GIVE AWAY

PROJECT PLAN

Submitted By:

Sashidhar Reddy Gowra 12428313

Yashwant Kumar Palisetty 16202251

Ravi Kanth Devanaboyina 16198171

Anudeep Reddy Gujjula 16190413

Introduction:

Now a days, students travel to different countries in order to pursue their higher studies, students face a lot of difficulties in getting adjusted to the new environment, cross culture and in various other aspects. The major problem they face is to gather the household items in the initial stages. The basic household items can be arranged by themselves, but when it comes to the point of major ones, it is difficult for them to manage their money on these large household items. In well developed countries like US and UK, there are some non-profit organizations which donate household items to the newly arrived students. But, it is a bit difficult for the students to get in touch with these organizations. So, we need an application, which can bring these organizations and the students closer.

Project Goal and Objectives:

- **Overall Goal:** Developing an online system, where students can directly interact with the non-profit organizations or individuals who are willing to donate household items.
- **Specific Objectives:** The specific objective of this project "Give Away" is restricted only to students, where the students can login to the online portal using their University mail-id to access the catalogue displayed by the non-profit organizations or any particular individual. The students can select the items and request them for delivery.
- **Significance:** Till date, we have seen many traditional give-away events, where students have to travel to a designated place, select the items and carry them back home. Also, there are few online portals with the same concept, but the items are not free of cost.

Project Background and Related work:

There are quite a few applications of this kind, but the major difference will be our project is restricted to University students and also cost free.

For example, "Ask and Give" application is one such application. Any person can login to this app and can grab the item. So, there is a risk that the application can be misused, which can't be ignored.

http://www.askandgiveapp.com/

The other such examples are "ellentv.com" and "stacksocial.com". But these portals sell the items, instead of giving them for free.

http://www.ellentv.com/giveaways/

Our project is exclusively for University students, who have an official University specific mail-id (**Ex:** xxx@yyy.**edu**) by using which they can login.

Technological & Architectural Requirements:

- An application for automation of give-away is required.
- Android App will present the presentation layer for the user.
- A relational database handles the persistence layer.
- The database used is Oracle 11g.
- The application will receive the data from the database using restful web services.
- The application runs 24*7.

Proposed system:

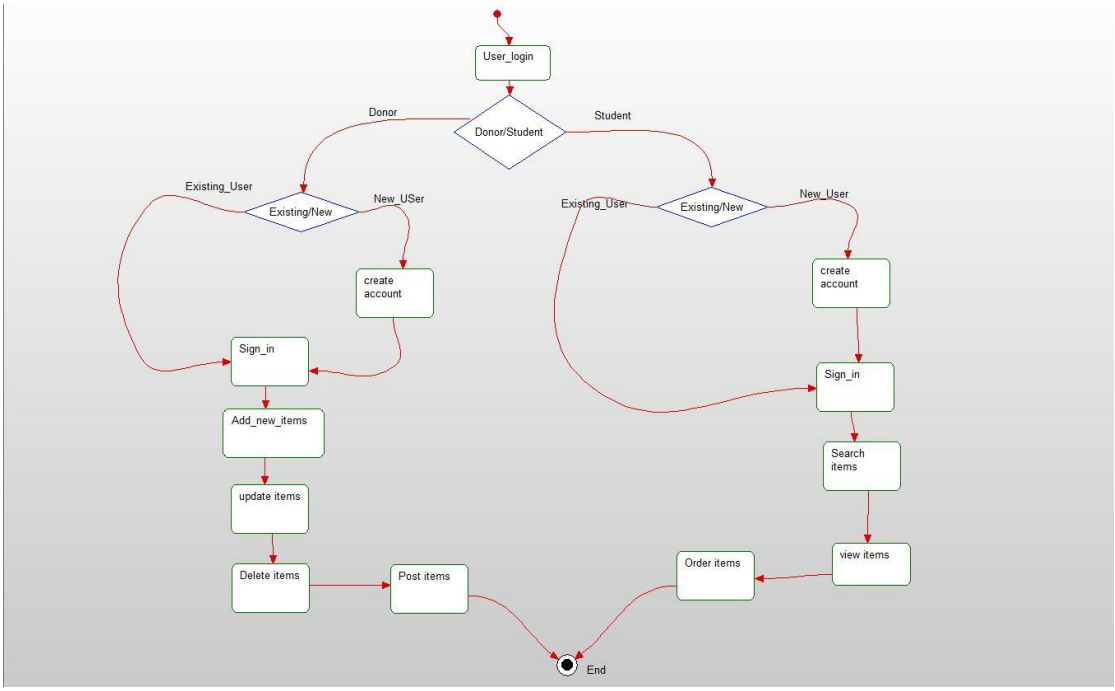
- **Requirement Specification:**

- **Functional Requirements:** In this system there are two set of users like people who like to give the items and people who like to grab the items. This system has two separate login pages for different set of users like donor and grabbers. In donor login, the donor might be an already existing user or a new user, if he is a new user he need to create an account for himself with a username and password where username must be unique. It is same in grabber login too. Once an account is created for a donor he can add his list of items with name, description and corresponding images of the items to be donated and post them to the system. Once the items have been posted to the system, people who like to grab the items can view them on the system and can order the items. One more feature of the system is like the grabbers can not only look for set items of items which are posted, they can also search for interested set of items which are posted for a giveaway.

- **Non-functional Requirements:** The main purpose of the system is to make international students arriving at campus feel comfortable in adjusting to new environment by providing them with household items which are kept for giveaway. So, the target set of grabbers is international students and the system validates the set of users by their email address, as the students will have the education domain email address which ends with 'edu'.The system should be consistent in blocking the items whenever a user orders the item, so that other users cannot have access to that set of items.

- **Technical Requirements:** As the project is a mobile application we would go for Android SDK to develop a basic android application and use HTML, CSS and JQuery in the front end and for data storage we are using Oracle 11g and would like to develop a web service to access data from data storage.

- **Workflow Analysis:**

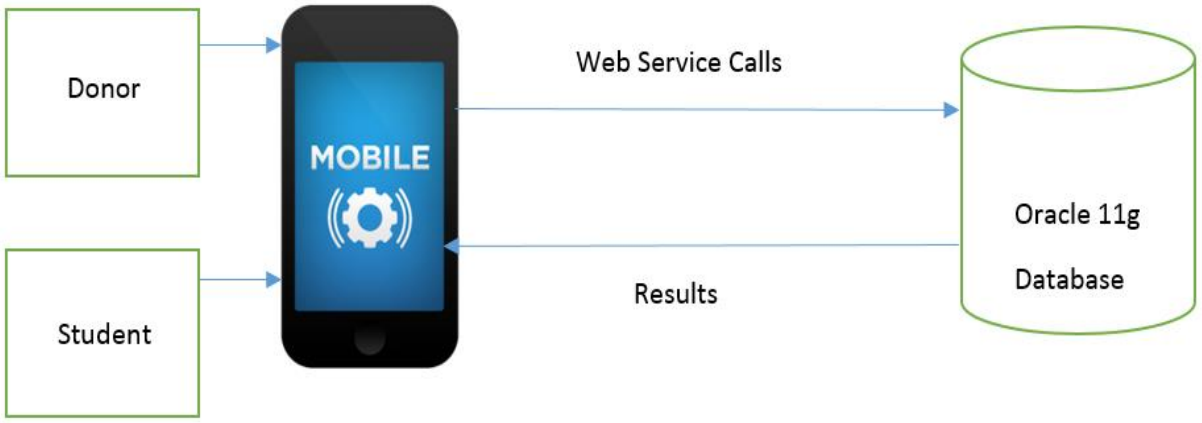


Framework Specification:

- **Assumptions and Principles:** As the application is intended for students we assume a grabber to be a student and verify the same using their email address. The other user set is assumed to be an individual or a non-profit organization willing to donate items for the sake of students.

- **Methodologies and Algorithms:** The intended method of application development is through agile methodology where we go for dynamic requirements and make the system flexible to incorporate the dynamic changes. The application has to perform certain sorting and searching operations when a user like to sort the items based on the date of posting and search for a specific item. For sorting the items a quick sort approach is followed and or searching an item binary search is being followed.

- **System Architecture design:**

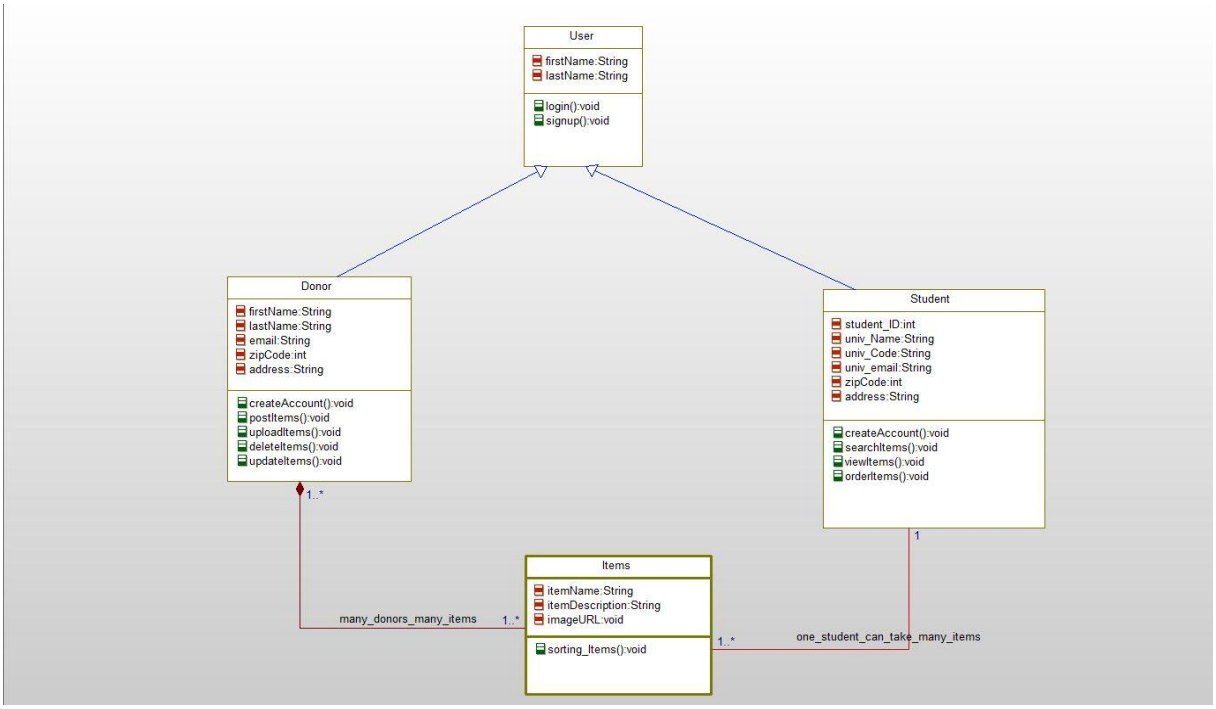


- **System Specification:**

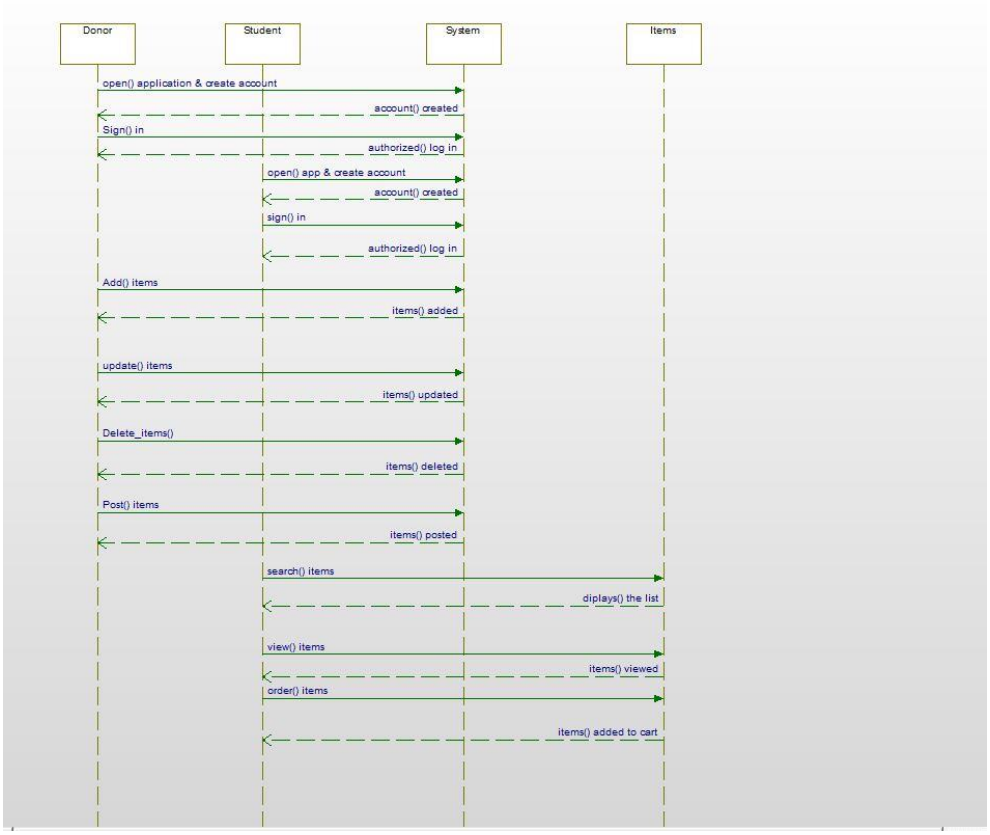
  - **Existing Service:** This system uses Google maps API for locating the user address location when he tries to order a product for delivery.

  - **New Service:** The application requires more and more images data to be populated on screen, we like to build a Restful service for retrieving data from database and populating the data on the mobile screen.

- **Class Diagram**



- **Sequence Diagram**



- **Service Specification**

    - **Operational description:** The service should take the input data from the mobile application and should insert the same in database. The other thing is that stored data should be sent back to mobile screen to populate the screen.

    - **Input/output service:** The input service is like taking user data from the create account page or login page validate them and store them in database. The output service should get back the stored data whenever required.

    - **Constraints/expectations:** This application deals with much of user data like student data and items data and also the donors data, items will have images to be uploaded to the system whenever a donor likes to donate the item. So once a student like to grab an item he needs to order that item and that item will be in blocked status and will be removed once the item has been delivered to student. We need to maintain lock on the status of item and whenever a new session begins for a user so that a blocked item should not be visible to other logged in users.

    - **Service flow**: The flow of service calls is like getting data from user input storing it, modifying the data, deleting the data and displaying the data back to mobile screen.

    - **Priorities**: The main goal of this application is to help students and finding some useful things and we need to verify the users and only students should be able to login and search for required items.

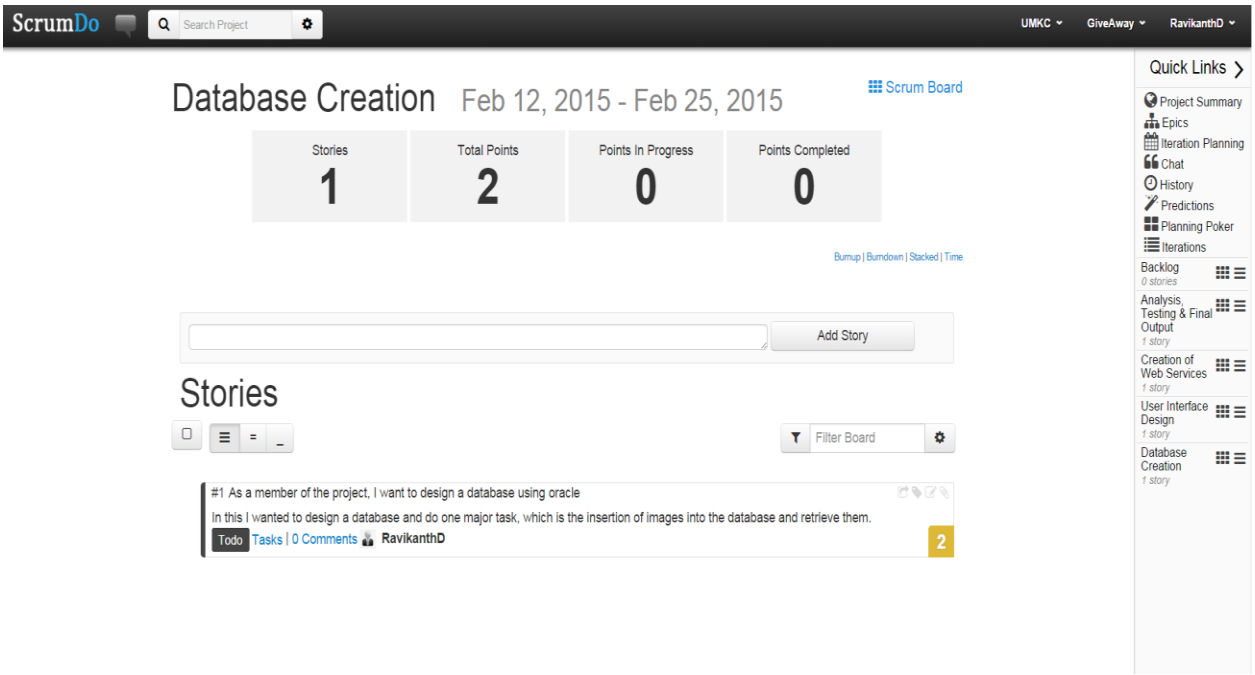
- **Design of Mobile Client:**

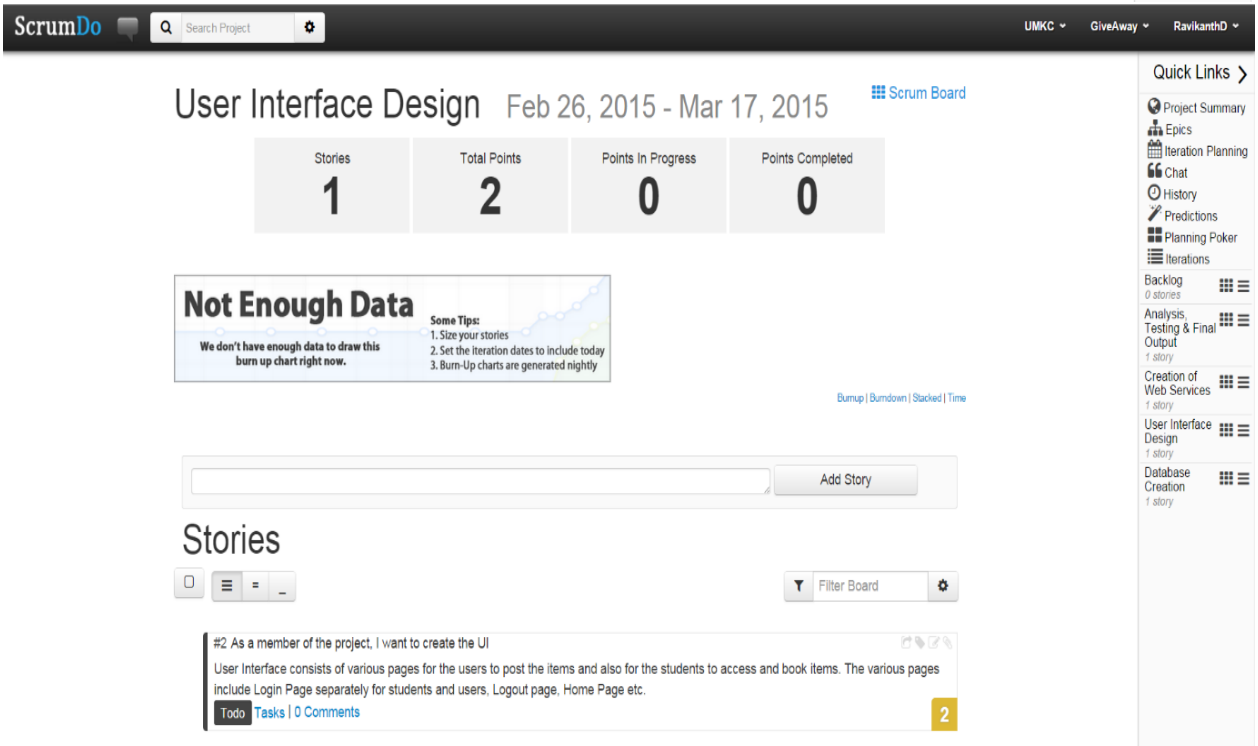
    - **Features:** The mobile client will have the required UI pages to make a user login to the application look for items or even post some items for giveaway. Separate login for people who look donate items and people who look to grab items and also student verification for people who would like to grab items.

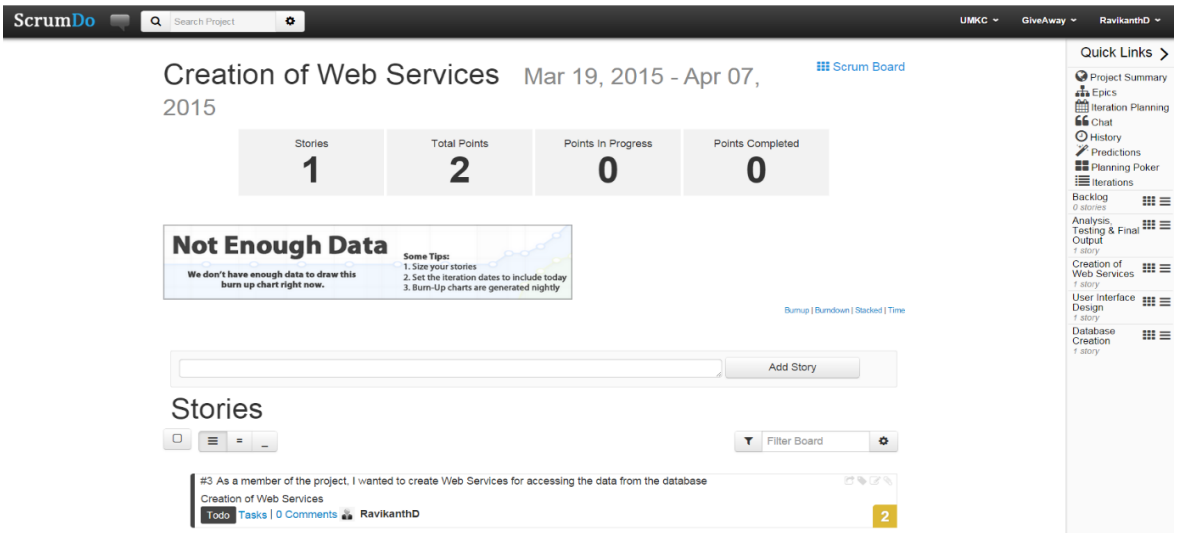
    - **Styles:** As the application has many images of items which are posted in the application to donate, we need to use effective CSS styles to separate text and images and to make them fit to the screen without overlapping. Bootstrap gives an effective way CSS styling where we can maintain a single stylesheet file and include all the style elements in that sheet with references.

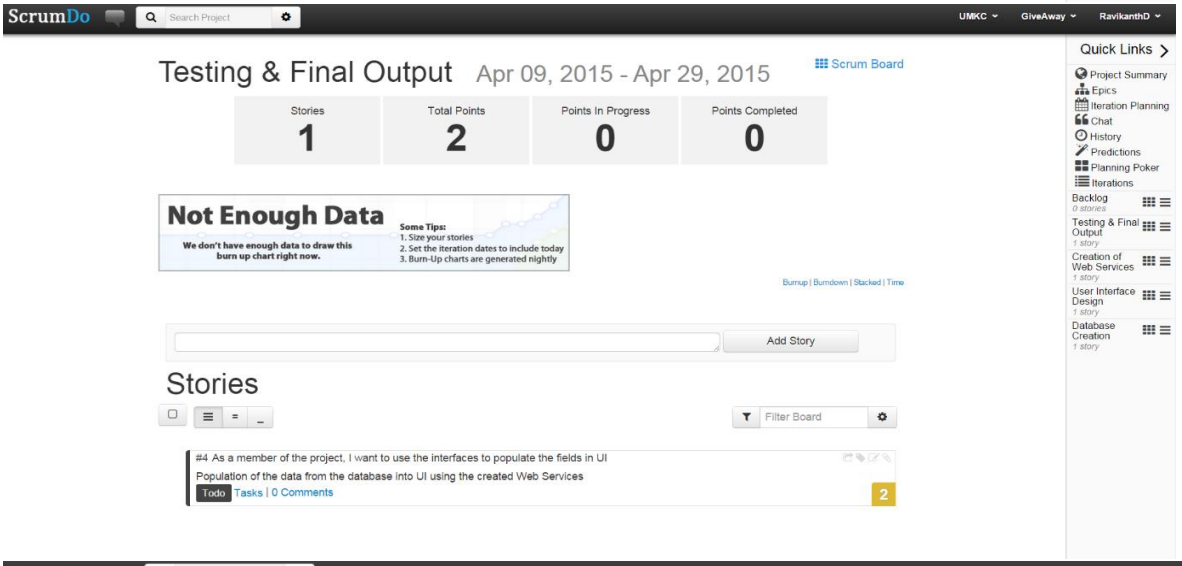
    - **Technologies:** For the UI screen design we would go with HTML5, JQuery as they provide some advanced features for UI design and scripting.

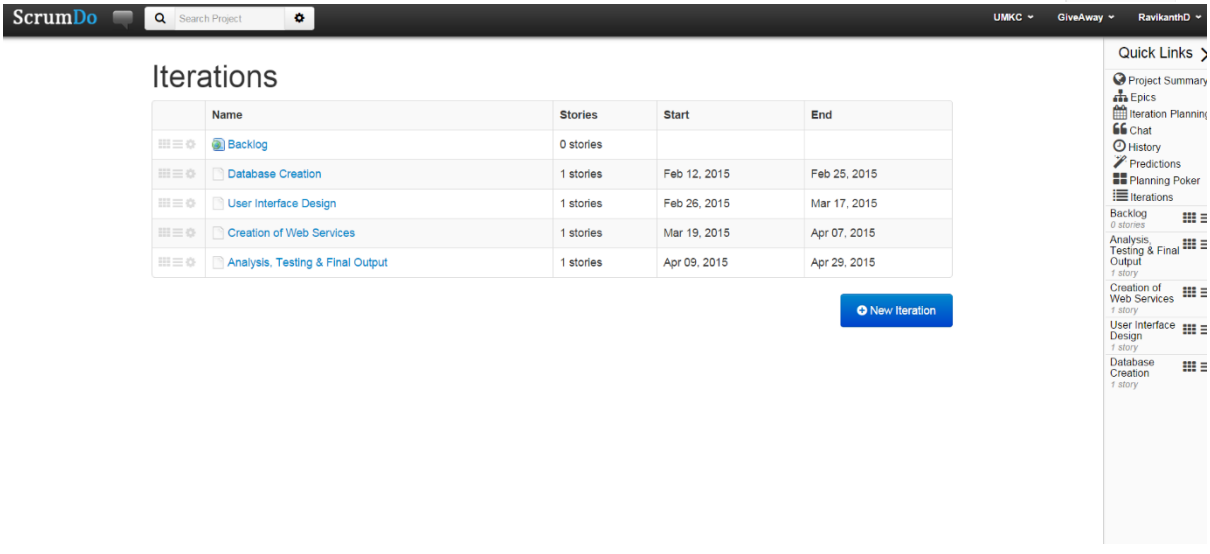
Plan by Service (ScrumDo):






ScrumDo
Search Project
UMKC
GiveAway
RavikanthD
Creation of Web Services Mar 19, 2015 - Apr 07, 2015
Scrum Board
Stories 1
Total Points 2
Points In Progress 0
Points Completed 0
Not Enough Data
We don't have enough data to draw this burn up chart right now.
Some Tips:
1. Size your stories
2. Set the iteration dates to include today
3. Burn-Up charts are generated nightly
Burnup | Burndown | Stacked | Time
Add Story
Stories
Filter Board
#3 As a member of the project, I wanted to create Web Services for accessing the data from the database
Creation of Web Services
Todo Tasks | 0 Comments RavikanthD
2
Quick Links
Project Summary
Epics
Iteration Planning
Chat
History
Predictions
Planning Poker
Iterations
Backlog 0 stories
Analysis, Testing & Final Output 1 story
Creation of Web Services 1 story
User Interface Design 1 story
Database Creation 1 story


ScrumDo
Search Project
UMKC
GiveAway
RavikanthD
Testing & Final Output Apr 09, 2015 - Apr 29, 2015
Scrum Board
Stories 1
Total Points 2
Points In Progress 0
Points Completed 0
Not Enough Data
We don't have enough data to draw this burn up chart right now.
Some Tips:
1. Size your stories
2. Set the iteration dates to include today
3. Burn-Up charts are generated nightly
Burnup | Burndown | Stacked | Time
Add Story
Stories
Filter Board
#4 As a member of the project, I want to use the interfaces to populate the fields in UI
Population of the data from the database into UI using the created Web Services
Todo Tasks | 0 Comments
2
Quick Links
Project Summary
Epics
Iteration Planning
Chat
History
Predictions
Planning Poker
Iterations
Backlog 0 stories
Testing & Final Output 1 story
Creation of Web Services 1 story
User Interface Design 1 story
Database Creation 1 story


ScrumDo
Search Project
UMKC
GiveAway
RavikanthD
Iterations
Name
Stories
Start
End
Backlog 0 stories
Database Creation 1 stories Feb 12, 2015 Feb 25, 2015
User Interface Design 1 stories Feb 26, 2015 Mar 17, 2015
Creation of Web Services 1 stories Mar 19, 2015 Apr 07, 2015
Analysis, Testing & Final Output 1 stories Apr 09, 2015 Apr 29, 2015
New Iteration
Quick Links
Project Summary
Epics
Iteration Planning
Chat
History
Predictions
Planning Poker
Iterations
Backlog 0 stories
Analysis, Testing & Final Output 1 story
Creation of Web Services 1 story
User Interface Design 1 story
Database Creation 1 story

Risk management:

- **Technology and Architectural Requirements:** Here in this application we are using Android SDK as mobile platform to build the application with HTML5, CSS and JQuery. The UI part does not pose any risks as it is a straight forward android application which gets its data from web services**.** The data storage and retrieval part will be challenging part and may pose a five risks while choosing a web service to be used to get the data. Architecture wise the application is very clear and might be risk free as it deals with specific set of users. There would not be much burden on the system in managing the user traffic.

Bibliography:

http://www.askandgiveapp.com/

http://www.ellentv.com/giveaways/

http://developer.android.com/sdk/index.html

http://ws.apache.org/

https://developers.google.com/maps/