

CS-5542 BIG DATA ANALYTICS AND APPLICATIONS SPRING 2016

PROJECT PLAN AND FIRST INCREMENT REPORT

GROUP-4

Introduction:

RoboCare – A human friendly robot, one's own personal doctor. As its name suggests, this robot takes good care of his companion right from diagnosing the disease to notifying the user the nearest practitioner who can prescribe medicines. All that the robot needs is few inputs from the user and it does all the work on its own. RoboCare does take help of the Smart watch and the Smart Phone of the user to provide many other functionalities. Thus, RoboCare can be regarded as a guide to make a human's life illness free.

Project Goal and Objective:

- Overall goal: To program a robot which can be used as a medical assistant.
- Specific objectives (problem statement): The main objective of the robot is to diagnose the disease that the user has depending on the inputs such as age, gender, symptoms, images etc. provided by the user.
- Specific features:

The Robot will perform following tasks:

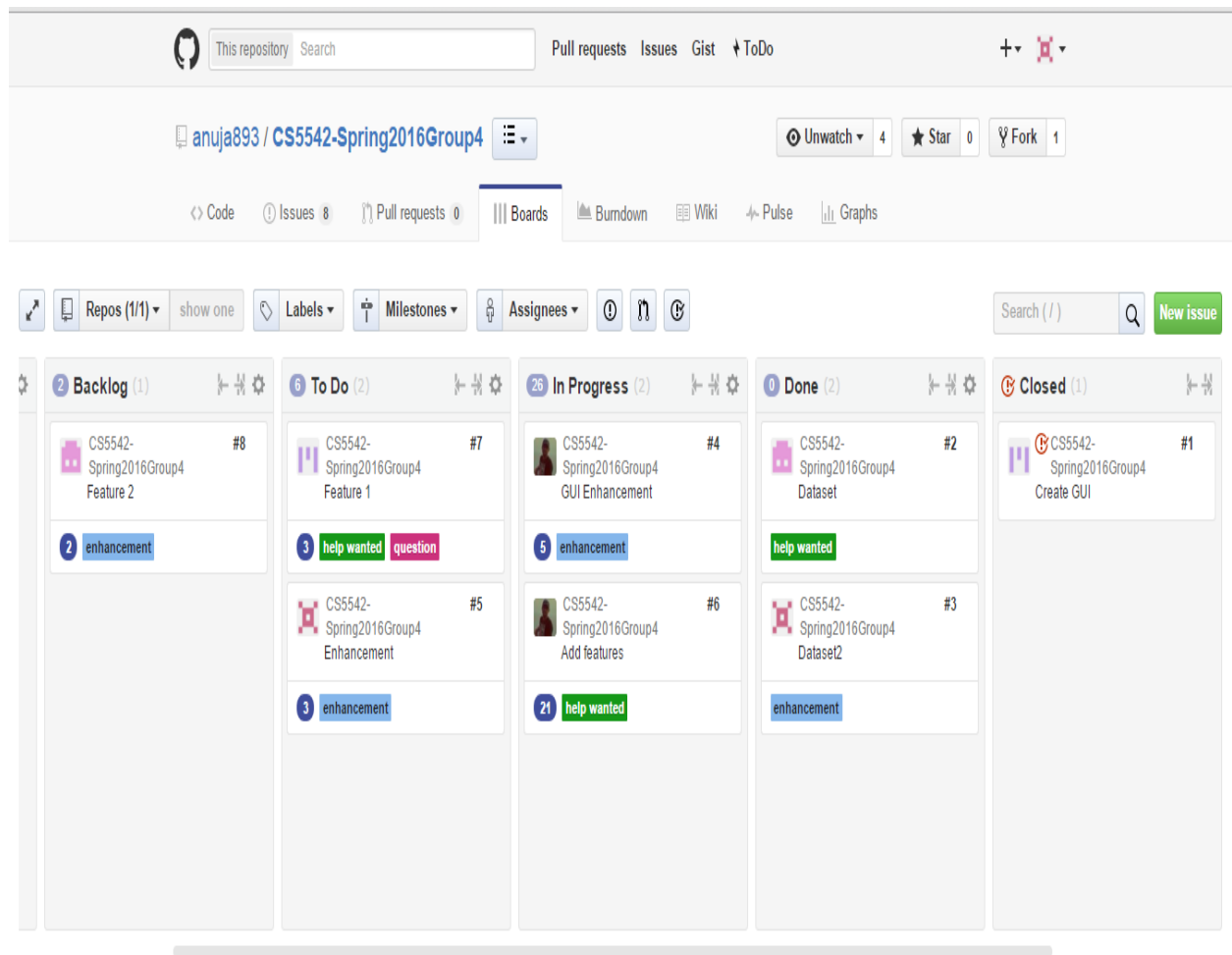
- Use facial recognition technique to authenticate the user.
- Collect the data from the user regarding the symptoms age and gender from his voice and would use Natural Language Processing and also images to identify the issue
- Diagnose the disease depending on the inputs provided by the user
- Suggest nearest doctor depending on the type of disease to the user
- Remind the user about his/her appointment by sending notification

•Significance

The robot provides the user with immediate information about the disease, nearest doctor and also keeps him notified about the appointment timings and prescription as and when it arrives from the doctor. Thus, the robot guides the user properly during its difficult times.

Project Plan:

Issues:

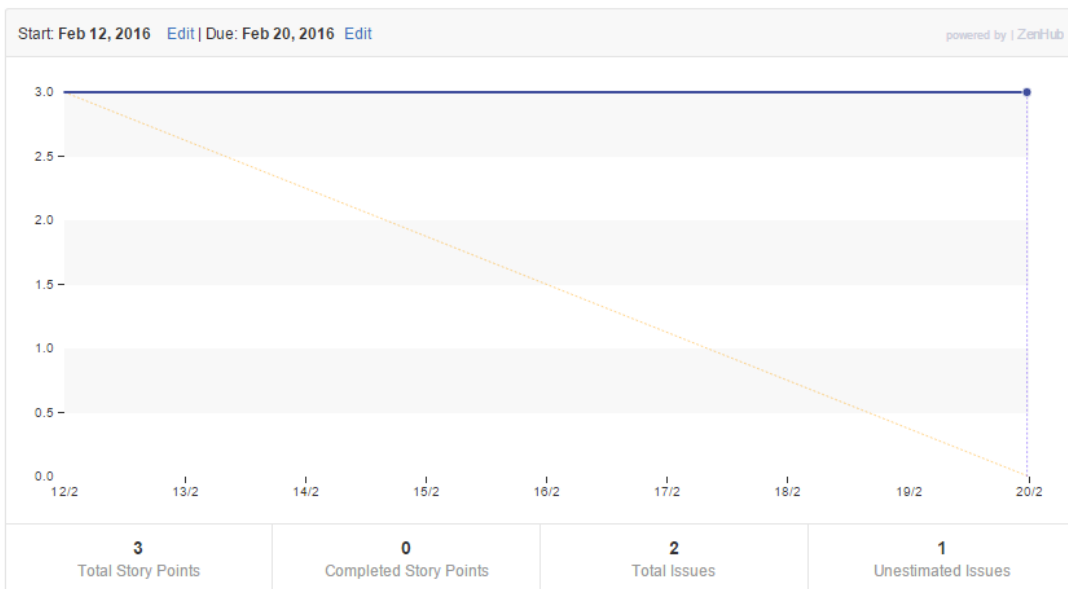


Burndown Chart:

GUI

 Edit Milestone  Change Milestone ▾

Create GUI before the 17th Of Feb.



First Increment Report:

Existing API:

Used Android Studio 1.5.1 to develop the graphical user interface of the application and the inbuilt APIs for Speech to text conversion

Design of Features:

➤ Diagram:

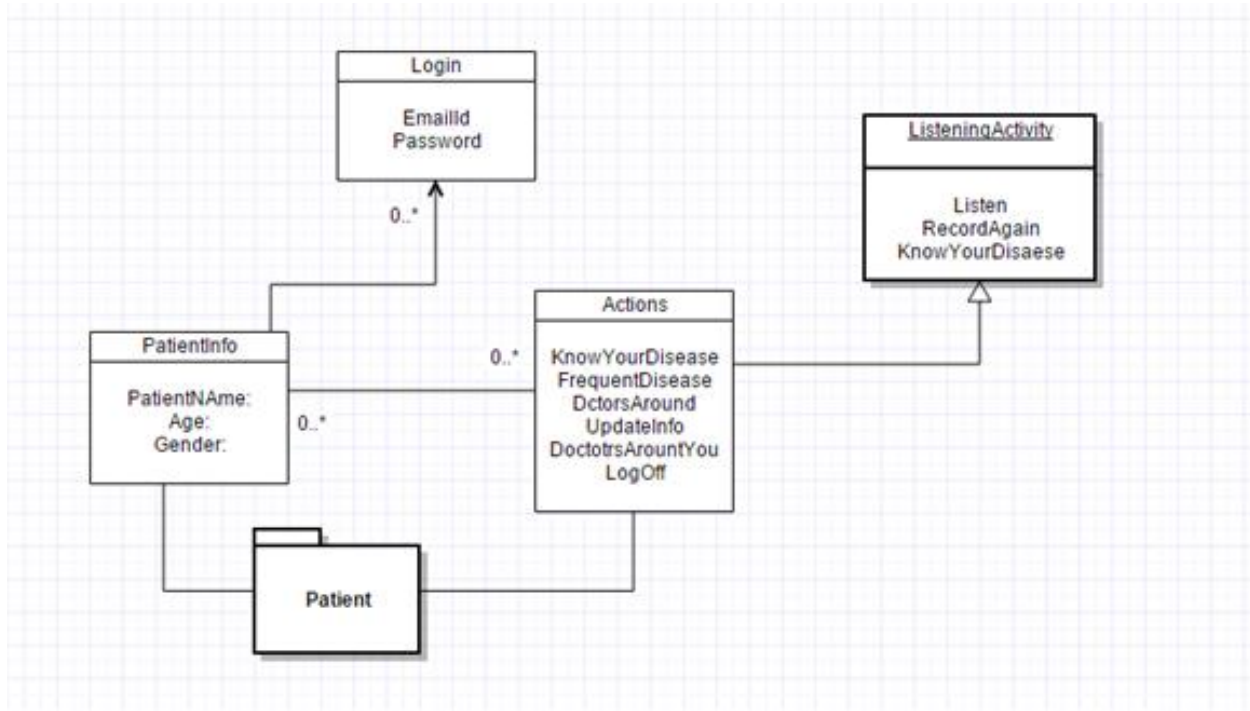


Figure 1.Class Diagram

➤ Dataset

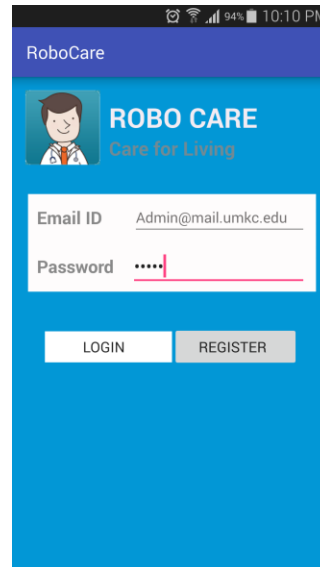
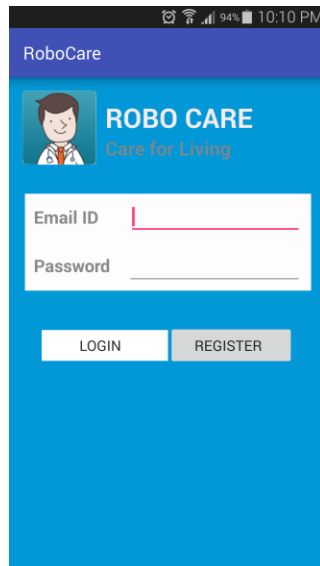
Developed a Comma Separated value (.csv) data sheet file consisting of information of various diseases and their symptoms

Implementation:

Application for a Smart phone

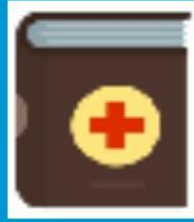
Deployment:

Screenshots





Know your
Disease



Frequent
Diseases



Update User
Profile



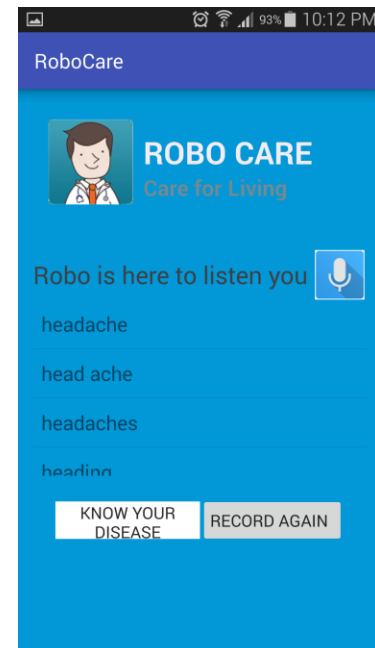
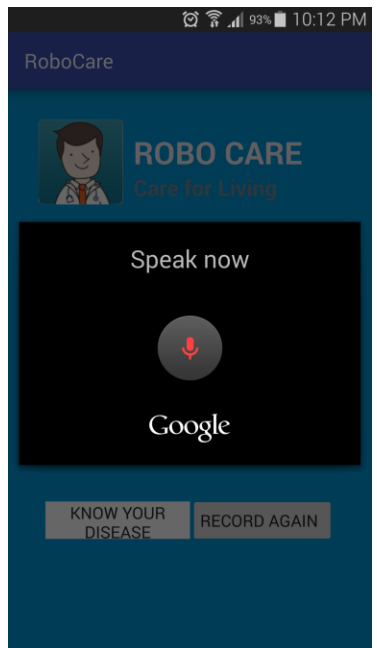
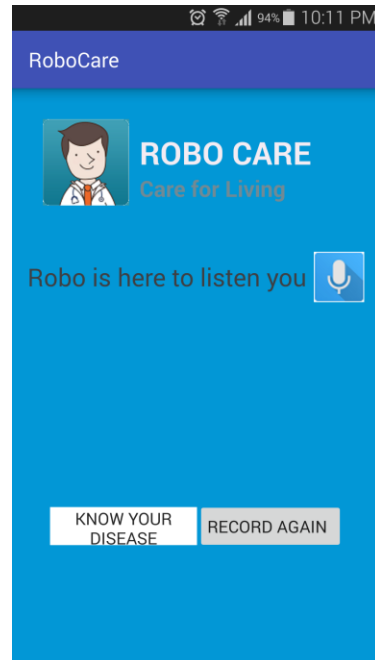
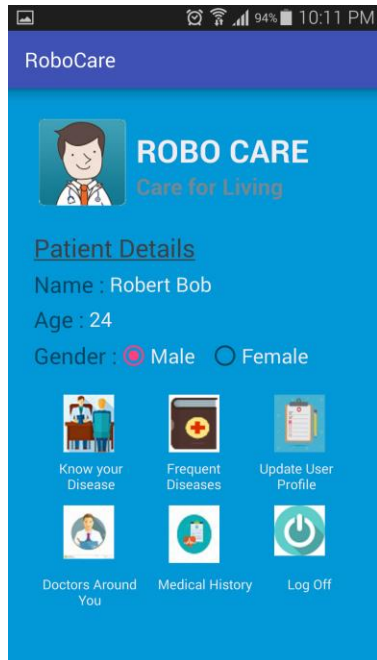
Doctors Around
You



Medical History



Log Off



GitHub URL:

<https://github.com/anuja893/CS5542-Spring2016Group4>

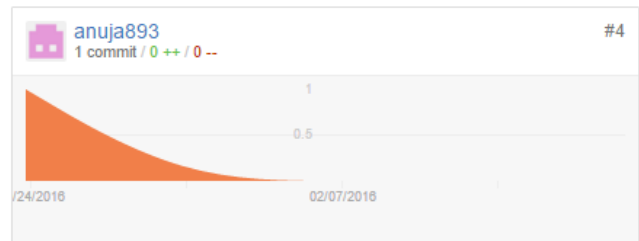
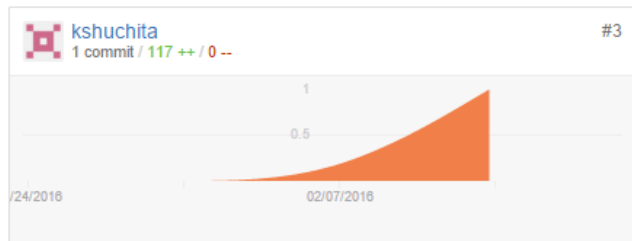
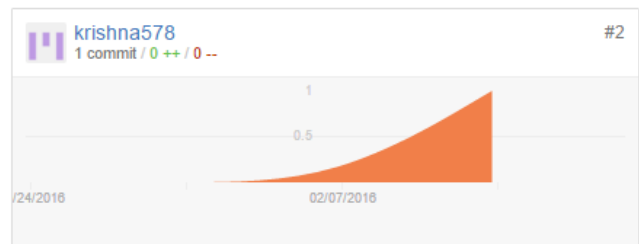
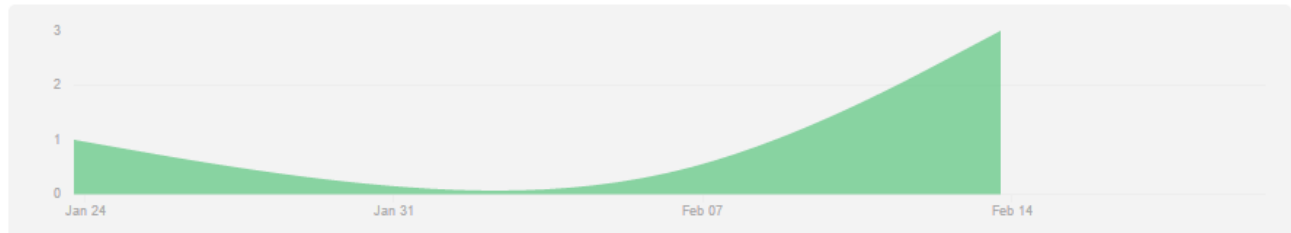
Project Management:

Contribution Graph:

Jan 24, 2016 – Feb 20, 2016

Contributions to master, excluding merge commits

Contributions: Commits ▾



Member Name: Anuja Sawant

Work Completed: 1. Prepared dataset

2. Adding features for the action page in the GUI

Time Taken: 3 days

Contributions: 25%

Member name: Shuchita Khandelwal

Work completed: 1. Prepared the final updated dataset

2. Added the voice recognition feature

Time taken: 2 days

Contribution: 25%

Member Name : Podili,Venkata Krishna

Work Completed: 1. Created the GUI Part

2. Created the action part of the User interface

Time taken : 4 days

Contribution: 25%

Member Name: Dara,Venkata Sai Sandeep

Work Completed: 1. Worked on the GUI Part

2. Modified the User interface facing bugs

Time taken: 3 days

Contribution: 25%

Bibliography:

<https://www.nlm.nih.gov/medlineplus/encyclopedia.html>

<http://seer.cancer.gov/tools/seerrx/>

<http://stackoverflow.com/>

<http://www.mayoclinic.org/>