



WEEKLY PLANNER APPLICATION

Status Report

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22/05/2018	1.0	Kells, Wood, Yu	First draft
23/05/2018	1.1	Kells	Updated grammar/spelling erros.

Executive Summary

The goal of this project, as outlined in the project proposal documentation, is to create a web application for Bulletproof. This application will recreate a functional whiteboard system used to provide a high-level overview of consultants weekly work allocations. We have adopted agile scrum practices as outlined in the Scrum Guide (Swaber & Sutherland, 2017) to assist in delivering this project.

As a response to the ongoing requirements of the project and feedback collected from our clients, mentor and moderator, we have implemented changes to the scope of the project and the project management practices. These changes have been with the goal of ensuring we deliver a software solution that reflects our ability and fulfil the needs of the client.

Our original prediction to deliver a usable product was 29 August 2018. At the pace of development established so far, we predict that we will be able to meet this deadline on the delivery of the promised minimum viable product. However, on feedback from our client have decided to focus on delivering usable/testable parts of the project at more regular intervals, to assist in gathering client feedback.

Current applications related deliverable are functions coded in Javascript and PHP that support core usability features of the minimum viable product, and style templates coded in HTML and CSS that serve as non-functional elements used in the appearance of the application. Project management related deliverables include documentation covering sprint planning, sprint review, backlog management and meeting minutes.

As a team, we have identified team coding sessions as a potential valuable process that will assist us in delivering our final product. As we carry on development work on the project into semester two, we plan to meet together weekly to perform collaborative coding sessions.

Project Description

Bulletproof, a cloud consulting agency based in Auckland has requested an organisational web application to manage their team. The application will support communication between their Auckland based team and other employees who are mobile or based in other locations.

Bulletproof has requested the application be simple to use and understand with minimal features. The features requested include; a calendar that displays relevant information for staff working with clients for each day of the week, mobile device compatible, cloud-based (stretch goal) and editable.

Our team is employing the use of HTML, CSS, JavaScript, SQL, jQuery, Bootstrap, PHP, Node.js and AWS to build and deploy this application. We are running the project in an Agile Scrum development environment and are completing project work in two-week sprints. We are using the Atlassian owned Jira as a project management tool as recommended by our clients.

Overview of Project

Scope statement & objectives

The project will consist of creating a cloud-hosted web application. The application will be mobile device compatible. It will display a consultant table that is organised by columns - Monday through Friday (each day will be split into AM/PM) with each new row representing a team member. This table will show at a glance who is attached to each client/project throughout the working week. A client table will be generated/updated on the same page, using the information added to the consultant table, that shows which consultants are working on which projects.

Key milestones & deliverables

- The web application will be able to display a consulting table.
- The web application will be editable.
- The web application will be able to generate client table.
- The web application will be optimised for mobile use.

Approach

Our team has been developing using an Agile Scrum methodology. We are using Jira as a project management tool to track our progress, update user stories and complete our two-week sprints.

Response To Proposal Conditions or Recommendations

Part of the feedback during our project proposal concerned the necessity of creating a database to support our application. Preliminary discussion with our client indicated that we might be able to use the Jira API's to retrieve data to populate our client and consultants tables. However, on further discussion with client and investigation of the Jira platform, we decided that this solution would not suit the needs of the client, and would take as long to implement as a database hosted with a cloud provider such as Amazon, Google and Microsoft. Therefore, we have decided that part of delivering a minimum viable product will be working with the client to create a database to store application data.

Variations From The Original Proposal

A key milestone outlined in the project proposal was that our application would have a fully implemented login system. As development has been carried out, it appears that implementing secure login system capable of tracking the permissions and accessibility of multiple users, might be outside of the resources of the project. While we will keep this feature as a stretch goal for the project, it is no longer a critical milestone.

A process outlined in the original project plan was to produce burndown charts to track the team velocity within a sprint, tracking actual user stories completed versus predicted user story completion. After our first sprint developing the application, we decided that burndowns were not producing helpful feedback for our team. All member of the team has to learn new languages and technologies during their work to create the application. Sprint burndowns are failing to capture the real effort being put in by individual team members on the project. Sprint reviews documents have been serving as a better tool to more broadly capture project progress.

In our skill analysis, we identified that we would need to develop skills to develop on the Linux platform. This assumption was incorrect. As we have started developing our application, we have not identified any areas where we will need to develop to support the Linux platform exclusively, as Linux platforms support most modern web browsers.

In our original plan, a non-functional requirement to was to have the application existing within the Jira platform, so we could retrieve data from the Bulletproof local instance of Jira instead of creating the database infrastructure to support our application. After investigating the Jira platform and discussing with our client, we have decided that Jira integration will be a stretch goal, and the application should be built standalone to best support the use cases for our client, primarily that of viewing the table through a mobile device

Summary Of Current Project Status

Work completed:

- The first version of the non-functional user interface elements coded in HTML and CSS.
- Two versions of functional front end features coded in HTML, CSS, PHP and Javascript required supporting user interaction.

Work yet to be done:

- Database Integration
- Mobile Compatibility
- Login features
- Jira and AWS integration

Issues:

We currently are working on a solution for displaying the calendar and how to achieve a minimal UX/UI while still maintaining full functionality and editing capabilities. We currently have two views, one for entering the information to populate the calendar and one for displaying that information in a clean easy to understand way.

Recommendations For Improving The Project Team's Performance

Over the period of the first semester, we have accomplished a lot of what we set out to do. However, we have realised that we need more scheduled collaborative coding sessions to optimise our performance. These sessions will help by creating more opportunities for brainstorming, sharing ideas and sharing our collective knowledge to get better results faster.

We have spent a great deal of time upskilling in the languages we will need to complete the project. However, because we are no longer looking at using Jira as a hosting service for our application, we will need to recover some of the time we spent researching and upskilling in Jira by focusing on the core skills we need to build and deploy the application as a stand-alone product.

Summary Of Individual Member Contributions and Learning Achieved

Junha Yu

Contributed to the project proposal, sprint planning and review, and app development. Learned about agile scrum and how it works, and about web development using Javascript.

Dan Wood

Contributed collaboratively to the project proposal including the rationale, terms of reference, scope and objectives, requirements, key milestones, project approach/plan, Gantt chart and skills analysis - as well as individually completing the cost estimate and the initial product UI/UX design mock-up. Contributed to the sprint planning and review at the end of each sprint. Built simple view using HTML, CSS and Bootstrap for the application based the initial product design for integration with core application. Learned a lot about JavaScript, Bootstrap, CSS and HTML through the upskilling and testing we have done so far. Also learned a lot about Jira through research and the use of the platform as a project management tool after initially planning to build the app for the Jira marketplace.

Tristan Kells

Have contributed to project proposal and status report documentation. As Scrum Master / Team Lead, have had the responsibility of organising client meeting, mentor meetings and assisting the team in following scrum processes. Have contributed to team documentation covering sprint review, sprint planning, meeting minutes, scope statement, product backlog and project Gantt chart. Have coded some of the front-end user interface features and functions in Javascript. Have started work on database integration with Node.js.

In the process of implementing the features I have developed, I have had to learn Javascript and JQuery, as well a develop my existing knowledge of CSS, PHP and HTML.

Have developed further knowledge of the Jira platform to use those tools to help in backlog management and to investigate the stretch goal of Jira application integration.

REFERENCES

Swaber, K., & Sutherland, J. (2017) *The Scrum Guide: The Definitive Guide to Scrum: The Rules of the Game*. Retrieved March 15, 2018, from <https://www.scrumguides.org/docs/scrumguide/v2017/2017-Scrum-Guide-US.pdf>