



CS 5542 Project Management Report

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The project plan was divided into four increments:

First Increment:

List of work:

- a. Project design, including scenario, use case specification, and feature design.
- b. Design class diagram
- c. Design sequence diagram
- d. Design architecture diagram
- e. Manage sensors in both smartwatch and phone.
- f. Implement AlchemyAPI in phone app.

Second Increment:

List of work:

- a. Get training data from smart watch
- b. Communicate between smartwatch and phone
- c. Use Spark to analyze training data sets obtained from smartwatch and phone

Third Increment:

List of work:

- a. Collect data from twitter and do the recommendation to a specific user.
- b. Collect image and text data from Instagram and do the recommendation to a specific user. Get data from device and analyze the category.

Fourth Increment:

List of work:

- a. Complete the whole scenario, add necessary modifications to the project.

Team Members Contribution:

Gharibi, Mohamed: 25%

Setting the configuration to connect the smartphone with the smart watch and solving the issues that might appear in the previous code. Guarantee the smooth functions overflow and changing the function parts to make them flexible for the future modification. Worked on the robot movement (which has been cancelled and deleted from the project). Based on the lab tutorials collecting the tweets and make the sentiment analysis over these tweets for the text recommendation. Finally, contributed in the project report, project video and the project slides.

Huang, Wei: 25%

Based on Mohamed suggestion, improves previous features (app layout, functions stabilities etc). Based on lab/tutorial examples to modify detail source code and add into new functions as needed. Particularly, assist Ting with the sentiment analysis section in the project which utilize decision tree method to determine which/what kinds of twitter message or current user status that they want other people know about and based on this similarity message, it will be send to the friends and recommendation him/her if this is a similar kind of message or event you also interested in and participate.

Sattineni, Vipin Reddy: 25%


Based on lab/tutorial examples to modified detail source code and implement specific functions to match with the need our project. Doing more research on how to realize two-ways communication between watch and phone and then sending real time data/notifications to each other.

Xia, Ting: 25%

Build the architecture. Pair the android phone and the smartwarch. Collect the tweets from twitter and images from Instagram. Code the part for sentimental analysis and classification using Spark ML library, and finally providing the recommendation results. Then the results will be send back to the device to let the user know. Also, let the images send to Spark to do the classification.

Final Project Evaluation:

In terms of completion of overall projects, we think we have successfully accomplished many key segments compared with the initial plans that we had set up in first increment. Though the moving segment that we designed at the beginning, which was intent to be used as a extra safety protection feature for users, but overall we are very satisfy with current status of our project. In the next agile process next time, we will make sure if the key features that we are going to implement will 100% realized at the end. Also, we will make sure what are the essential goals of the project at the end so that we can create a very clear guideline and time schedule to make sure all the procedures follow what we setup. In this project, we could stick with almost all the plans that we scheduled. As the "management structure" mentioned in this report, each one of us is responsible for different tasks and we tried to help each other on different subjects. Overall, Mohamed testing for existing features between Smartphone and watch and identify potential issues that may exist in previous code. Provide suggestions on which specific part of functions need to be modified so that to guarantee the smooth function overflow when new functions are added in the future. Get involved in robot motion controls by using objective C. Wei will based on Mohamed suggestion improves previous features (app layout, functions stabilities etc). Based on lab/tutorial examples to modify detail source



code and add into new functions as needed. Get involved in robot motion controls by using objective C and image capture (sending certain notifications based on criteria defined). Vipin based on lab/tutorial examples to modified detail source code and implement specific functions to match with the need our project. Get involved in robot motion controls by using objective C. Doing more research on how to realize two-ways communication between watch and phone and then sending real time data/notifications to each other and Ting involved in robot motion controls by using objective C. Doing research on how to train data to recognize human face and automatically comparing with certain database at backstage. Then execute certain command by definition or from user's watch. Based on this project, we think future project could be further improved if TA or teacher could set up very clear modules within project, which indicate how each segment works and this will also help each team to identify how much work need to be done and how to distribute each part to the team members. If this is a real world project, I think it definitely need to be improved and done more frequent periodic project/progress review so that to make sure the functionalities are able to be used at the end and there might be need more further testing to make sure no major bugs/errors will contours when actual users utilize the application. For next year project, maybe this class can tried projects with much more clear goal-oriented projects with limited types of projects so that each team be able to handle the overall project very well.