

REFLECTION REPORT

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Semester Project 1 – Course Assignment

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1. Thought process and project management.

For this project I wanted to make use of the guiding principles of the Agile manifesto and take advantage of the flexibility of the Scrum framework. By doing this I was hoping to achieve a consistent workflow while being able to adapt to any potential changes coming during the project weeks. To ensure manageable and focused work, I decided to split the project into 2 sprints lasting 2 weeks each, each sprint focusing on specific parts of the development process. Each sprint was planned out with targeting specific milestones to ensure that there was something to show to the client at the end of each sprint. Here are some examples:

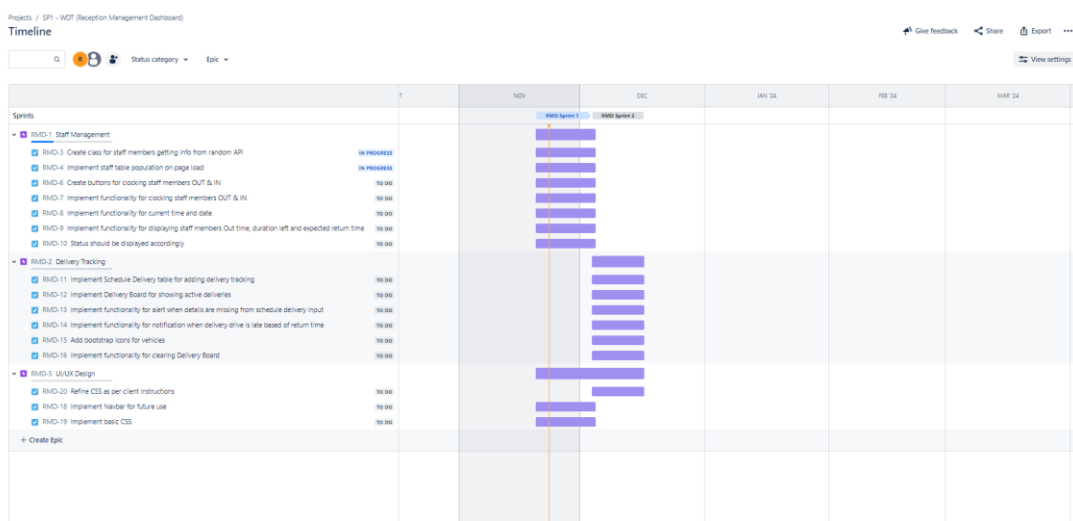


Figure 1 - Project Roadmap

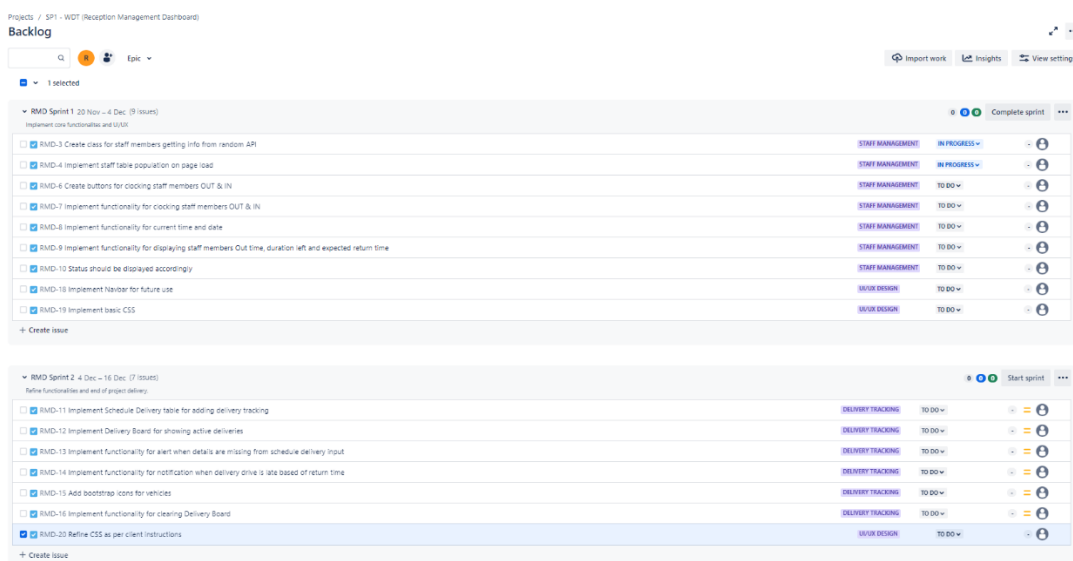


Figure 2 - Project Backlog

2. Sprint 1 – Staff dashboard and basic UI/UX

The focus of the first sprint was to create a functioning staff management dashboard and implement basic CSS to visualize how the final product would look. The main priority of this segment was not to show off stunning visuals, but rather implement core functionalities that would carry over to the second sprint as well. I had decided to create three epics (larger tasks/goals) and split them across the two sprints as displayed in Figure 2 - Project Backlog. The first order of business was to structure the HTML and implement the staff member dashboard which was one of the main features of the webpage.

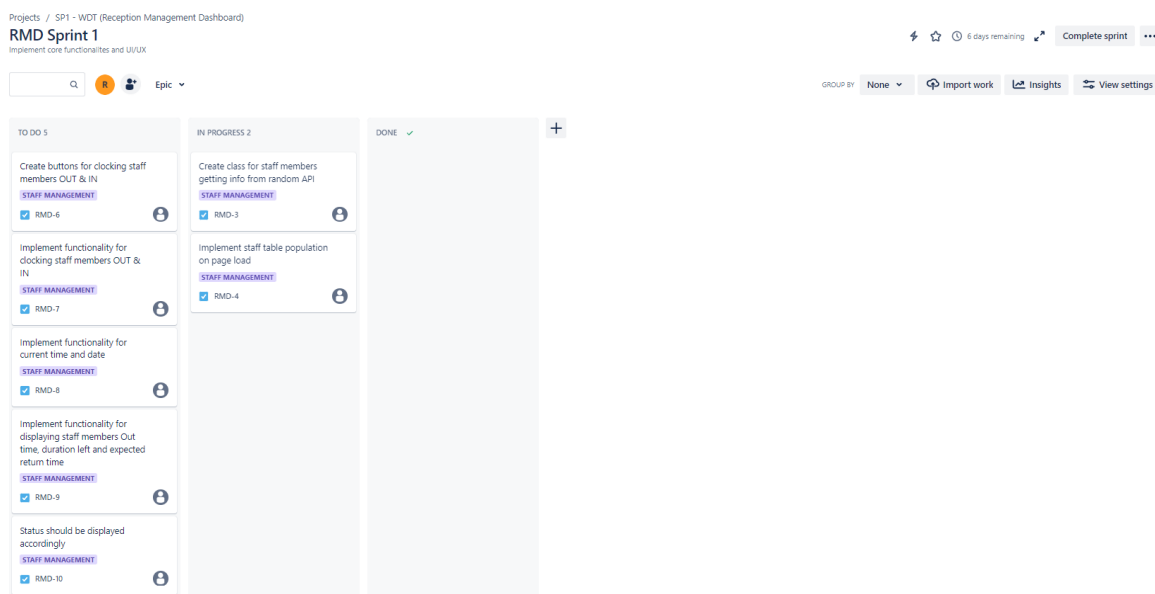


Figure 3 - Sprint 1 progress board 21.11

I created these issues based on my understanding of the chosen project methodology. By implementing these issues, I would have a tangible, working webpage to show at the end of the sprint. As shown in Figure 3 - Sprint 1 progress board 21.11 there are some issues missing compared to Figure 2 - Project Backlog. This is because as I was working on the sprint, I believed it to be beneficial to implement some basic CSS based on the client specifications as well as implementing the navbar. Main reason for this is that I thought it would be easier for the client to give feedback on the look and feel of the webpage with some basic CSS implementation.

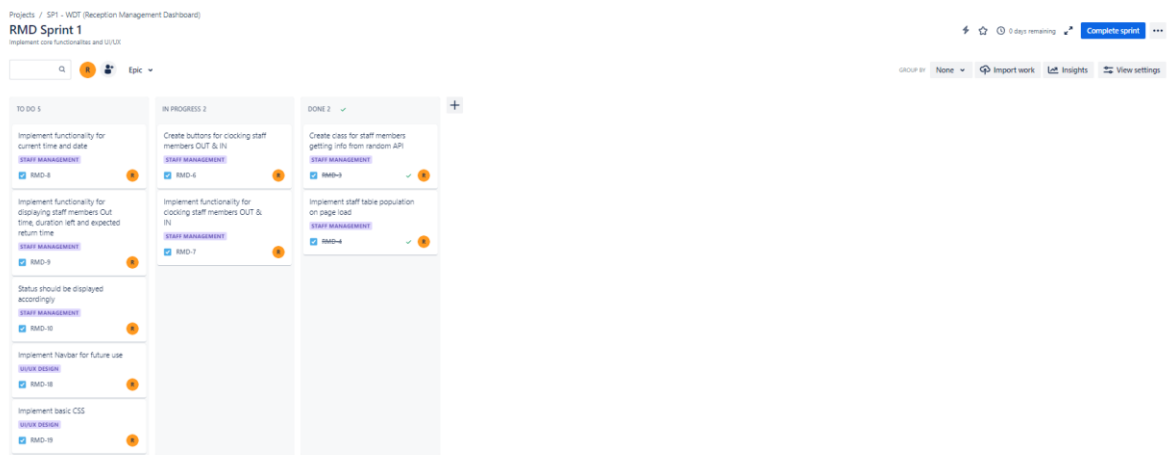


Figure 4 - Sprint 1 progress board 23.11

As seen in Figure 4 - Sprint 1 progress board 23.11 I decided to work my way through the issues with similar functionality before moving on to something else. By doing this I could make sure that I was focusing my work instead of spreading my resources to thin.

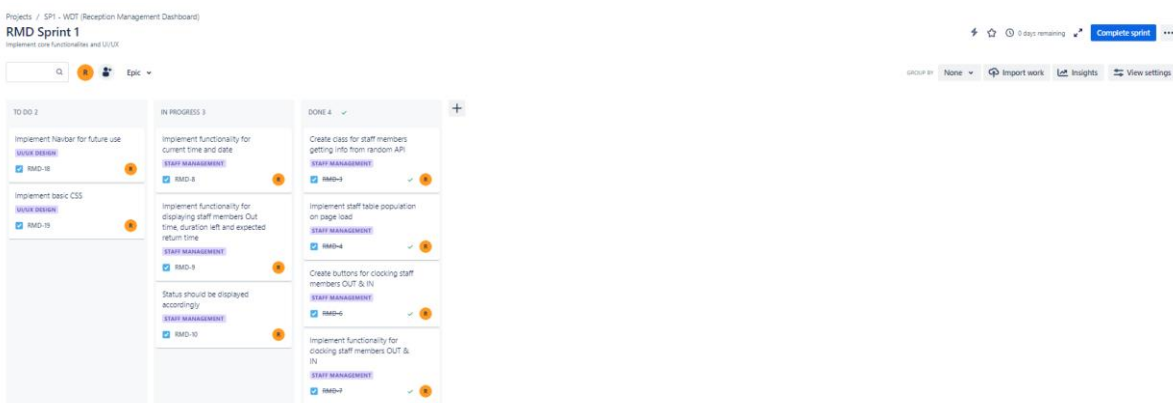


Figure 5 - Sprint 1 progress board 27.11

When working on the implementation of the basic CSS I ran into an issue with the animations for when a staff member is selected for clocking out/in. The issue was that I wanted to change the background color of the selected staff member, but nothing happened. I created a new issue, marking it with the identification of bug in Jira and added it to the sprint.

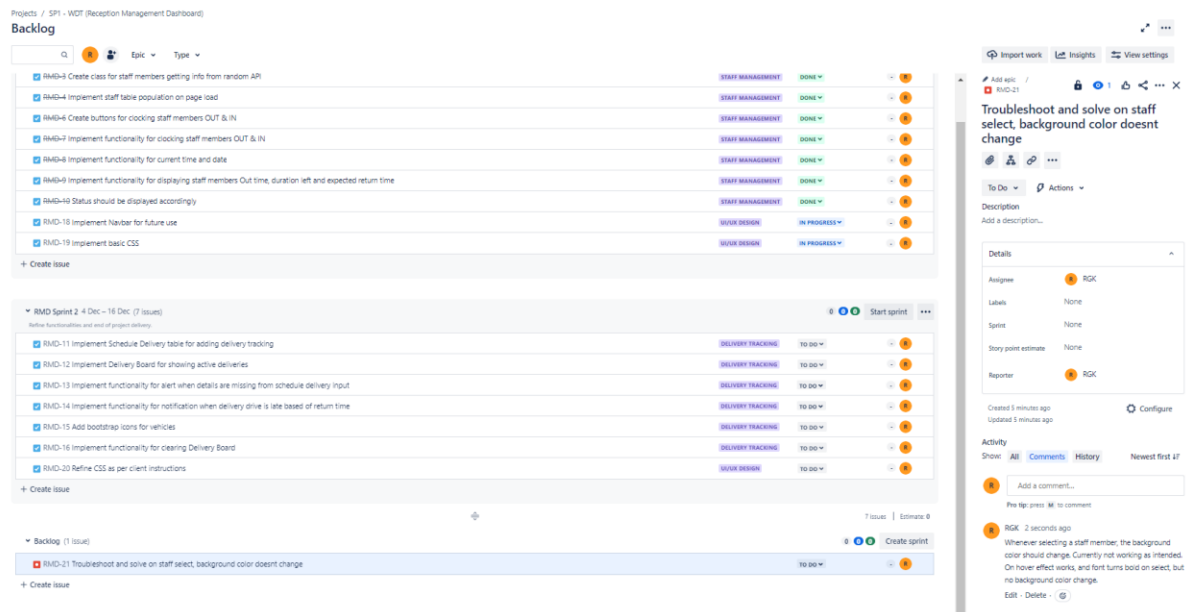


Figure 6 - Project backlog, adding bug to sprint 1.

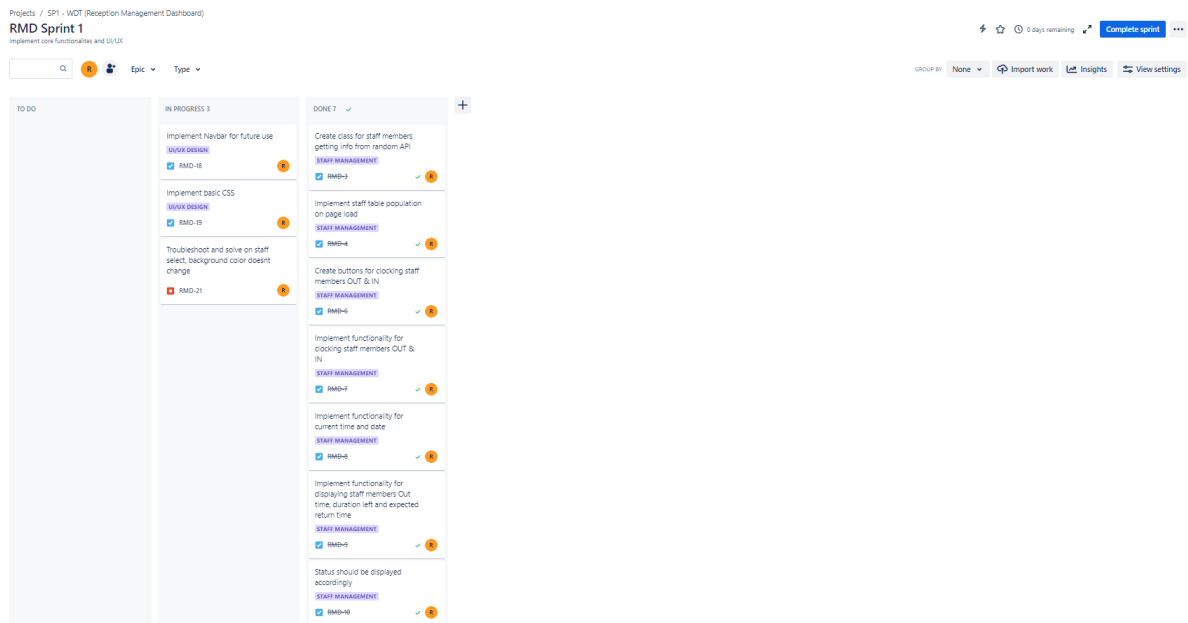


Figure 7 - Sprint 1 progress board 29.11

Encountering, troubleshooting and solving bugs are a crucial part of software development and I felt it was important to create an issue for this even if the sprint was nearing its end. By doing this it was assigned, worked on and solved by the end of the sprint and is part of the documentation of workflow when looking back at it.

At the end of the sprint, when I was done with all the issues created it was time to complete the sprint. In a real-world scenario, this would also mean having an end of sprint meeting to review the work done with the client and get feedback on the work. This is an essential part of working with sprints as it helps adapting to changes and refining for future sprints. It is also a great opportunity for the team to look at what could be improved, what went well and how to implement does improvements in future sprints.

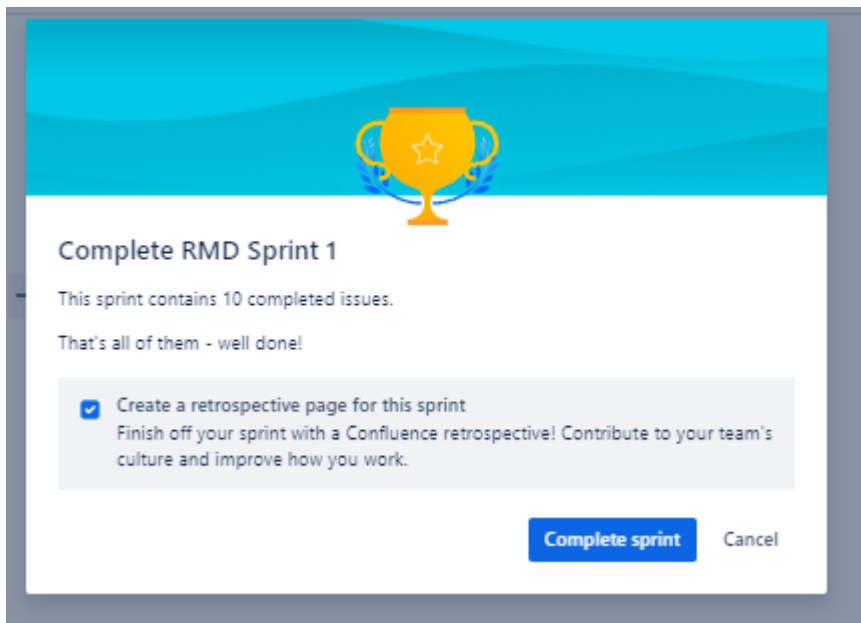


Figure 8 - Sprint 1 completion 1.12

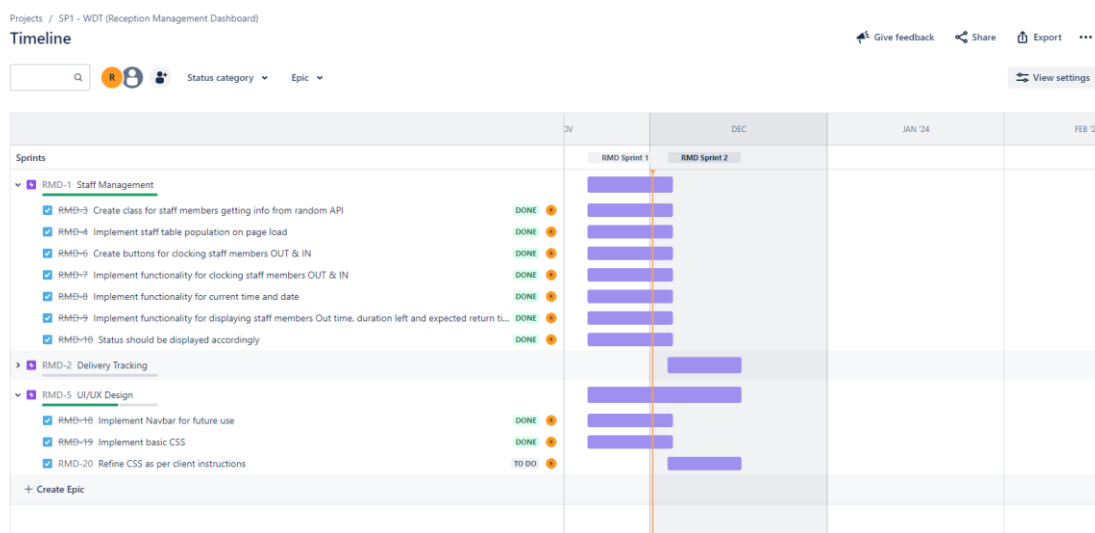


Figure 9 - Project Roadmap after Sprint 1 completion 1.12

3. Sprint 2 – Delivery Tracking

As for the second and final sprint, I had a general idea of what I wanted to achieve. The main goal of the sprint was to finalize and refine and previously “unfinished” functionality while aiming to implement the brand CSS and some custom user experience improvements. To start of my board was comprised of mainly functionality assignments, but as the sprint went on, I decided to add more items to the backlog to keep track of everything I wanted to get done.

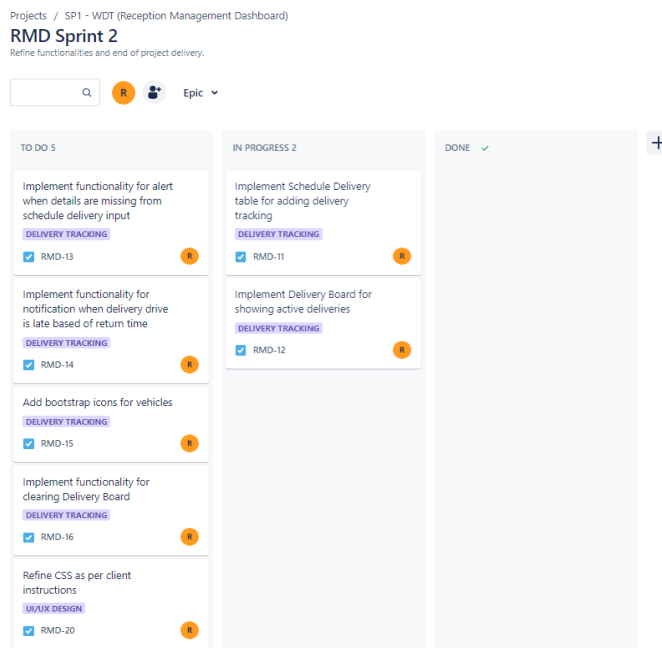


Figure 10 - Sprint 2 first iteration

One example of this was whenever I tried implementing the feature of having the icons related to the type of vehicle being used by the delivery driver show up in the select menu and the delivery board. I struggled for a little while, so I made a new task in the backlog marked with bug to remind myself to find a way to solve that problem.

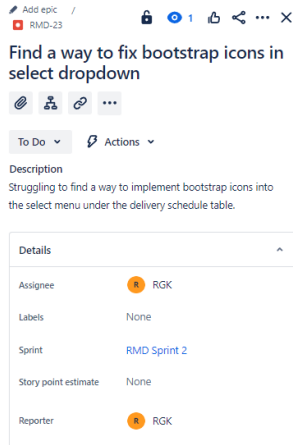


Figure 11 - Bootstrap icons in select menu bug

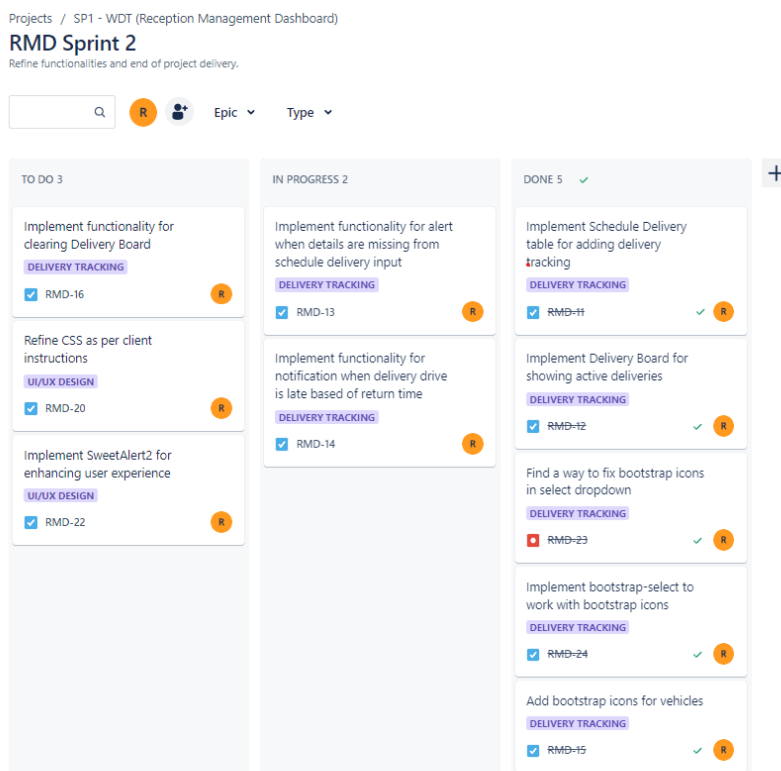


Figure 12 - Sprint 2, second iteration

By iterating upon the sprints by adding additional tasks and issues whenever they would occur, or an idea would cross my mind I felt like I was in control of the project the whole way through.

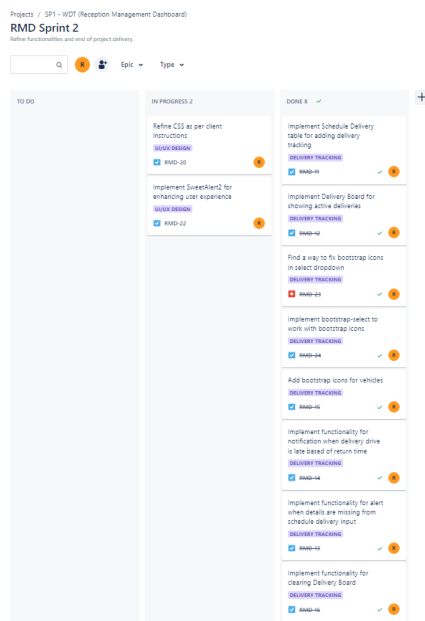


Figure 13 - Sprint 2, third iteration

By the end the first week of the 2nd sprint I was mostly done with everything related to core functionality which made it so that I was able to focus most of the last week on refining the styling and user experience.

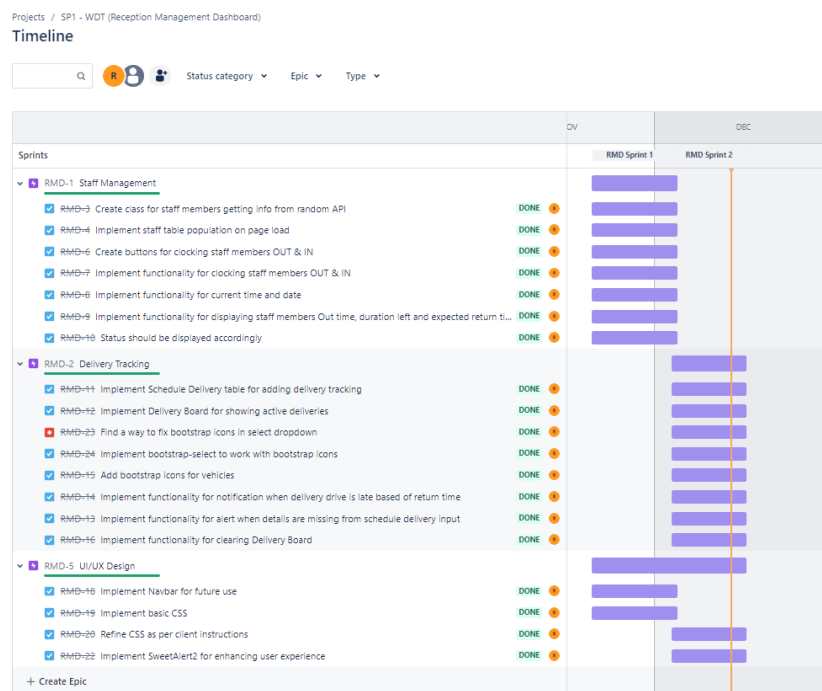


Figure 14 - Roadmap after finishing Sprint 2

The remaining time left of the 2nd sprint I used to write this report, commit my code to GITHUB as I had been working in a private offline folder locally and making sure everything was in working order.

4. Summary

This project was built upon using Agile and Scrum principles and took advantage of good planning, adaptation to feedback and changes. Every iteration of the project was done with continuous improvement in mind. By splitting the sprints into different focus areas there was a clear goal for each sprint which made it easier to achieve, which in turn concluded with a tangible product to showcase to the client. While core functionality took a lot of time and frustration to get just right, refining CSS and improving the user experience was a fun and enjoyable experience.

The project management and how it was structured was based on my understanding of the Agile and Scrum principles as well as my personal opinions in terms of what I thought would be good practices. The screenshots shown earlier in this report should reflect my thoughts in terms of how the Sprints, Epics and issues were chosen.

Looking closer at the issues created for this project and the overlying Epics they were done with a few things in mind. Firstly, I wanted to split the two sprints into distinct end goals that built upon each other. The first sprint was intended to be a good showcase for the client in terms of how the webpage would ultimately look and feel. With having core functionalities for the staff table working and adding a bit of basic CSS to reflect the client's requirements I felt that was a good way to segment into the second sprint. I also wanted to implement the navbar during the first sprint so that the client could give any feedback that could be iterated upon during the second sprint. This also would apply to the basic layout provided by the visualization from the staff table seeing as the overall look of the tables would remain mostly the same. Having the buttons present with some basic CSS as well would in my mind also help give a great overall look at the first iteration of the webpage.

The second sprint was mostly about refining core functionalities while implementing the additional tables and enhancing the user experience. The table implementations were straightforward, but I did have some struggles getting the select dropdown for the vehicles to show the bootstrap icons. After a lot of searching around on forums I eventually found out that they could be implementing by using a bootstrap select plugin and since I was already using bootstrap that seemed like a good idea. At first, I could not get the implementation to work with my existing code. After testing it in a

fresh HTML file I managed to narrow my way down to where the issue, lied by using the dev tools in the browser. It turned out that since I had used custom CSS for my navbar dropdown menu and items, the styling and naming conventions were interfering with the bootstrap integrated styling. So, after doing some name convention changes, I finally got it to work with my existing code. After having all my core functionalities sorted, I moved on to refining my code which meant adding additional comments, playing around with the structure and hierarchy to see what worked best, removing redundant/or duplicate code from several iterations of coding. I also spent some time playing around with the implementation of the SweetAlert2 and its styling. Customizing the toasts, alerts and validation prompts to ultimately enhance the user experience.

By adhering to these principles for the duration of the project I feel like I have produced a product that I can be proud of. Being adaptive in planning, flexible in solutions and continuing to iterate and improve every step of the way. And even if the client feedback in this project has been hypothetical, in a real-world scenario I believe that my project management and development would have benefited both the client and me.

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