

Revised Risk Assessment – Team 3.02

Overview:

An initial prototype of a to-do list application has been successfully created and has garnered the interest of Initech. Initech has proposed additional functionalities on top of the original feature set of the application. The main functionality proposed is the addition of a web-based application that acts similar to the mobile application. Initech would like to integrate the web-based application with the mobile application to create a synchronized to-do list manager accessible through both the web and the mobile app. The synchronization is done by keeping two databases, a centralized one on the web, and a local one kept on the phone. The local will sync with the central database when the app is started or explicitly asked to synchronize.

Current Status:

The current status of the prototype is simply the mobile application. Since the web-based portion has not been created yet, it is obvious that the mobile application does not synchronize to the web portion. All functionalities that do not relate to the web-based application has been implemented.

Pre-Development Risks:

Our major pre-development risk is that none of our group members are highly experienced in creating web-based application used along with a mobile application. A few of the members have had brief encounters and gone through basic tutorials and will hopefully be able to guide us through the process. The experience of our group members reduces the probability for this risk to occur. We will mitigate this risk through the use of Google Web Toolkit and Google App Engine and the documentation they provide. The impact of this risk could be very large, hindering our ability to successfully develop the application. To further mitigate this risk we will seek help from others as necessary.

Security is not a significant risk we are worried about. This is a simple list manager that should not be holding sensitive data. The application does provide some low level of security through the use of passwords. If higher security is desired, the storage of data will be encrypted as well as the synchronization of data will also be encrypted.

Since Google Web Toolkit and Google App Engine are both free and should be sufficient to fulfill the requirements, cost is not a major risk. There is a risk that we may run over the estimated effort hours, but we are using the Unified Software Process, well defined roles and development processes to control this risk. Since all group members were involved in the development of the mobile app and Initech does not change the core features of our application,

there are no other pre-development risks that we can identify.

Decision Drivers:

The primary decision drivers will be feasibility and our client, Initech. If a feature is not feasibly implementable in terms of time, effort, technology, or cost, it will not be implemented and appropriately presented to Initech. Other capabilities will be driven by the needs of the customer through the use of customer feedback on the deliverables of the product.

Post-Development Risks:

Majority of the post-development risks are related to the reliability and dependability of the applications to correctly synchronize. The largest risk being a non-deterministic bug that prevents us from reproducing the bug enough to diagnose. We hope that with the use of the Google Web Toolkit, it will properly deploy the web-based portion of the application and make debugging easier for us. In other words, we estimate a low probability of occurrence for this risk. Our plan to mitigate this risk is to properly and carefully develop our synchronization module such that the results should be very clear.

There is the potential risk that after development, all the effort hours are spent on development, leaving little to no time for testing. Since there is not a budget set as of this point, we may be able to continue spending labor hours as long as it is before the hard deadlines. We will mitigate this risk by diligently using our effort hours properly. As said before, since the only addition is the web-based application that is simply a mirror of the mobile application, there are not any other post-development risks we can identify.