

Milestone 6 Progress Evaluation

Project Title: Panther Shuttle App

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Faculty Advisor: Professor Khaled Ali Slhoub (kslhoub@fit.edu)

Client: Vincent Borrelli (vborelli2022@my.fit.edu), Student Shuttle User

Milestone #6 Progress:

Task	Completion %	Joey	Tony	John	Chase	To do
Finalize Student Side of App.	100%	50%	30%	10%	10%	N/A
Finalize Driver Side of App.	100%	50%	30%	10%	10%	N/A
Implement Manager Side.	100%	70%	10%	10%	10%	N/A
Finalize Manager Side abilities.	100%	80%	20%	0%	0%	N/A
Test/demo of the entire system	100%	25%	25%	25%	25%	N/A
Conduct evaluation and analyze results	100%	25%	25%	25%	25%	N/A
Create user/developer manual	100%	70%	10%	10%	10%	N/A
Create demo video	100%	40%	20%	20%	20%	N/A

Milestone #6 Discussion (Task Details):

- Finalize Student Side of App.
 - The student side was finished besides a few elements that were being used as placeholders. Once we got the Manager Side implemented, and started using it to implement the necessary data, we used that data to make updates on information on the home screen, as well as some core features like the Favorite Stops, Schedule, and even the stops appearing on the map. We also updated the settings tab to have properly working settings as well.
- Finalize Driver Side of App.
 - Similar to the Student side, it was in a similar state where it just needed to use information from the Managers side's input. We updated the Drivers notifications to use the data from the Manager side and tweaked the settings to not be a mock up anymore and have working settings.
- Implement Manager Side.
 - The last component that needed to be added. We have 2 tabs, one for updating the map, and another for updating the schedule. These were the 2 components we always intended for the Manager as its the most crucial parts for the use of the Student/Driver side to pull data from.
- Finalize Manager Side abilities.
 - Once more this included implementing this side in full instead of within parts like we did with the previous sides of the app. It was lower in time consumption to implement the components of this side of the app and most of the time was spent manually inputting the correct up to date shuttle information from the website into the scheduler builder for the app to use.
- Conduct evaluation and analyze results
 - Similar to the last milestone, we do more testing, this time making sure to pay special attention to the Manger side and its impact on the other sides to ensure everything is working properly. We also want to try and test multiple users (besides just 2) on the app at once to see how it affects.
- Test/demo of the entire system
 - We will run a full simulation on what everyday use might look like to ensure no bugs are persisting and fix anything we catch at the last minute. We want to enable as many features and use as many components as possible to make sure multiple components and features being used simultaneously don't break anything as well as to showcase this all in the demo video.
- Create user/developer manual
 - Using the guidelines from the syllabus we will outline a manual for Users (All 3 in our case) and the Developer Manual which will maybe be used one day for future students. We will ensure it has proper guidelines and visuals for people to see and understand so they can effectively pick up the project if they care.

- Create demo video
 - Similar to the Manual we will be following the guidelines outlined in the syllabus. We will ensure our video covers a range of properties from all sides ensuring that all the main components are shown in a quick showcase video for people to enjoy. We aim to edit it to also look nice and use it during our showcase as background footage while we talk about the app to judges and spectators.

Milestone #6 Discussion (Team Contribution)

- **Tony:** Once more Tony's biggest contribution was with his Android Phone. We used this throughout testing and the full demo to ensure it is working properly on the android phone to simulate as close as possible to how students or drivers could be using the app in real time. Other than that he helped in the odds and ends for implementation of features, cleaning up the app, and finalizing some components of the milestone.
- **Chase:** Chase helped with anything that was needing last minute touch ups or general bug testing for newly implemented features. After something was developed or pushed, he would ensure it worked properly before continuing forward. Other than that he helped by giving feedback and ideas on improvements to features or parts of the milestone.
- **Johnny:** Similar to Chase, he helped with anything that wasn't working properly or would ensure when working on a feature that it was working as intended before pushing it out for the rest of us. He helped give feedback and ensured that the development was being as smooth as possible for a "final" build.
- **Joey:** Once again did most of the framework for the features or segments of the milestone. Wanted to ensure things were being worked on ahead of time and made mock ups for the team's feedback before continuing. Reminded group members of deadlines, tasks, and meetings, and cleaned everything up for a final build. Also is the group leader for the Senior Design Showcase, so he ensures everyone is updated with the emails and messages sent out.

Milestone #6 Discussion (Lessons Learned):

- **Cross Platform**
 - Originally we planned to make the App work for both Android and iPhone devices. Unfortunately after a bit of research we found out that developing for both platforms simultaneously was essentially impossible. They use completely different languages and the process of developing an iPhone app is significantly harder than an Android. So we ultimately decided on only developing for the Android side, as luckily we learned early on that it was out of our scope to make it Cross Platform.
- **Backend Service**
 - After some time in development we realised that in order for us to be able to use some of the features we promised like live updates, notifications, and an updatable schedule/map we needed a backend service to use. We luckily found one called Firebase which we have been using for the second half of the semester for most of the features as they require us to pull data from the backend service.
- **API Key**
 - On a similar note, we had the issue with the map where we needed the Google API key in order for us to access the map and be able to display the area around the student. We were able to use it but it did limit what we wanted to be able to do with the app as everything regarding the map and the API was uneditable besides some basic features we added.
- **Development Length**
 - The length of time it took for some features varied depending on what we needed. Sometimes adding something from scratch would take a long time but once it was implemented once somewhere was easier to implement in other locations. The general time we had to work on the app, on top of our other responsibility obviously made for a pretty pressured environment when wanting to meet milestones that we set in advance, but for the most part we usually set the bar low and excelled within the time limit.
- **First App**
 - This was all of our first times developing a large scale, year long project, especially with it being a mobile one at that. We had a lot of parts that we had to get used to such as the new language, environment, and way the code was structured in order for us to proceed. We all had a lot to learn in that first semester but by the end of it we were able to excel by the time the second semester rolled around, and get the app to a pretty stable spot.

Date(s) of Meeting/Client Feedback:

- March 29th, 2025 5:30pm at Panther Bay
 - Vincent Borrelli
 - Loves the Student and Driver connections.
 - He want the updated schedule, not the placeholder one.
- April 12th, 2025 5:30pm at Panther Bay
 - Vincent Borrelli
 - Got to see everything working as intended with the new Manager Side.
 - He loves the simplicity.
 - Easy to use and has a lot of valuable information.

Date(s) of Meeting/Advisor Feedback:

- April 7th, 2026 3:15pm at Crawford Room #401
 - Professor Shloub
 - Likes the changes made to the poster.
 - Only suggestion if we can use the bottom right corner, do so.
 - Development is going great, keep up the good work.

Faculty Advisor Signature: _____

Date: April 13th, 2026