Our task entails enhancing Capital One’s existing engineering rostering system, hence our top priority is to develop a better user interface for clients to use. We have split into teams to develop two main webpages, an administrator web page for managers and an employee web page for the engineers. We are also building an automated email system for holiday approval requests, whereby an engineer is able to book off holidays through selecting a start and end date, which only the manager is able to approve. One of our requirements involves applying artificial intelligence methods to automatically complete employee rostering via search methods. Our team is also utilising JavaScript frameworks to design the website. Our main requirement is to separate the controls of manager and employees such that only the administrator could manipulate the status of the employee by setting them as ‘Active’ or ‘Inactive’, substituting the ‘Strong’ and ‘Below strong’ status and probation period evaluation. Holidays and deployment periods are paramount and should be separated and stored individually. Employees should be able to view timetables without having to log in and administrators should be able to log in to change the status of the employee or to generate a report of the employee and to manage scheduling.

o Results of focus groups / user surveys (where applicable)

All of our team members have built functional websites independently last semester, therefore we are skilled in using HTML, CSS, JavaScript for website design and to use PHP and SQL to manage the backend database. Some of us have experience in manipulating rostering software such as Time Tree mobile applications. We have also learnt about search methods in our AI module last semester, as well as how they can be applied to a real world scenarios. We are also using GutHub for version control, and regularly committing new updates and changes to any feature we work on. All of us also have a good command of software engineering and are following the agile methodology and incremental development to deliver high code quality. We are using Visual Studio Code to write our code in, and are using MySQL to create our database as these are installed on all University lab computers.