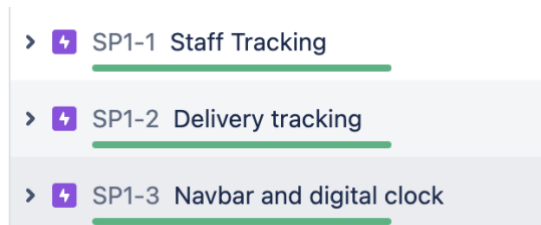


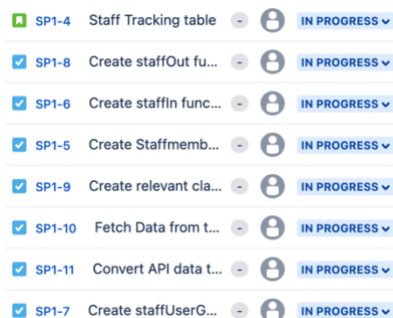
Reflection Report Semester 1 Project

The semester 1 project has been a challenging yet interesting coding endeavour. During this project I think I have developed my skills in JavaScript, jQuery, bootstrap, HTML, CSS and object-oriented programming. When approaching a project of this size I found that using Jira to help organize tasks helped significantly as it ensured I stayed on track throughout the entire duration of the project, in addition it helped keep track of which tasks I needed to complete and which tasks I had already completed.

Using Jira I created various Epics, Stories, and Tasks, to break the required work up into more manageable pieces. As epics are what the user will be able to do on the application. I decided to split it into the following epics:



The staff tracking epic would cover the functionality required for the receptionist to track the staff members leaving in and out of the office. The issues and stories I assigned to the staff tracking epic are shown below:



I chose to create these issues and stories as I found that they covered all design aspects and functionality required for the staff tracking section of the application. For example, a staff tracking table needed to be present for the staff tracking to function, and a staffOut function was required to clock staff out of the office.

The delivery tracking epic would cover the functionality required for the receptionist to track the deliveries coming into the office. The issues and stories I assigned to the delivery tracking table are shown below:

<input checked="" type="checkbox"/>	SP1-14	Schedule delivery...	-		IN PROGRESS	▼
<input checked="" type="checkbox"/>	SP1-15	Delivery board ta...	-		IN PROGRESS	▼
<input checked="" type="checkbox"/>	SP1-16	Create addDelive...	-		IN PROGRESS	▼
<input checked="" type="checkbox"/>	SP1-17	Create deliveryDri...	-		IN PROGRESS	▼
<input checked="" type="checkbox"/>	SP1-18	Create clearDeliv...	-		IN PROGRESS	▼

Again, I created these issues and stories as they covered the design aspects and functionality required for the delivery tracking aspect of the application.

Finally, I decided to create a navbar and digital clock epic as this would cover the final design aspects and functionality required for the application as WeDeliverTech wanted a digital clock as well as a navbar. This was quite a short epic and only included the following issues:

<input checked="" type="checkbox"/>	SP1-12	Navbar	-		IN PROGRESS	▼
<input checked="" type="checkbox"/>	SP1-13	Create Digital clo...	-		IN PROGRESS	▼

I decided to divide these issues into 3 sprints: Design sprint, Staff sprint, and Delivery sprint.

Design Sprint	Staff sprint	Delivery sprint
---------------	--------------	-----------------

The Design sprint would include all web page design. I chose to complete this sprint first as I found that the web page would need to be completed in order to implement the actual functionality of the web page. I decided to assign the following issues and stories to the design sprint:

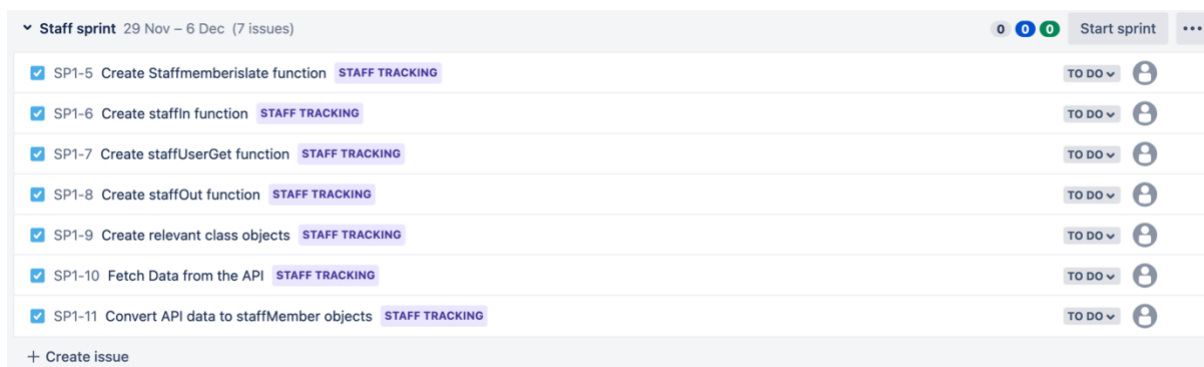
▼ Design Sprint 21 Nov – 28 Nov (5 issues)				0	0	0	Start sprint	...
<input checked="" type="checkbox"/>	SP1-4	Staff Tracking table	STAFF TRACKING	TO DO	▼			
<input checked="" type="checkbox"/>	SP1-14	Schedule delivery table	DELIVERY TRACKING	TO DO	▼			
<input checked="" type="checkbox"/>	SP1-15	Delivery board table	DELIVERY TRACKING	TO DO	▼			
<input checked="" type="checkbox"/>	SP1-12	Navbar	NAVBAR AND DIGITAL CLOCK	TO DO	▼			
<input checked="" type="checkbox"/>	SP1-13	Create Digital clock functionality	NAVBAR AND DIGITAL CLOCK	TO DO	▼			
+ Create issue								

and below is the board for the design sprint halfway through the sprint:

Projects / SP1		
Design Sprint		
Q	SW	Epic ▼ Type ▼
TO DO	IN PROGRESS 2 ISSUES	DONE 3 ISSUES ✓
	Create Digital clock functionality NAVBAR AND DIGITAL CLOCK <input checked="" type="checkbox"/> SP1-13	Staff Tracking table STAFF TRACKING <input checked="" type="checkbox"/> SP1-4
	Navbar NAVBAR AND DIGITAL CLOCK <input checked="" type="checkbox"/> SP1-12	Schedule delivery table DELIVERY TRACKING <input checked="" type="checkbox"/> SP1-14
		Delivery board table DELIVERY TRACKING <input checked="" type="checkbox"/> SP1-15

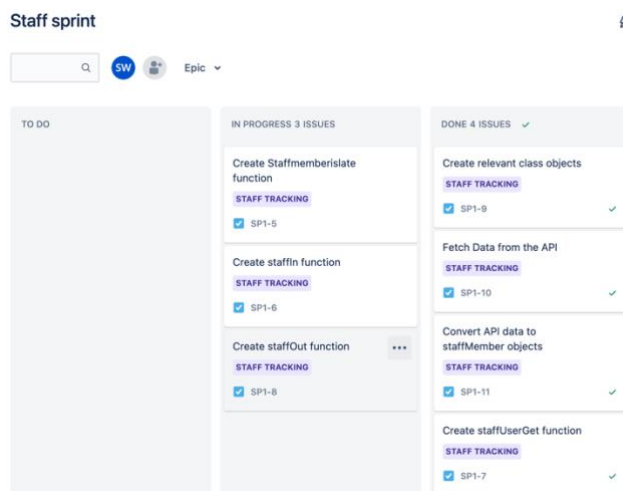
I found that the design sprint was one the of the easier sprints to complete as I find HTML and CSS much easier than JavaScript and jQuery. However, I did struggle a bit with the navbar at first as I was trying to create it using only HTML and CSS. In the end I used bootstrap as it simplified the process significantly.

The staff sprint included all functionality required to clock staff in and out of the office, as well as the functionality required to fetch the staff data from the API and create staff member objects. Hence, I assigned the following issues to the staff sprint:



▼ Staff sprint 29 Nov – 6 Dec (7 issues)		0 0 0 Start sprint ...
✓ SP1-5 Create StaffmemberIsLate function	STAFF TRACKING	TO DO ▾
✓ SP1-6 Create staffIn function	STAFF TRACKING	TO DO ▾
✓ SP1-7 Create staffUserGet function	STAFF TRACKING	TO DO ▾
✓ SP1-8 Create staffOut function	STAFF TRACKING	TO DO ▾
✓ SP1-9 Create relevant class objects	STAFF TRACKING	TO DO ▾
✓ SP1-10 Fetch Data from the API	STAFF TRACKING	TO DO ▾
✓ SP1-11 Convert API data to staffMember objects	STAFF TRACKING	TO DO ▾
+ Create issue		

and here is the board halfway through the sprint:



Staff sprint		🔍 SW 🧑 Epic ▾
TO DO	IN PROGRESS 3 ISSUES	DONE 4 ISSUES ✓
	Create StaffmemberIsLate function STAFF TRACKING ✓ SP1-5	Create relevant class objects STAFF TRACKING ✓ SP1-9 ✓
	Create staffIn function STAFF TRACKING ✓ SP1-6	Fetch Data from the API STAFF TRACKING ✓ SP1-10 ✓
	Create staffOut function STAFF TRACKING ✓ SP1-8	Convert API data to staffMember objects STAFF TRACKING ✓ SP1-11 ✓
		Create staffUserGet function STAFF TRACKING ✓ SP1-7 ✓

Creating the classes for the objects was one of the easier tasks as I am quite confident in object-oriented programming. In addition, fetching the data from the API and create staffMember objects wasn't too challenging as a lot of functionality on how to use the API was given by the website. However, I struggled with the staffMemberIsLate function as I was getting a lot of error messages which were difficult to address. I was able to solve these issues by going over some of the course content again and asking the teachers for help. I also had an issue where the toast would keep reappearing however, I was able to solve this by clearing the interval I had created. Finally, the staffIn and staffOut functions were relatively easy to create as they just involved changing the object properties and modifying HTML content using jQuery.

The final sprint I created was the delivery sprint which would cover all functionality required for the receptionist to enter scheduled deliveries into the table as well as the functionality required to clear the deliveries from the table. Based on this I assigned the following issues to this sprint:

The screenshot shows a Jira Design Sprint board for the period 21 Nov – 28 Nov. It contains five issues, all in the 'TO DO' column. The issues are:

- SP1-4 Staff Tracking table (STAFF TRACKING)
- SP1-14 Schedule delivery table (DELIVERY TRACKING)
- SP1-15 Delivery board table (DELIVERY TRACKING)
- SP1-12 Navbar (NAVBAR AND DIGITAL CLOCK)
- SP1-13 Create Digital clock functionality (NAVBAR AND DIGITAL CLOCK)

Each issue has a 'TO DO' dropdown and a user icon. A '+ Create issue' button is at the bottom.

Below is the delivery board halfway through the sprint:

The screenshot shows the 'Delivery sprint' board. It has three columns: 'TO DO', 'IN PROGRESS', and 'DONE 3 ISSUES'. The 'DONE 3 ISSUES' column contains three items, each with a checkmark:

- Create addDelivery function (DELIVERY TRACKING) - SP1-16
- Create deliveryDriversLate function (DELIVERY TRACKING) - SP1-17
- Create clearDelivery function (DELIVERY TRACKING) - SP1-18

I found that this sprint was much easier than the staff sprint as I could repeat a lot of the code. Therefore, I didn't really struggle with any the code too much.

Below is the roadmap for the semester project:



The roadmap ensured I stayed on track; however, I think I could have done a better job setting the deadlines for the sprints. For example, the staff sprint took almost the entire week whereas the delivery sprint was completed in just a few days.

Overall, I am proud of my progress and results in this project considering it is the first time I have completed an application of this size; however I still have room for improvement.