Post-Mortem Report

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For RMIT Software Engineering Process & Tools

Project Description

Overview
The goal of this project was to design, develop and test an application that was to provide booking functionality to any business. In simple terms the primary project goal was to provide a system where customers can book a time slot for an appointment.

Product Owner
Lawrence Cavedon

Project Start Date: February 27, 2017.

Project End Date: May 29, 2017.

Performance

Overall we are extremely happy with the team's performance throughout the development of this project. In summary, the following aspects of the project were significant to it's success.

What went well

- Having a team that was experienced in building modern web applications.
- The use of ReactJS, Redux and other open source frameworks provided to be extremely valuable by reducing the amount of time needed to be spent on development.
- The use of a module based programming language (Node JS) for the backend provided ease of development, allowing for more time to be spent on developing the UI and the functionality as opposed to writing code to complete common tasks.

We also had a few points in the project that could have been improved on. They are as follows.

What went wrong

- More documentation should have been developed, especially in reference to project meetings. Whilst we believe communication for this project was to a high standard with team members working side by side for approximately 30 hours a week (on both is project and other unrelated projects) it wasn't officially documented, which would

make bringing an additional team member onto the team difficult, due to a lot of the design decisions being in the heads of the existing team.
- A bigger emphasis and process being writing tests. Whilst tests are prevalent throughout the project, so more defined rules internally as to what tests should cover and the design of those tests would make it easier and more enjoyable for team members to write them.
- An increase of time spent on this project would have also been beneficial.

Schedule

We believe that this project was continuously developed on time and to schedule. All submission were completed before the deadline and all required functionality was functional during project meetings.

Technical Challenges

Any technical challenges faced were negligible due to the team's experience in developing web applications. However without the pre existing knowledge in the technology stack used we could see the following being potential technical challenges:

- Understanding the Redux data flow concepts
- The use of Webpack and associated plugins and configuration to build the web application.
- React project structure and React best practice.

Risk management

This project had a small number of potential risks. The first being failing to deliver the product on time. To mitigate this risk the product was careful planned and whilst developing a very bare / basic version of the functionality was developed so that even if the team's commitment had to be cut or project was more difficult than originally thought, the application would still have the core functionality.

Another risk this project had was the risk of a lack of communication. To mitigate this risk we ensured that all members of the team worked on this project side by side in person on a regular basis and that a number of different communication channels were available.

You are required to design, develop and test an application named "Appointment Booking System". This is basically a booking system that can be used by any business, allowing a customer to book a time slot for an appointment. The system can be for any kind of business, e.g., a hairdresser, a gym, or dentist. The application will display a customer's booking after it is entered and allow them to provide address, contact and other details. If the customer has made a booking previously and their information has been stored, the application will allow them to retrieve that information.

Overall Project Assessment

Performance against project goals/objectives	1 2 3 4 5 6 7 8 **9** 10
Performance against planned schedule	1 2 3 4 5 6 7 8 9 **10**
Performance against quality goals	1 2 3 4 5 6 7 8 **9** 10
Performance against planned budget	1 2 3 4 5 6 7 8 9 **10**
Adherence to scope	1 2 3 4 5 6 7 **8** 9 10
Project planning	1 2 3 4 5 6 7 8 9 **10**
Resource management	1 2 3 4 5 6 7 8 9 **10**
Project management	1 2 3 4 5 6 7 **8** 9 10
Development	1 2 3 4 5 6 7 8 9 **10**
Communication	1 2 3 4 5 6 7 **8** 9 10
Team cooperation	1 2 3 4 5 6 7 8 9 **10**
Project deliverable(s)	1 2 3 4 5 6 7 8 **9** 10

Key lessons learned

The key lesson learnt from this project is the documentation is important, even in the situation where all members of the team are fully aware of everything that is going on. Whilst this project is short lived (12 weeks) this don't apply as much as it would in an industry environment, but without proper written documentation a massive amount of risk can occur if something was to happen to a team member or a team member was to quit the project. Additionally having readable written documentation helps when bringing on new members to the team, speeding up integration into the team as well as making their lives a lot easier.