Project Planning Paper

Team: We Can Do It

Team Members

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**Team skills analysis:**

* Three of the team members (one CE/ two CS) have good experience with software development.
* One member has good experience with UI/UX design, and has designed many personal applications.
  + No experience with software development.
* One member has experience with SQL database.
  + No experience with mobile application development & web development.
* One member of the team has experience in application development such (iOS and android) and he developed many different applications both personal and commercial.
  + Have experience on the backend side & database.
* One member has experience with Front-end web development.

**Legal and Ethical analysis:**

Currently, we do not have any legal or ethical concerns. The only sensitive/protected information that we may be dealing with is Criminal History Record Information (CHRI). But the Wichita Police Department (WPD) will be providing us with a list of servers that are pre-certified to use in regard to CHRI, one of which includes Apple.

As for use or misuse, the WPD did mention that there could be a possibility of sharing this product with different cities. Because this is a data management project that will be solely used by the WPD we do not think there is a high risk of misuse.

**Milestones:**

We have to provide an initial sample of the User interface of the application and get it reviewed by the Police department. So, we can get their thoughts of the User interface and User experience of the Application. So, we can change it before we create the application because changing the User interface while coding the application will take more time. Also, it's better to grasp the idea and what the police department exactly wants before writing code to save time. We are planning to do that before the end of this semester. I would say around week 8-10 it should be done.

We want to meet with the police department to talk about the most frequently used web pages, so we can include it in the initial sample of the application that will be reviewed by the police department. Having that in the initial sample will make the user interface and user experience that we want to implement on the application apparent to them. And that will make the comments that we get back more beneficial and helpful. And we want to finish this on Week 10-12.

**Metrics:**

The metrics that we will be measuring our accomplishment toward the final product will be the feedback that we get from the police department on our sample user interface and user experience. And how our approach toward solving the issue is appropriate or not.

Furthermore, we will be meeting with customers who need the product and they are the police department. And getting their feedback on each step we take on the application. Because we are building the application for their use, not our use that 's why their feedback is important.

Also, we will be using trello to keep track of each team member's accomplishment toward their given task. Trello is a website that gives the users the ability to put a todo list that can be viewed for all participants on the page. Also, users can put a percentage of the finished task which can be viewed for other participants. Trello is a great tool for putting a todo list and to track projects' accomplishments that why we are using it.

**Acquisition Schedule:**

The project architecture of this project is the application architecture. Since this will be a mobile/ web-based application, it was the most logical way to approach this project. It best describes the patterns and techniques we should use when designing and building an application and gives a good roadmap for best practices to follow in order for us to end up with a well-structured app. This is also the only architecture that focuses on both front-end and back-end development which is needed.

The conceptual bill of materials from what I’ve found is that if its a private app and will be shared amongst the police department, then they would need to pay for a license on the app store of around $399 a year. If we take the route of web-based application then it would depend on how often the app is used and will be paid per gb after 5gb is used. The risk of late delivery of resources to the client would hinder our chance of getting our application selected by the police department or not getting service learning from the project.

**Data Configuration Management Plan:**

Because our project does not require us to configure any hardware, we only need to manage the configuration of our software and documentation. We are using the source code management software, GitHub, to keep track of all our code. We will be writing the code individually and GitHub will be a good way for all of us to hold each other accountable and check on one another’s progress. We will also be continually testing our code as we edit at each step.

For documentation, we are using Google Drive to manage any and all important documents we receive from class or from the WPD. Google Drive also allows us to collaborate on documents while providing timestamps and past versions of all documentation.

**Software Development Model:**

The software development model that our team has chosen to utilize is the Agile model. We chose this process because it is the most flexible in terms of how it is structured. It is to accommodate changes and the need to produce the software faster. Another reason why we chose this method was because it values the relationship between the team and the client; we can collaborate with the client throughout the whole process instead of just following a set plan and not be able to change it. Agile is focused on more short sprints and iterations rather than a long term, so that we can see what direction we would need to head and give our focus to per week.

As a team, we can handle more complexity of the project in the development process. Because the Agile model is collaboration-heavy, we found that this would be the perfect model for us since we believe in the same model as it. We focus on tasks as a team with all of our strengths, not just individual strength. This is found to be more efficient and it also helps since we can give internal feedback to each other to see what needs to be improved within the next spring and also get feedback from the clients regularly. It is a continuous process of delivering working, tested, prioritized features of the program.

**Overall First Semester Schedule:**

Week 1-4: Analyze the idea and the technologies that we will use it to develop the project.

Week 5-6: Study the user interface design and User Experience for the application

Week 7-9: Study and design the backend side such as database and endpoints for the API.

Week 8-10: Prototype 1.0; A mobile application wireframe that represents all screens of the application, It shows all usage scenarios.

Week 10-12: Prototype 1.1 Finished (final design), transforming the design into interactive screens by using Adobe XD, and finished from testing.