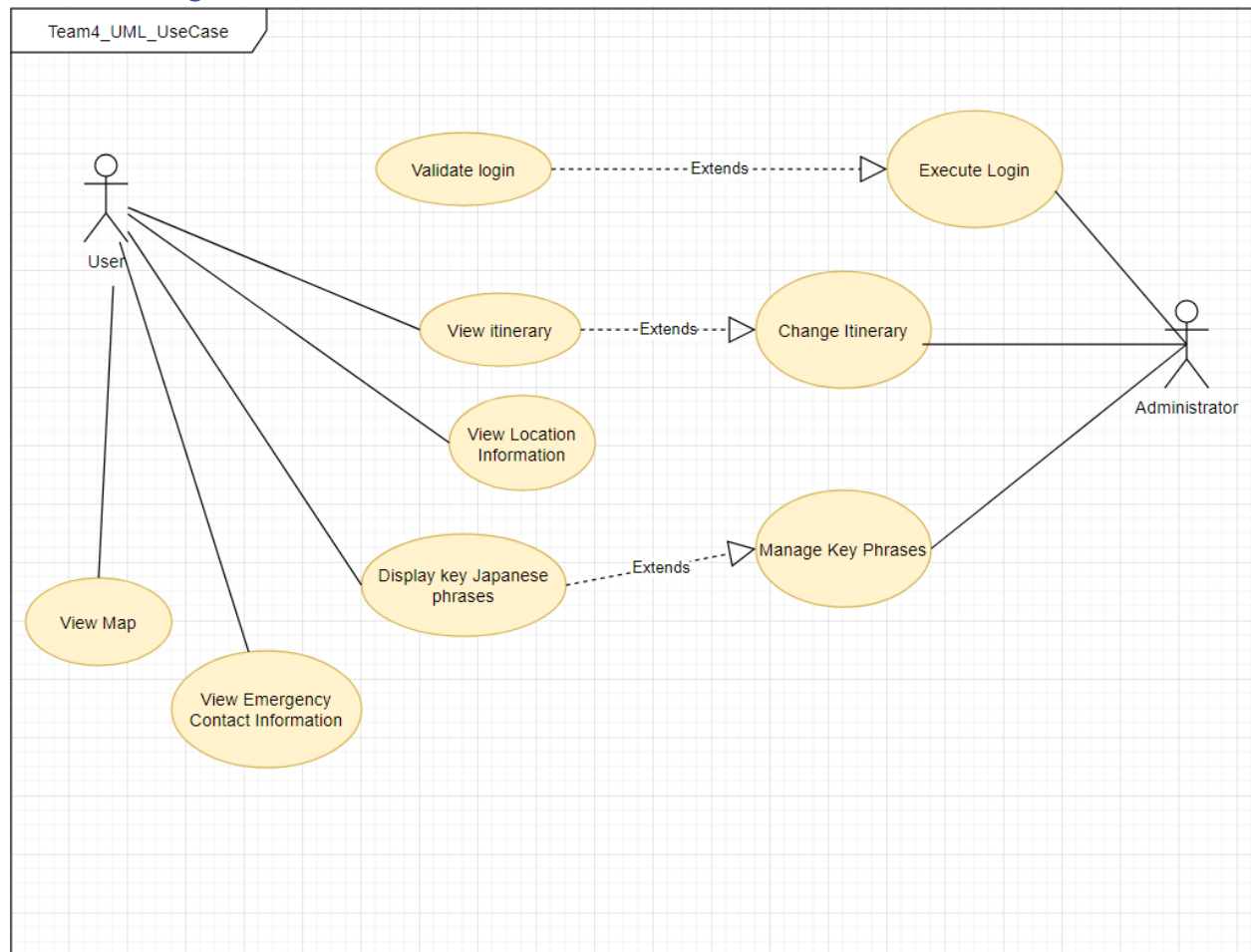
Could Have:

- Image sharing/hosting (*after discussing with Professor Aiken, she said that this requirement was no longer a necessity*)
- Website search feature

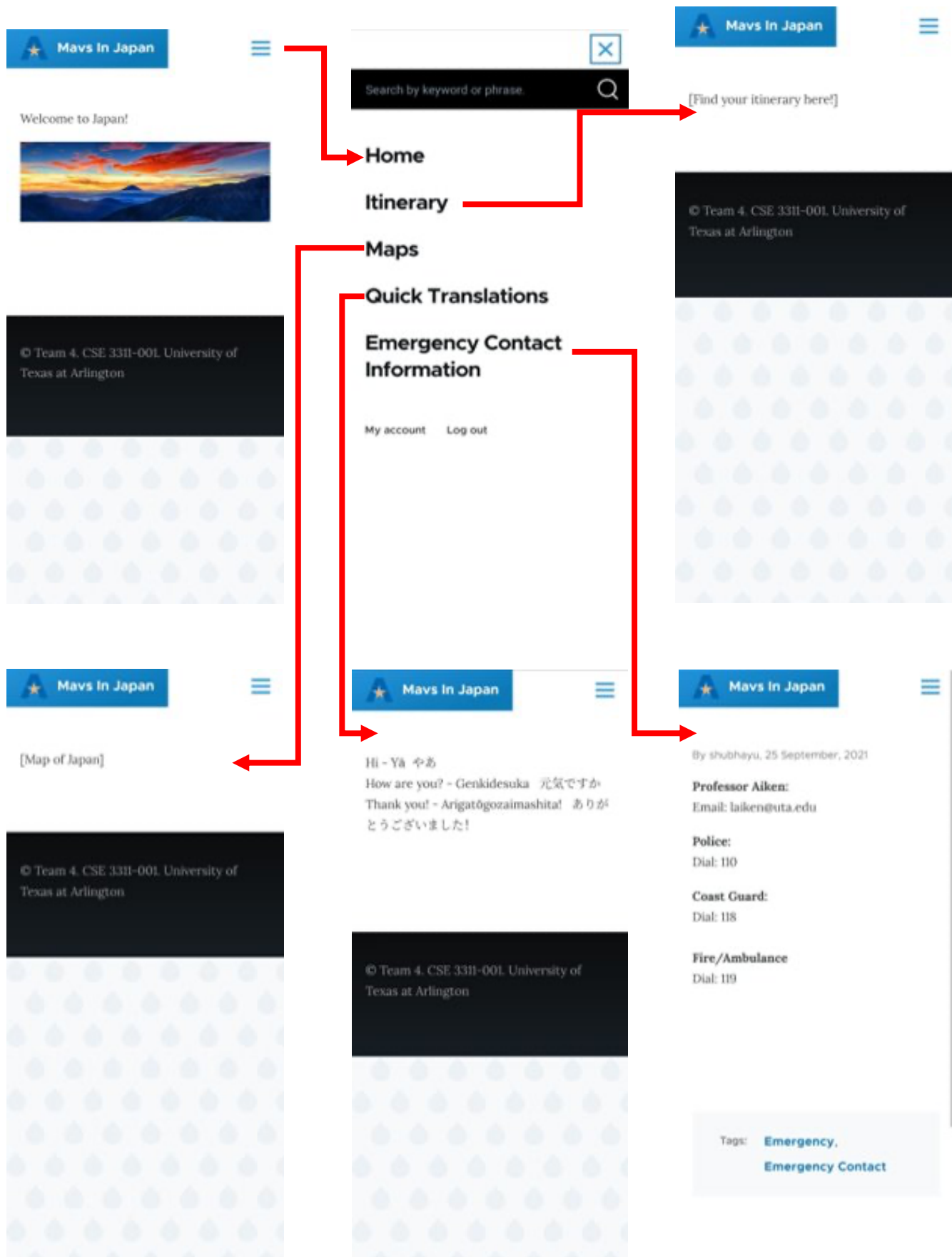
Won't Have:

- Messaging feature

Use Case Diagram



Transition Diagram/Screen Shots



Code & Tests

Important Links

GitHub Link: <https://github.com/shubshres/CSE-3311-Team-4>

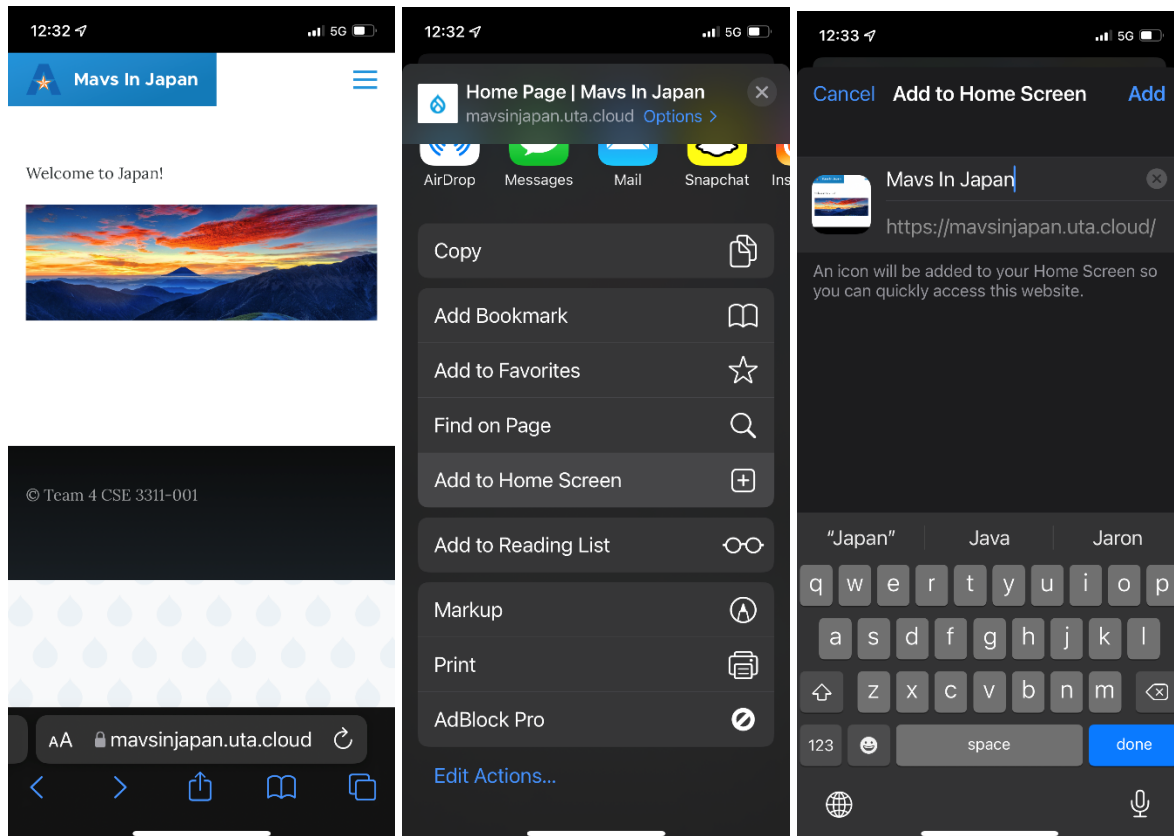
Progressive Web App: <https://mavsinjapan.uta.cloud/>

Most iteration 1 work was mainly getting the structure of the website to be functional. Because of this the GitHub repository does not have much code.

Test Cases

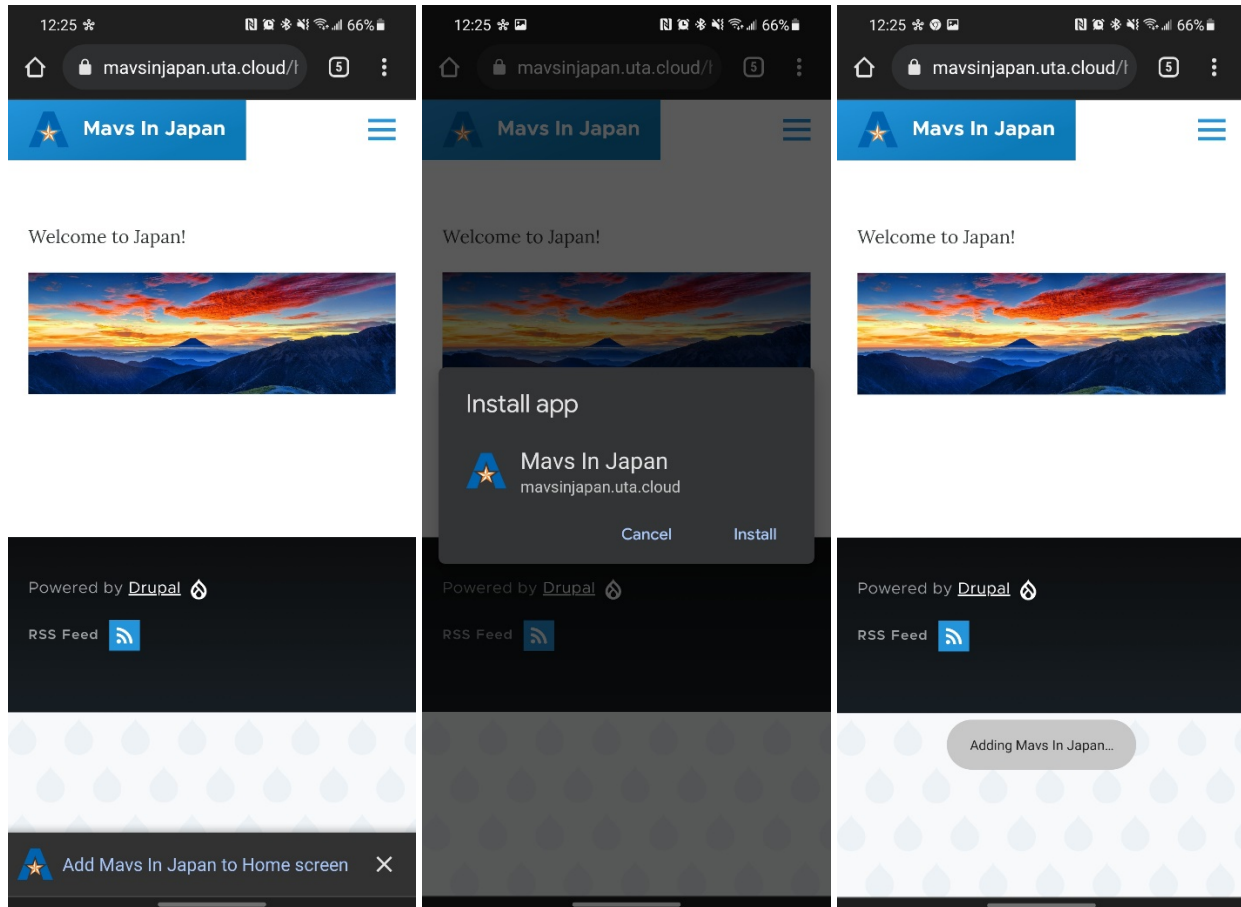
Progressive Web App (on iOS) Steps to Test

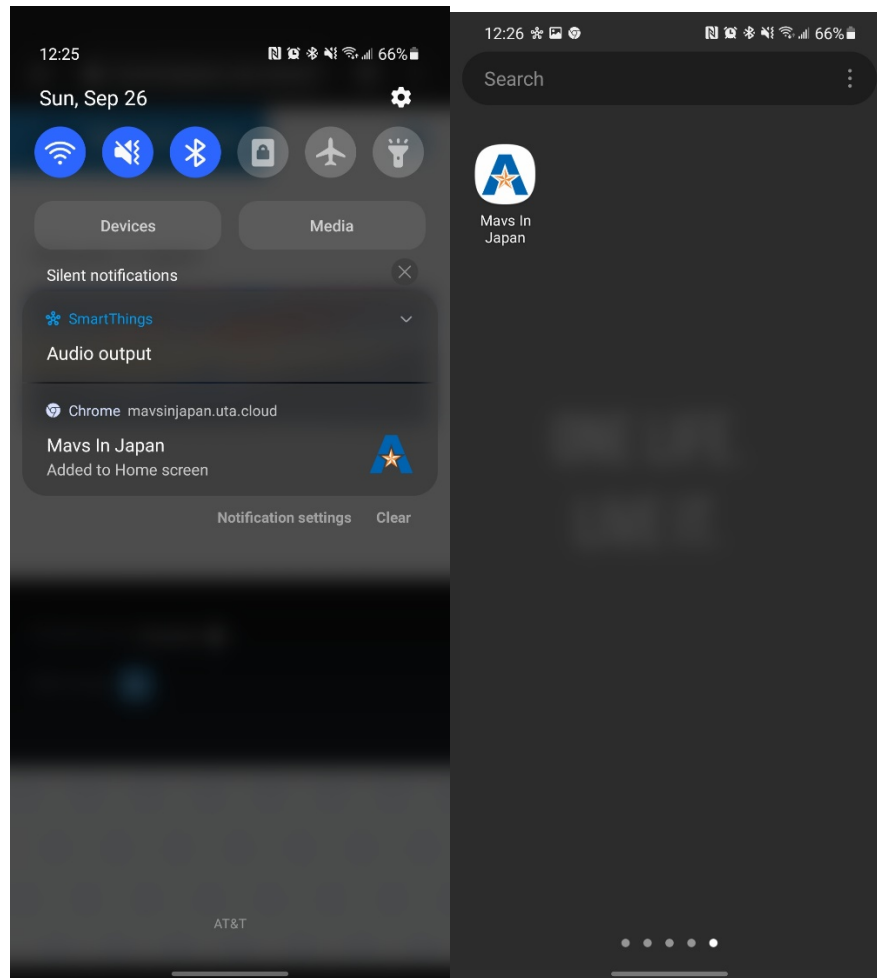
1. Go to <https://mavsinjapan.uta.cloud/>
2. Press the share button (square with arrow pointing up)
3. Tap 'Add to Home Screen'
4. Add to home screen by pressing 'Add' at the top' right
5. Tap on the app on the home screen
6. Close the app
7. Put phone on airplane mode
8. Reopen app



Progressive Web App (on Android) Steps to Test

1. Go to <https://mavsinjapan.uta.cloud/>
2. Tap on 'Add Mavs in Japan to Home screen' pop-up
3. Tap 'Install' on Install app popup
4. Go to home screen
5. Tap on the app on the home screen
6. Close the app
7. Put phone on airplane mode
8. Reopen app





Customers & Users

Description:

Customer: Professor Aiken is Professor at UTA planning a study abroad trip to Japan.

Users: Professor Aiken's study abroad class who will need to be able view an itinerary for their trip.

Feedback:

In this iteration, we received feedback regarding the user interface and the key features that we need for the website. We are also waiting on doing the itinerary page as we discussed with Professor Aiken that she would have a better plan on the weekend of September 25-26 to send to our team. Discussing with Professor Aiken, we decided to remove the 'photos' feature for now, but we may implement it later in the project if we have time.