**Risk Management Plan**

**Version 3.1**

**Project Management App**

**Team A**

**CSC-355**

**Spring 2016**



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**REVISION HISTORY**

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| --- | --- | --- | --- |
| Version | Author | Description | Date |
| 1.0 | Hector Richiez | I created the first draft. | 09/03/2015 |
| 1.1 | Jennifer Li | I made format changes, and minor grammatical changes. | 09/06/2015 |
| 1.2 | Tyler Mariano | I updated the color, style, and design. | 09/07/2015 |
| 2.0 | Jennifer Li | I reworded and added sections, and made some grammatical changes. | 09/11/2015 |
| 2.1 | Hector Richiez | I made some grammatical changes and added more risk factors in the project development cycle table. | 09/16/2015 |
| 2.2 | Jennifer Li,  Tyler Mariano | We reviewed the document before submission. We changed the section headers to all capital letters and removed dates from header section. | 09/17/2015 |
| 3.0 | Jennifer Li | Made grammatical corrections in sections 1, 2 ,3 ,4 ,and 5. Also added risk number 16 to the project risk list. | 02/16/2016 |
| 3.1 | Jennifer Li | Reviewed and updated the severity and/ or probability of risk number 5, 9, 10, 11, and 12. Also added risk number 17, 18,19, and 20 to the project risk list. | 02/17/2016 |

**1.0 INTRODUCTION**

With careful evaluation and consideration, Team A has assembled a Risk Management Plan that contains a master list of risks that may impact the overall performance of the Project Management App. This document will help Team A adapt to the possible risks that may occur during the duration of the project. The team has created a process of categorizing and enumerating the risk factors, which will help the team rate the Severity, Impact and the Probability of the risk that will affect the implementation of the project. In case a specific risk does occur, the team will be ready to identify the risk by the Description and will act accordingly by the given Resolution Plan.

**2.0 RISK MANAGEMENT PROCESS**

Risks are the other faces or outcomes of a project or plan. They will always exist but if we can predict them with anticipation, there is a better chance to overcome them. However, not all risks will be present in a given situation; the best step is to prepare for them by identifying the threats that are more provable to transpire. In the case of the Project Management App, each individual will be responsible for identifying threats that could jeopardize the project and act accordingly to eradicate the threats. If the severity of the threat is high or medium, documentation procedure will have to be followed to maintain a record of the threat.

**3.0 CATEGORIZATION OF SEVERITY**

After evaluating the risks factors that can impact the overall performance of the Project Management App, the team has come up with a strategy of enumerating and categorizing risk factors of low, medium or high, the probability of a contingency happening and the overall impact that such a contingency would impose in the healthy existence of the application. In the event that it may occur, high means that the probabilities of a contingency to happen are affirmative. Medium means that there is a 50/50 chance that it could happen, and low means that there is at least 20 percent change of the contingency to occur.

**4.0 SUMMARY OF RISK**

The risks that the team will encounter during the duration of this project will be categorized into three different types. The first type will be Technical Risks. The second type will be Cost Risks. Last but not least, the last type will be Deadline Risks. Each type of these risk is explained in the sections below.

**4.1 Technical Risks**

Technical Risks are issues that could profoundly impact the development of the project. Risks that would be categorized into this type will consist of hardware constraint, software integration, logical coding errors, network issues and platform or environment issues.

**4.2 Cost Risks**

Costs are a very important part of a project; they are one of the big three forces that may cause the down fall of a project. Risks that are categorized into this type will consist of the development of the application, cost incurred in personnel training, legal fees, application deployment, and licensing fees.

**4.3 Deadline Risks**

Any event that would delay the successful completion of the project, such as members’ inexperience that would result in delaying the deployment of the application, and falling behind in meeting deadline by members of the project would be considered risk that would impact the project’s official schedule.

**5.0 PROJECT RISK LIST**

The table below is the list of all of the possible risks that the team may encounter during the duration of this project. The list of risks is broken down into seven categories. Each risk will contains an ID, Type, Severity, Impact, Probability, Description, and a Resolution Plan. The Impact category will have three different levels. The first level is high, which has an enormous impact on the project that will be harder to mitigate. Medium, which has a possibility of having an enormous impact but can be managed. Lastly, Low, which has the least possible impact of the system and can be easily mitigated.

**\*Key: T = Technical C=Cost D=Deadline.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | Type | Severity | Impact | Probability | Description | Resolution Plan |
| 001 | T | High | High | Medium | Developers having little and no experience with mobile technology | Engaging in technological  Tutorials that would fortify or better the technological background of developers in mobile platforms.  With the inclusion of a new member that has a significate amount of experience in developing in Android Studio. |
| 002 | T | Medium | High | Medium | Android Studio is an IDE that will be used to develop the App. Judging from our experience the IDE is or behave slow for coding. | With the new version release of Android Studio, the IDE provides drag and Drop features to help with development. The new features help developers be more productive with implementation. |
| 003 | T | High | High | Low | The application needs to have internet connection at all time to save the data in a data base. If there is no connection, data can’t be saved | Implement a capability for the application to be able to save project’s data locally for later transfer to the database when connection to the internet is available |
| 004 | T | Medium | High | Medium | After deployment, functionalities of the Application may become obsolete and outdated. | Offer service update and patches that would offer new functionalities to the end user. |
| 005 | T | High | High | Low | Miscommunication between team members can have an impact in the project implementation. | Weekly team meetings will be held to go through the project specification, constrain, cost, functionality and development. |

**Project Risk List (continued)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | Type | Severity | **Impact** | Probability | Description | Resolution Plan |
| 006 | C | Low | Low | High | To deploy and make the application available in the Google store there is an annual fee of $25. | Team members will be responsible for paying for the annual fee to be able to offer the application to the android users’ community. |
| 007 | C | Medium | High | Low | The functionality of messaging capability require a monthly server feed of $5 | This functionality falls the intended purpose. In the event that it is implemented in the application, the team members will share the cost. |
| 009 | C | Medium | Medium | Low | Research and development is a critical aspect of an application development because it entails finding the latest technology used by business | Buy books to learn the latest technology out there. Read poster board, and survey companies that are in the business of developing apps. |
| 010 | D | Medium | Medium | Low | Not meeting deadlines in the application integration and coding implementation can setback the deployment of the application. | If necessary members of the team will have to cross their responsibilities’ boundary to meet deadline and assure a successful deployment of the application. |
| 011 | D | High | High | Medium | Testers not adapting or having problem using the GUI interface of the application. | Before Application deployment, a survey will be conducted with a prototype so users can provide feedback on their experience with the application GUI interface. |

**Project Risk List (continued)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | Type | Severity | **Impact** | Probability | Description | Resolution Plan |
| 012 | D | Low | High | Medium | Unit testing is necessary to make sure that each component or module of the application is working correctly. Not having the right number of personnel for testing could impact meeting deadline. | If testing happens to be too much to deliver the application on time, others member will join in to expedite the testing cycle so it doesn’t delay the application deployment.  With three developers working on implementing this project, unit testing of each functionality will be more productive. |
| 013 | T | Medium | Low | Low | Not knowing the standard library of Java, could potentially slow the project and failed to meet deadline | We will Review documentation that explain the functionality of the different libraries in the language and how to implement them efficiently so we are not falling into situation of reinventing the wheel. |
| 014 | T | Medium | High | Low | Not following a convention for Name and capitalization of variables and functions could prove to be obnoxious for updating and maintaining of codes. | We will make sure to follow the convention of the language that is used the most to implement the application. These standards and conventions will be decided by team developers. |
| 015 | D | Low | Low | Low | A natural disaster could happen without warning. It could potentially create chaos in a project if no precaution is taken. Not having backups and copies of the software being developed is a major problem if a natural disaster happens. | To be prepare for loss of important software application and data during a natural disaster, each member of the project will have a updated copy of the project being developed in case if a natural disaster strikes, we still have copies to continue with the project. The use of GitHub will help keep all versions of the project, to prevent loss of data. |

**Project Risk List (continued)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ID | Type | Severity | **Impact** | Probability | Description | Resolution Plan |
| 016 | T | High | High | High | Failing or downtime of the Web host. Which is used for the activity of providing storage space and access for websites. | Implementation of overload protection and file backups will help mitigate the possible failing or downtime of the web host. |
| 017 | T | High | High | High | Developers having little and no experience with implementation of Databases. | Engaging in technological  Tutorials that would fortify or better the technological background of developers to learn how to implement and set up the use of a database. |
| 018 | T | Medium | Medium | High | Team A had multiple client changes, which causes a miscommunication in system requirements. | To help our new client catch up with the rest of the team. The project leader will meet with the new client at least once a week to help assimilate the client. |
| 019 | T | High | High | High | With the incorporation of a new team member, miscommunication of the project can hinder the productivity of the team. | To assimilate our new team member, we decided to show him all the technical documents that the team has created for this project and dedicate the first 15 minutes of our weekly meeting to clear up any misconceptions. |
| 020 | T | High | High | Low | With a total of three developers, coding and documentation styles are going to be different. This may cause code to be poorly documented. | Developers, will agree on the proper documentation and coding styles which are explicitly explain in the development plan document. |