Process Assessment Document

Team 3.02

1. Team members: Jack Suen, Niranjanaa Ragupathy, Archanas S Vaithiya Santharaman, Sanchita Vijayvargiya

2. Process used: Unified Software Process (USP)

3. Activity assessment: for each activity the team used, provide:

- **Mobile Application (MTM):**

Phase	**Activity Description**	**Quality**
Analysis	The given android application was analyzed to determine the features, design and the functionality of the various modules.	100
Modification	The mobile application was modified to include the synchronization module	95

- **Web Application (WTM):**

Phase	**Activity Description**	**Quality**
Inception	End product vision and business case are specified. The scope of the project is established.	100
Elaboration	Requirements are analyzed and an architectural prototype is developed.	98
Construction	Remaining use cases will be analyzed and designed. This phase is usually broken down into multiple iterations till the final product is built.	95
Transition	Product is deployed and the issues that arise are addressed.	95

5. Productivity assessment

- Total time spent: 200
- Total lines of code in delivered product: 1300 (approx.)
- Total lines of user documentation: 8364
- Productivity score: 100. The team was able to meet often and meet most of our internal deliverable deadlines. Work was not procrastinated to the last minute and performed in a timely manner.

6. Quality assessment

- Total number of test cases: 24
- Total number of defects found during testing: 6
- Total number of defects fixed: 5
- Quality score: 90. The quality of the application was dependent on the mobile application which could only be correctly ran on 4.0 and above. The requirements were met but there are some limitations on the synchronization. Besides the synchronization, the web application is user-friendly and mirrors the mobile application very well.

7. Recommendations:

Prioritized bullet list of recommendations on how to improve the team's software development process.

1. Have detailed documentation pertaining to design and requirements for all projects. Designing the MTM based on the WTM would have been easier if it were documented.
2. Work with technologies that are well documented. During the course of this project the team ran into a number of issues with the Google App engine platform.
3. Split the work among member on a module basis, to ensure higher productivity. Members can build stubs and work with them until dependant modules are available.
4. The new feature should form the central theme of the design, in this case synchronization should have been addressed earlier on in the cycle.
5. Branches in Git, to avoid conflicts while multiple members were working on the code base.

Recommendations for the software:

1. Currently the application does not support two tasks with the same name, this will be resolved in future versions
2. Further features for synchronization need to be added on the mobile and web side.

In the current release, synchronization of the mobile and web updates makes the assumptions listed below. Future releases should avoid these dependencies:

1. On login success,
    a. List of all users in the web is synchronized (in future, can be made to synchronized when app starts)
    b. Tasks of user who just logged in is synchronized
    c. Task synchronization also happens when d synchronize menu option is chosen
2. Deleting users is not supported.
3. For user password change, web's password is given higher preference
4. Task names will be unique
5. Names of users added will never conflict
6. Tasks deleted are synchronized regardless of which user's task it is.
7. If conflicts occur in task updates, web's task changes are given higher preference
8. New users in d mobile are added to the web when the user chooses synchronize menu option.

8. Summary:

The team modified an existing android TODO-list application and built a new web TODO-list application using unified software process model. The user interface could have been improved in the web application but the team compensated for that with a higher quality application through efficient coding techniques and complete system testing.