Self-service pitch script.

Introduction and motivation

Hi, I'm Callum, and I'm the team Leader. I'm interested in UI design and mobile apps.
Hey, I'm Shuxiang, and I'm the Team administrator. I'm interested in OOP and machine learning.
Hello, I'm Thomas, and I'm the Git Master. I'm interested in game development and OOP problem solving.
Hi, I'm Ashley, and I'm interested in game development and cyber security.
Hey, I'm Zihui, and I'm interested in Big data and rear end development.
Hello, I'm Kieran, and I'm interested in Computer vision and VR/AR.

Together, we are a multinational team of aspiring computer scientists, and we are keen to join hands with an industry leader to provide an effective solution to a real world problem. During our search for projects, we were looking for something that was within our domain of knowledge, yet would challenge us to grow and develop new skills. The self service project seems like a perfect example of what we were looking for.

We think we would be a great choice to take on the project because we bring a versatile skill set to the table. While each of us has a strong foundation of technical skills, our various interests and backgrounds means that we each have a unique skill set. For example, ashleys interest in cyber security means he has an understanding of encryption which can be used to create secure login systems. Zihui's interest in back end development led him to get hands-on experience with the Java Database Client, which will be useful in creating a customer database for the application. As for myself, I'm really interested in mobile apps so over the summer I learnt how to develop an application on Android, which was a valuable learning experience. In addition to this, many of us have experience working in professional environments where teamwork skills are vital, so we also have much to offer in the form of soft skills. Now, over to Kieran who will give an introduction to the project analysis.

Analysis

Great, thank you Callum, the analyses we are presenting today are only preliminary ones and we will do a lot more analyses after our project starts. So, today's analysis will be based on two aspects: user analysis and product analysis. For user analysis, we know the user of this application would be lawyers and agents traveling around the nation, or even the world, providing services to their clients. Based on our current interpretation of the project brief, we understand the basic requirement of this project would be an all-platform mobile application which allows users to book trains and hotels, review trips, also with the ability to work out the best route for each trip and a clear user interface. We are likely to discover more user needs after we finish the requirement gathering process with your employees. Ok so this is the end of my part, let me introduce Zihui to present our product analyses.

Thank you Keiran, I will continue to talk about our product analysis. Based on the user analyses Keiran just demonstrated, we have done some researches on existing products in the market. We have found that some applications, such as the “Business travel planner”, “Hopper” and “TripIt”, can provide parts of the services but none of them can integrate all of the services into one app, which is really motivating and inspiring for us to work on something that no one has done before. For the product itself and its development, we identified some preliminary challenges such as: developing cross-platform development and a clear and straightforward UI design, enabling real-time update of parking slots and train status and closing the potential technology gap between what we learned from university and what is actually used in IT industry. Detailed solutions will be presented in following sections.

That’s the end of the analyses, and Tom will talk about our approaches.

Approaches

Lovely stuff, thank you, Zihui. So, since our application has to be accessible for any platforms, we think it’s more efficient to use a framework developed by Google called Flutter, which allows cross platform development. So instead of using different languages and platforms for different operating systems, for instance, Swift/Objective C for iOS, Java for Android, etc., we can use one unified language and one code base for any platform, which will shorten the development phase and lower the cost for later maintenance. Most importantly, we can achieve this without compromising the user experience because a Flutter app can provide as good an experience as native apps.

Also, for the real-time update of information, we suggest using API to connect the users to businesses that are contracted with Browne Jacobson. API’s will then allow the user to book travel, find routes, book hotels and restaurants, and find parking - all within the self-service app.

Moreover, to deliver a straightforward and efficient user interface, we plan to study similar apps in the market and come up with designs that are both user-friendly and functional. Websites such as “FluidUI” and “Proto.io” allow us to create prototypes much quicker and easier than before. Therefore, we will be able to provide a set of alternatives, it means we also need employees from Browne Jacobson to experience our prototypes and give feedback.

In addition, we have come up with a mechanism of time management that allows our team members to close the technology gaps we mentioned before, which will be explained more later in the management section by Ashley.

Management

Thank you Tom. In this project, we want to use an agile management approach. We really like agile methodology because it allows us to be flexible with our internal communication style and also allows us to work very closely with the sponsor. Frequent contact with the sponsor means that we are far better positioned to create the product that the sponsor wants. If a feature doesn't quite meet the requirements that were set out, then feedback will allow us to move quickly to correct our mistakes. If requirements change, new implementations can be planned and carried out immediately.

Based off of the project brief we received, we think we can achieve a complete product in the given time frame. Our estimate for the entire process is 18 weeks.

The first four weeks will be spent on requirements gathering and skill development. While a subgroup of our team will spend time understanding the exact requirements of the product, the other members will spend time learning the skills needed to build the product. This will ensure that when development begins, no time will be wasted in plugging skill gaps.

The second phase of our timeline will be another four weeks long, and will focus on writing up a detailed specification and creating a prototype of the product. This period will be critical for addressing how we will meet the requirements and how we will tackle any known obstacles to come. We will also use this time to create an interactive prototype to confirm the look and feel of the final product with our sponsor. Now, Shuxiang will take over and talk to you about the last two phases of the project timeline.

Thank you Ashley. The third phase will be the development phase. During this phase we will finally get to grips with creating the application for the sponsor. This will be the longest phase of the project, its length subject to what is specified during the requirements phase. Considering what we already know, we estimate the minimum length for the development phase to be 10 weeks. During this time, we will develop a real product and deliver it to you in iterations. To organise sprints and sprint goals, we will use a kanban board on Trello. This will allow us to keep track of a backlog of User Stories, where each user story will outline a goal and the criteria used to meet the goal. Each user story will be unit tested and documented by the team to ensure that the produced software works as planned. By using performance metrics such as burndown and velocity, we can measure the efficiency of previous sprints, and use that information to predict the efficiency of future sprints and a project completion date.

The final stage will be the release of the software. During this stage we will release the product, which will allow us to find issues with the system that we may have missed. We can then proceed to debugging the software should there be a need for it.

We hope you have enjoyed hearing out our plans for the project. We look forward to meeting you in the Q and A where you will have the chance to ask us questions. Thank you for your time.