



FFPAC Application Milestone #2

Team GVSU

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Milestone #2 Report

Intended Progress:

The second milestone presentation reflects weeks 8 - 11 of the winter semester. During these four weeks, we intended to have the following completed:

- Connecting the front end to the database (Week 8)
 - Ensure that entries are updated correctly and database is storing correct values. We also want our information to reflect exactly what is currently existing so that way the application has the correct data to interact with.
- Receive constructive feedback from FFPAC representatives (Week 9)
 - Schedule a meeting with Ross and Helen to demonstrate the website as it stands. Get their impressions of what they see and make any requested changes. Since the committed will be using this application, it must be specific to these individuals' desires since this could turn into an ongoing application after we all graduate.
- Implementing the feedback received from FFPAC members (Week 10)
 - After meeting with Ross, Helen and any other committee members, we want to delegate the revisions amongst group members and push the code by the end of the week.
- Entering the given data into the database from Laura Przybytek (Week 11)
 - Hopefully we will receive all the data from the Grand Rapids campus along with any more revisions to classrooms made that would not be shown currently in the Allendale campus table. It is crucial that all of our data inside the database reflects what is out there.

Progress Made:

Currently, we have created a web application for the users of FFPAC to interact with on multiple mediums to cater towards user friendliness. Our web application currently updates values in a MySQL database and can be referenced at any time on the website. An essential part of the project was meeting with FFPAC representatives and obtaining feedback on its current state. This meeting was held before Spring Break and we received excellent feedback from them on the progress made so far and features they wish to see still. Some of these ideas include:

- Connecting our database to other databases used by faculty and maintenance
- Create an instance of this on a server for the committee to access
- Implementing users via email login
- Notifications of revisions to other users

- Create a temporary instance of the session for a specific walkthrough before adding that instance to the main database
- Incorporate attributes given by Laura Przybytek's spreadsheet
- Major renovation field for a problem that will take time to resolve
- Being able to choose location in a building that is not classroom specific
- Adding a simplified map of a specified building

Our group was ecstatic to receive such helpful revisions and comments from the FFPAC members. Everyone seemed very interested in what the team had so far and was quick to note any desired changes they wished to see. Our timetable for implementing these features was a little off schedule due to us planning work to be done during Spring Break. However, the group was able to make drastic changes to the project and noted any revisions that was unable to be completed.

Technology Clarification:

Due to some confusion on our choice of technology this section will hopefully clarify any questions raised. The main question we have received is why we chose to use Wordpress. We chose to work with Wordpress for a few reasons, the first reason being that it has a powerful and extensive user class and functionality. From the beginning, our intention was to allow users to be registered and given permissions for certain areas of the application, such as maintaining the database. The second reason that we chose to use Wordpress is because it has a massive following and the result of this is extensive documentation. Due to this, we would easily be able to look into the documentation and find any necessary functionality or answers to solve problems that may arise. Since Wordpress gives us a template to build off of, this made starting the project and maintaining the flow of information on the web application much easier. The last reason we chose Wordpress was because it is a framework written in PHP, which is a very simple language to develop in and to learn for the group.

Setbacks:

The first setback we had for this milestone was Spring Break due to the fact that team was all over the state and it was hard to collaborate on the project while on vacation. However, we planned for that week to be slower in development and were able to move past this week of minimal collaboration.

The second setback we ran into was not having any information for the downtown campus. As of now, the walkthrough cannot cover that campus. We are contacting Laura Przybytek to get the finalized information for our database and should hopefully have this by week 12.

While running through the notes taken from the second meeting with the FFPAC, some of the desired features are currently unable to be enacted into the project. One of these features being

the connection to other GVSU databases used by faculty and maintenance in order to update our database as well with their information. Any revisions for a room including changes maintenance makes is impossible to implement with no access to that information. If we could get the application running on GVSU servers, maybe this will be easier for us to perform. If our group can implement a feature to generate reports in a certain file format, we could send these revisions to the correct individuals to resolve the complaints.

Another feature that was in question to be implemented was the use of user accounts for the web application. We are able to make administrative accounts for anyone to access the code behind the Wordpress site. For the FFPAC members on the walkthrough however, it was debated about them having their own accounts to just use the application. We wanted to keep it basic so that only the committee had access to this application, but at the same time having user accounts has numerous benefits. Not only does it increase the security of this information, but it can give access to more faculty outside the committee for their use as well. Also by logging who inserts what complaint, more features can be extended to this web application.

With having individual accounts, a notification system can be placed by using their email from a complaint they posted. We just wanted to be sure that the notifications would be within reason and not just spamming the user's inbox with pointless information about their complaints. If we are able to use the emails as a means of logging in and could refine the notification system in its setup, then we will go in that direction. That will be another task to be completed in the duration of time for the next milestone.

For the software side of the project, our group is in need of developing more unit testing as assurance that the code will function properly and that all edge cases are caught. Since we will not be able to be in constant contact for maintenance, ensuring the quality of code now can greatly increase the longevity of this site's functionality. We plan on setting time aside for everyone to create unit tests before contacting the FFPAC members about the revised project.

Our biggest setback to date is having a live version of the application hosted and running constantly. As of now, we are still using Cloud 9 to spin up live instances, but they only run for a few hours before they are automatically taken offline. We tried installing the application on the GVSU student account (<http://cis.gvsu.edu/~student>) but due to MySQL authorization issues, we could not continue this approach. The next step we took was trying to setup an Amazon EC2 account to run a free year of hosting but ran into MySQL import issues for the database. We have not given up on the Amazon approach and are still trying to get the database imported and the application running.

Projected Progress:

From now until Week 14, our team wishes to have the following features and meetings accomplished within this timeframe:

- Implement more possible features brought up from FFPAC. (Week 12)
 - There were a lot of great ideas given to the team during the FFPAC meeting. Unfortunately not all of them are going to be possible. We hope that another meeting will address the issues from implementing previous ideas and maybe spawn new ideas that are plausible.
- Finalize all production data and have everything be up to date with GVSU's current classroom information. (Week 13)
 - We will keep in contact with Laura Przybytek to get the classroom list for downtown as well as any revisions going on in the Allendale campus to prepare for the next FFPAC walkthrough.
- Run the revised project to our FFPAC representatives a final time to note any last minute changes that are crucial to the functionality of the web application. (Week 14)
 - Any more discrepancies they have with the actual website we can quickly revise before the end of the semester. By this time, we hope to have the live instance already up on a server, so they are able to note any changes and email us anything they want to see fixed. With a live site, the changes can happen that same day and response between the team and the FFPAC members will be quick and easy.

Conclusion:

Even though there were a few setbacks that the group experienced, we believe that they are issues that can be worked around. The ideas that were given during our time at the FFPAC's meeting was extremely crucial and we will be sure to carry out as many as we can. Our group is confident in the progression of the web application and that the next milestone will bring much better features.

Intended Progress Gantt Chart:

