Design Document
Team 3.02

1 Introduction

Do-D-Due is an application that allows a user to manage their daily tasks. This application allows the user to create a task list, edit and delete it via the Android application or the web interface. The tasks will have a name, description, due date and priority. The user will be able to check off items in the list and will be able to hide them. The application will support multiple users, each one with their own lists.

2 Design Considerations

This application will be available to multiple users and each of them may have large lists, thus it must be extensible, maintainable and robust. In addition, in this case, the application is available on both mobile and web platforms. The mobile application has already been developed the web application is currently being developed, hence, this design document will touch upon aspects of the web application in more detail.

2.1 Assumptions and Dependencies

2.1.1 Assumptions

- User may use both the MTM (Mobile to-do list manager), WTM (Web To-do list manager)
- MTM works closely with LDB and WTM works closely with CDB
- LDB and CDB would be synchronized regularly. Certain degree of fault tolerance is required in between the synchronization cycles.
- Conflicts will be resolved by time. The task which is entered at the later time is given the preference.

2.1.2 Dependencies

- Compatible Android device
- Compatible web browser

2.2 Constraints

- The application will run on Android devices and should not use any external libraries.
- The application should be compatible with most of the popular browsers

2.3 System Environment

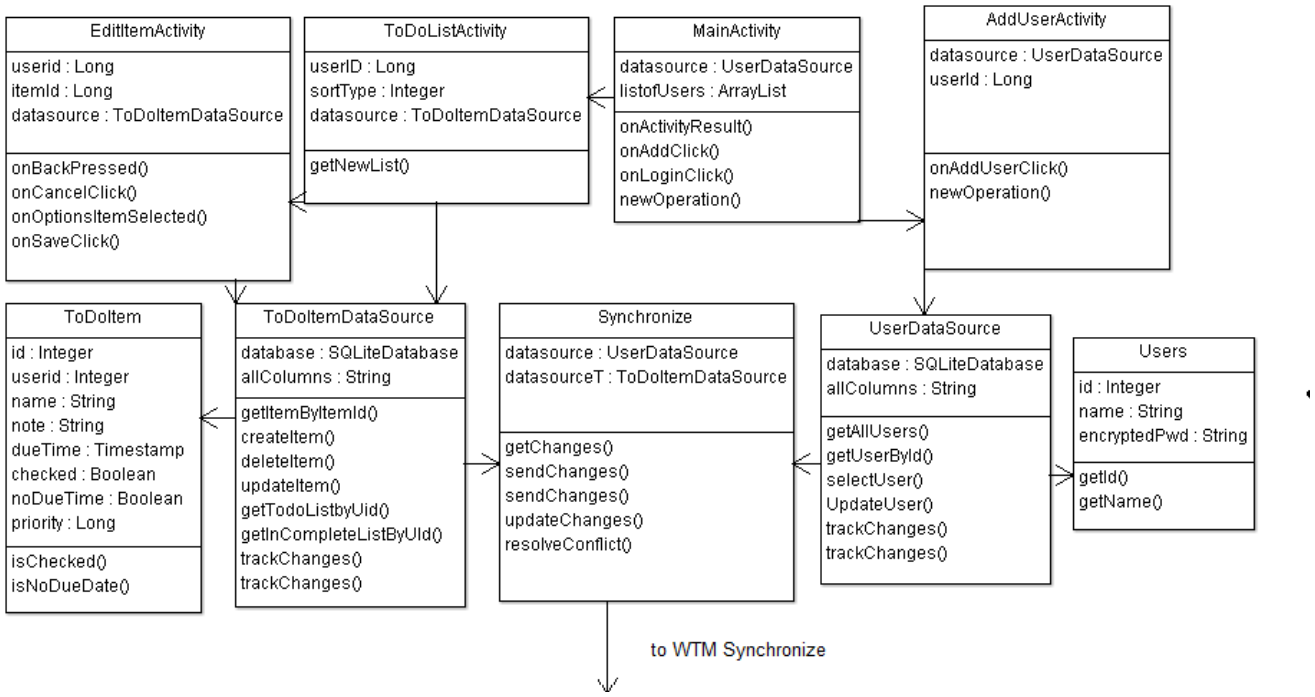
- MTM will run on android phones ver 4.0 and upwards. It has been found to be compatible with ver 2.5 and above as well

4 Low Level Design

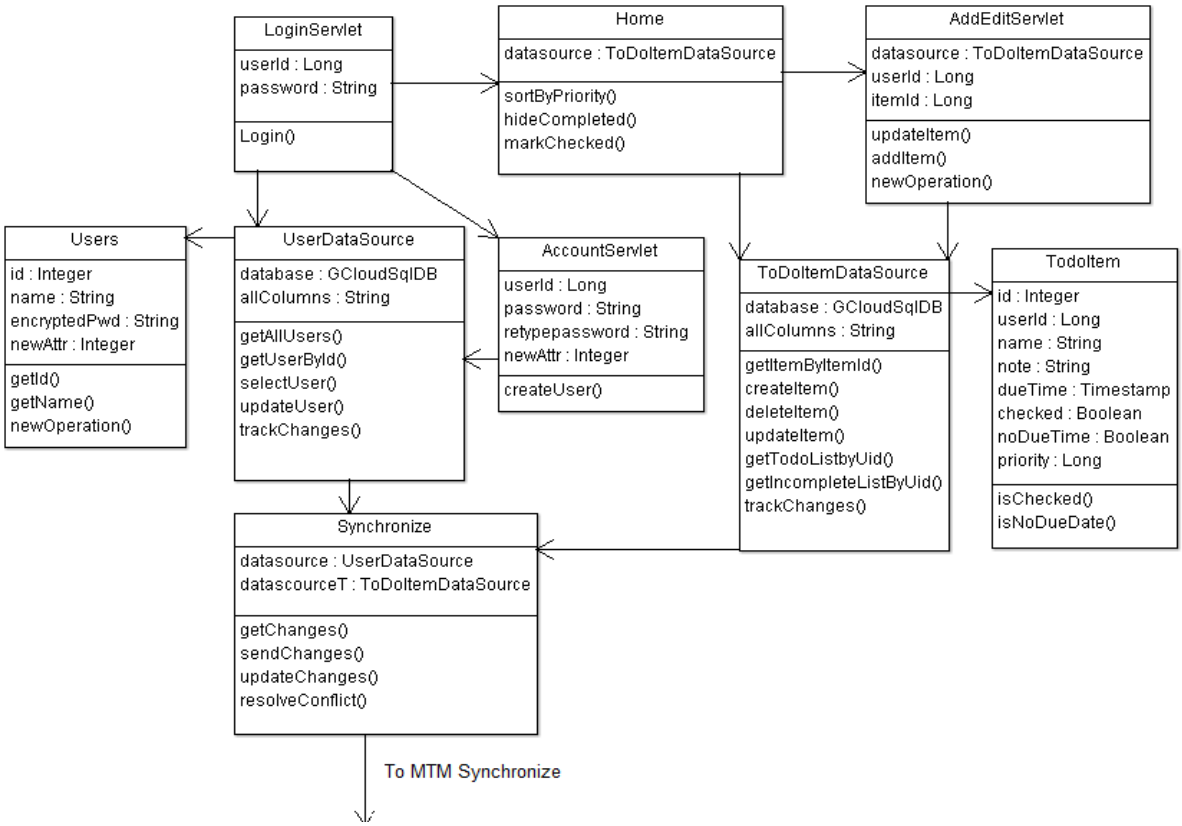
The software architecture document provides the high-level overview of the system. The lower-level view of the system is elaborated below:

4.1 Class Diagram

Mobile To-do List Manager



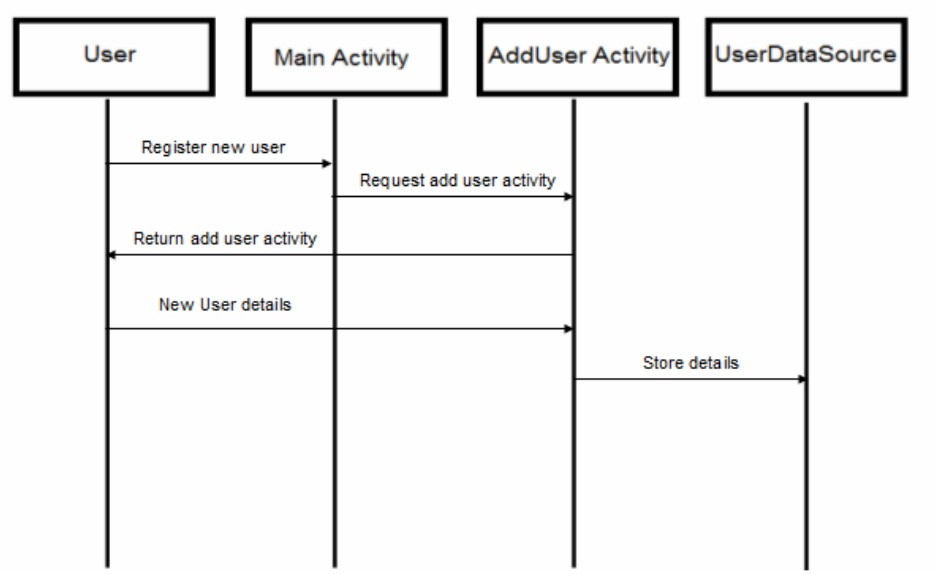
Web To-do List Manager



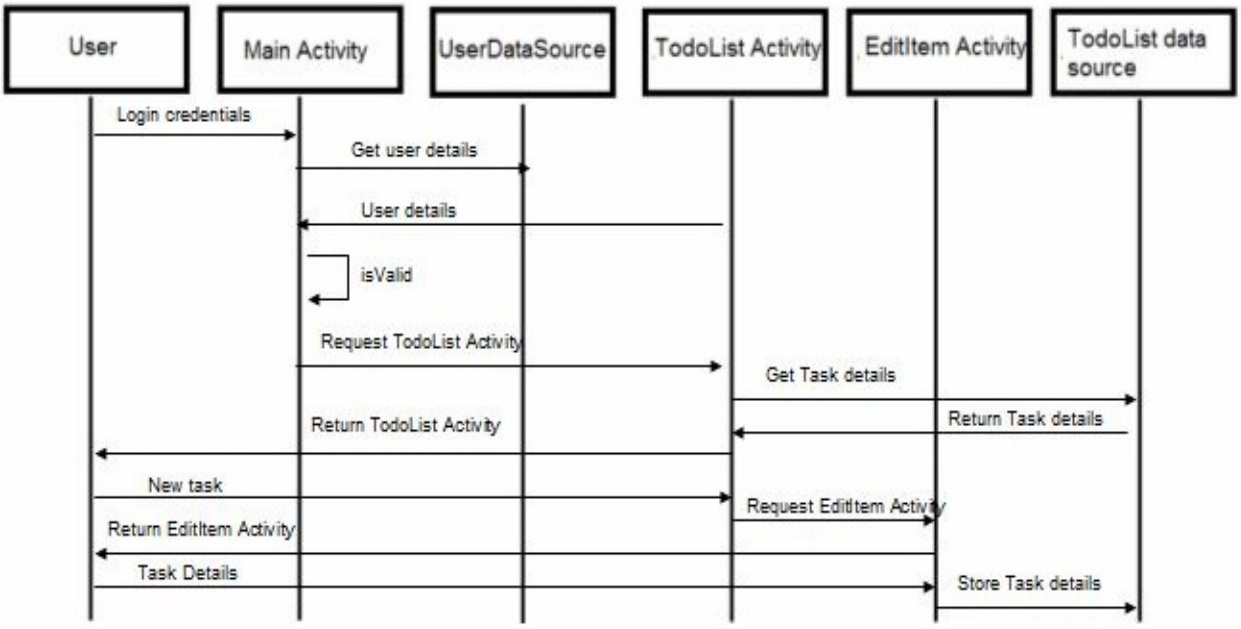
4.2 Sequence Diagram

4.2.1 Mobile TodoList Manager

Add User

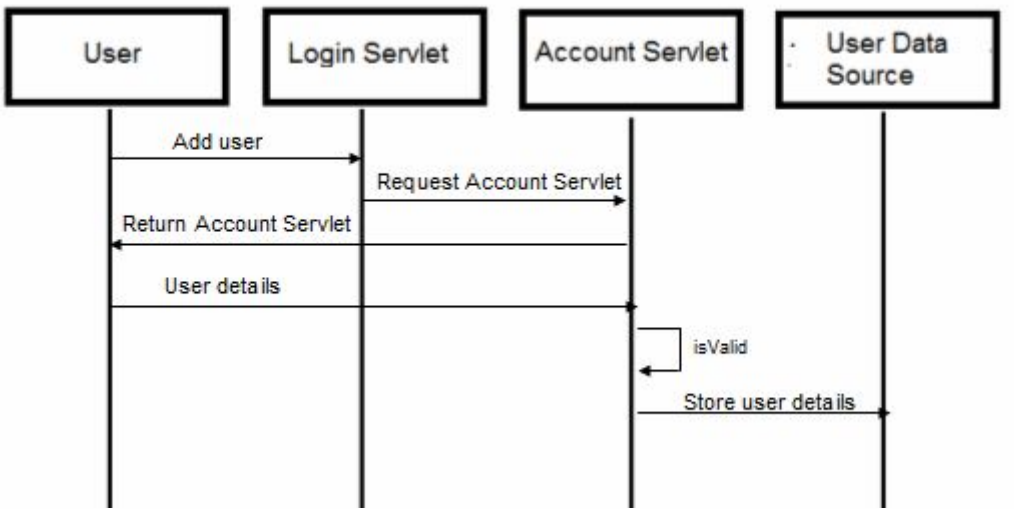


Add Task

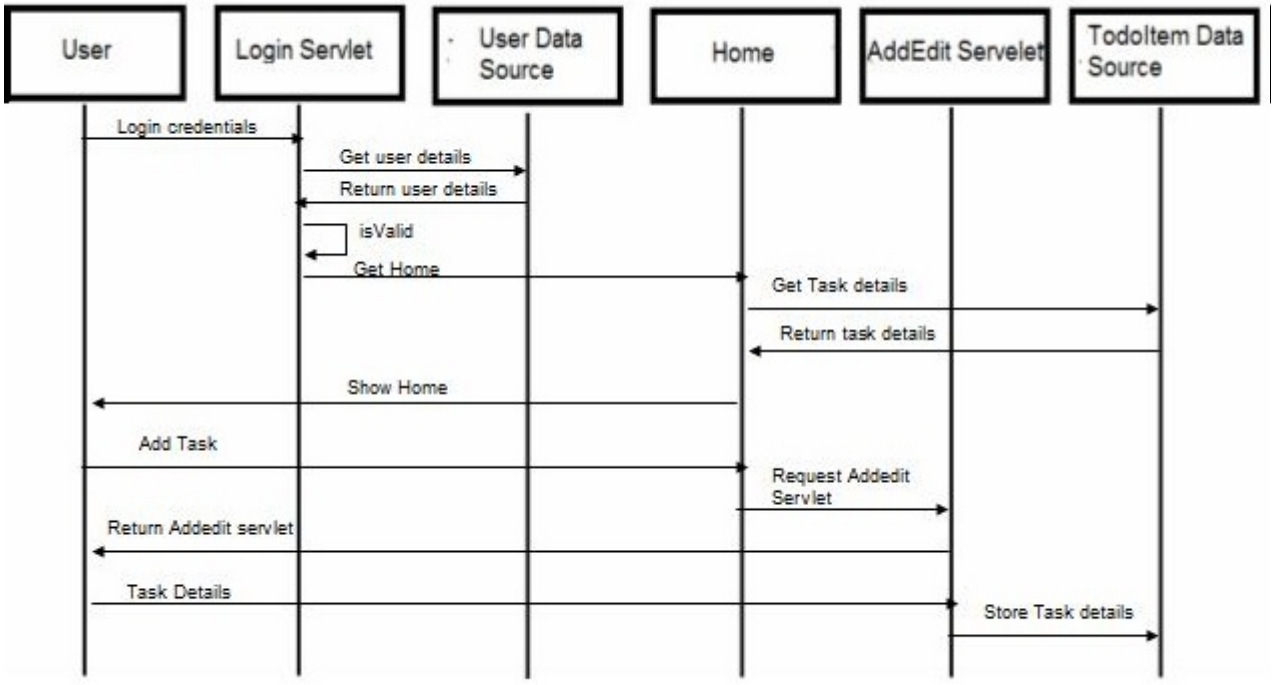


4.2.1 Web TodoList Manager

Add User

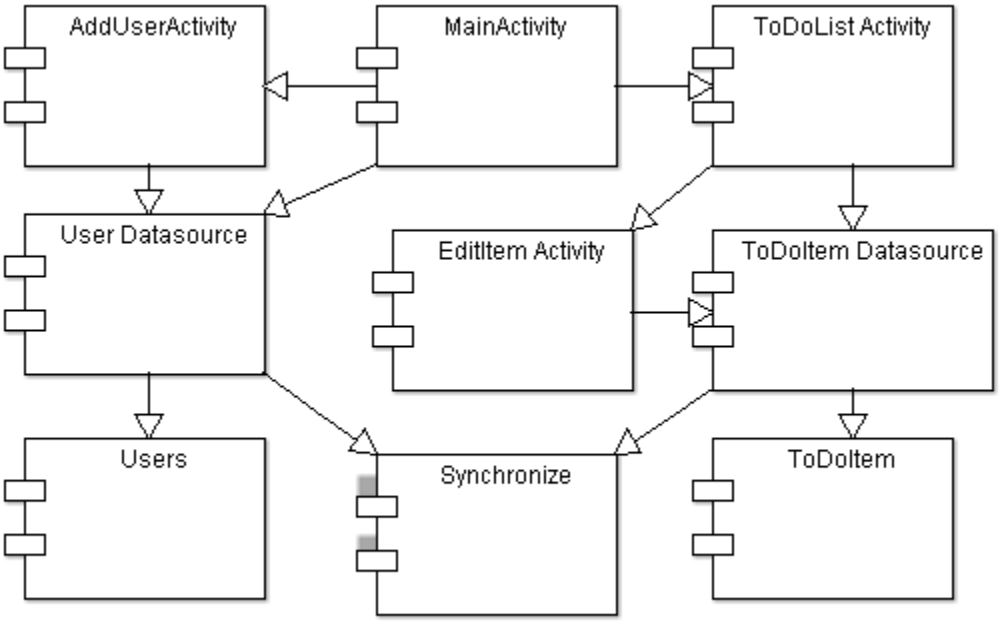


Add Task

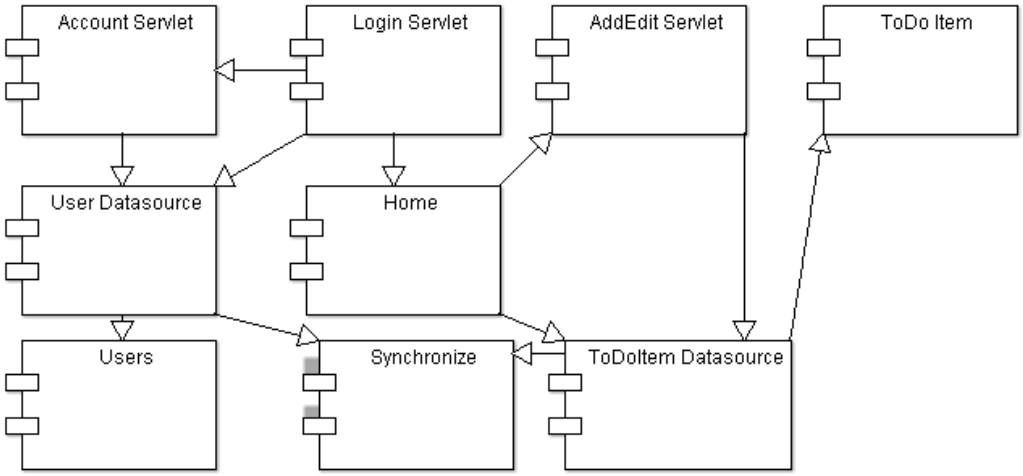


4.3 Component Diagram

4.3.1 Mobile TodoList Manager



4.3.2 Web TodoList Manager



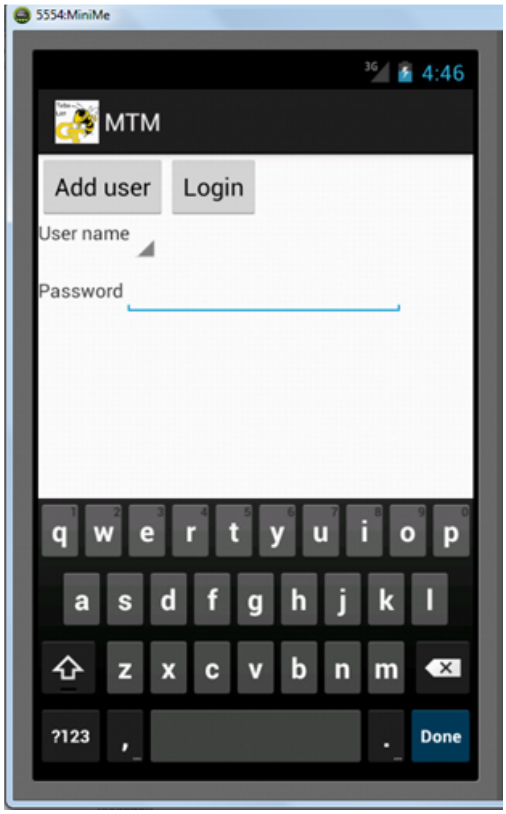
5 User Interface Design

The user interacts with the Android application using a touch screen. The user runs the application by clicking on the MTM icon on the screen, and uses the application following the instructions on the screen (For example, the user can login by flipping the Login button).

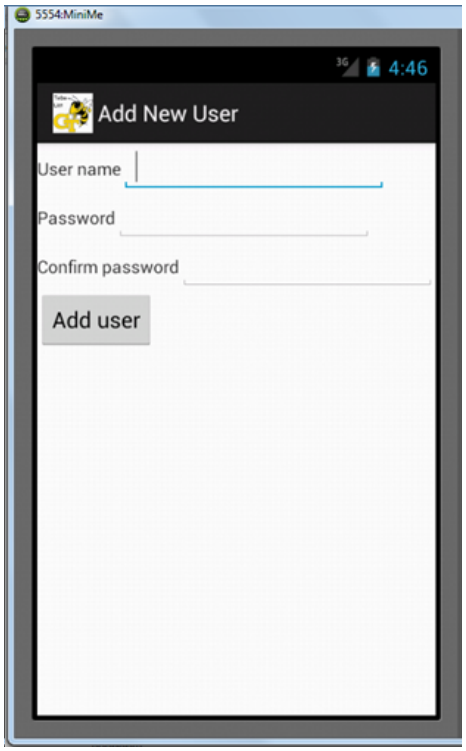
5.1 The format of the user interface of the MTM :

5.1.1 Showing the Do-D-Due App Menu

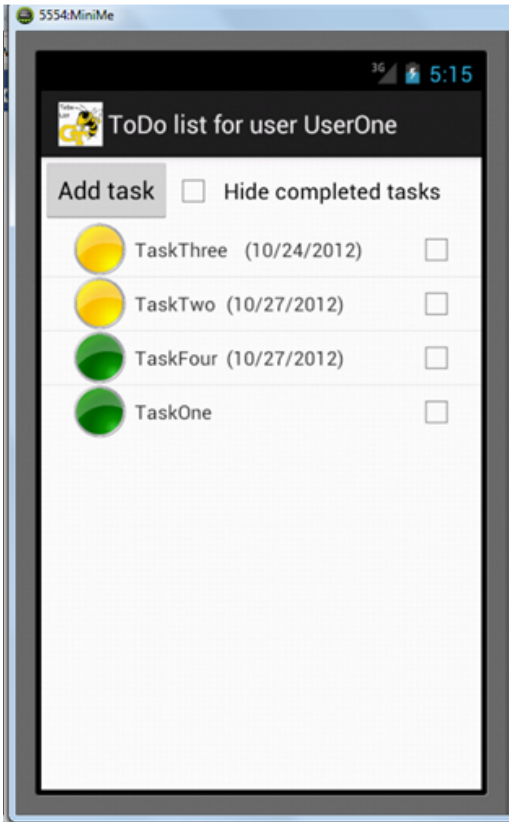
5.1.2 Showing the Login Screen



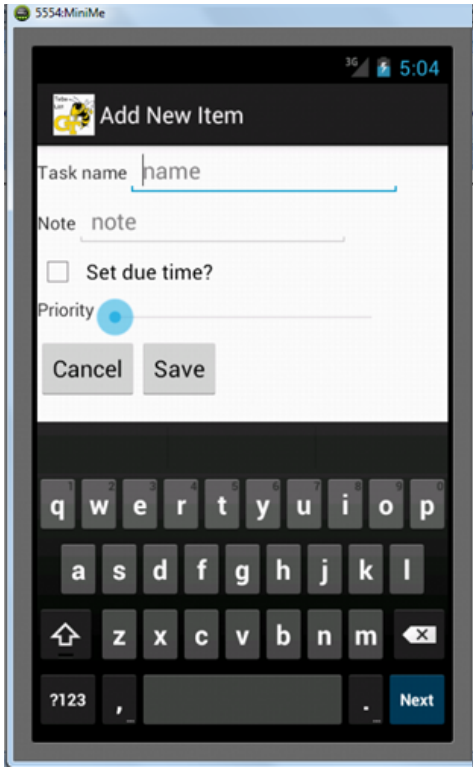
5.1.3 Showing the new user registration page



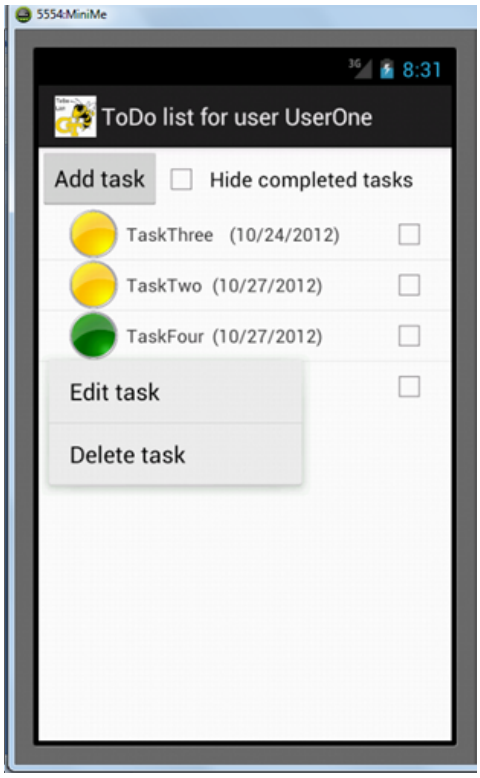
5.1.4 Showing the Tasks List Page

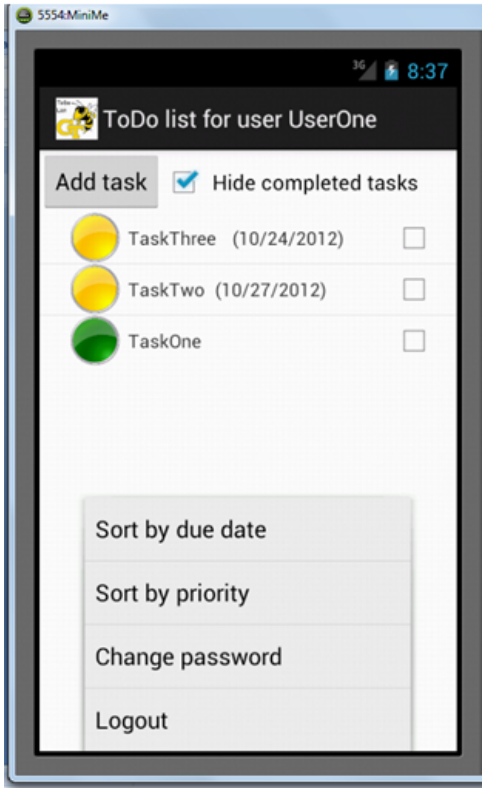


5.1.5 Showing the Add New Item Page



5.1.6 Showing the various modifications options available

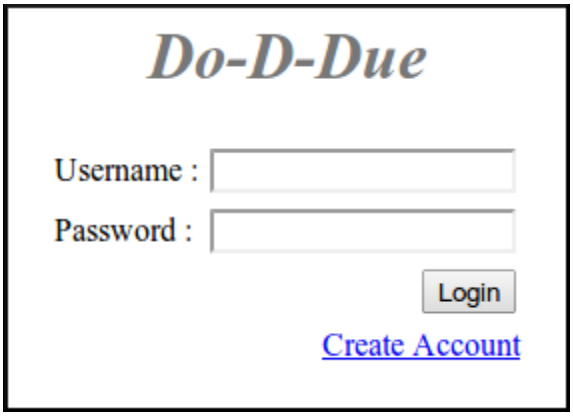

5554:MiniMe
8:31
ToDo list for user UserOne
Add task
Hide completed tasks
TaskThree (10/24/2012)
TaskTwo (10/27/2012)
TaskFour (10/27/2012)
Edit task
Delete task


5554:MiniMe
8:37
ToDo list for user UserOne
Add task
Hide completed tasks
TaskThree (10/24/2012)
TaskTwo (10/27/2012)
TaskOne
Sort by due date
Sort by priority
Change password
Logout

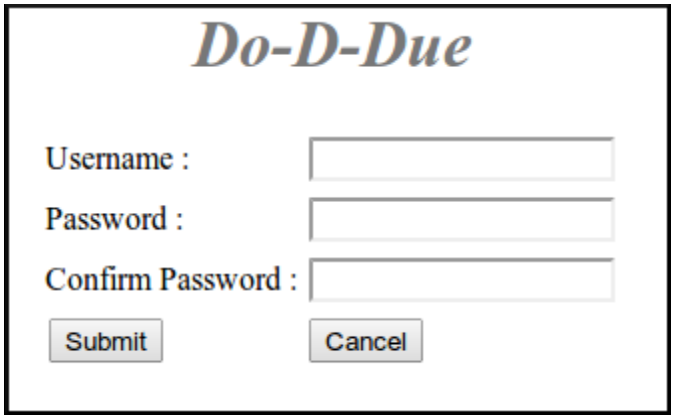
5.2 The format of the user interface of the WTM :

The web interface of the app is designed using Javascript and HTML. The users interact with the application through the UI, they can login, add users, tasks and edit tasks.

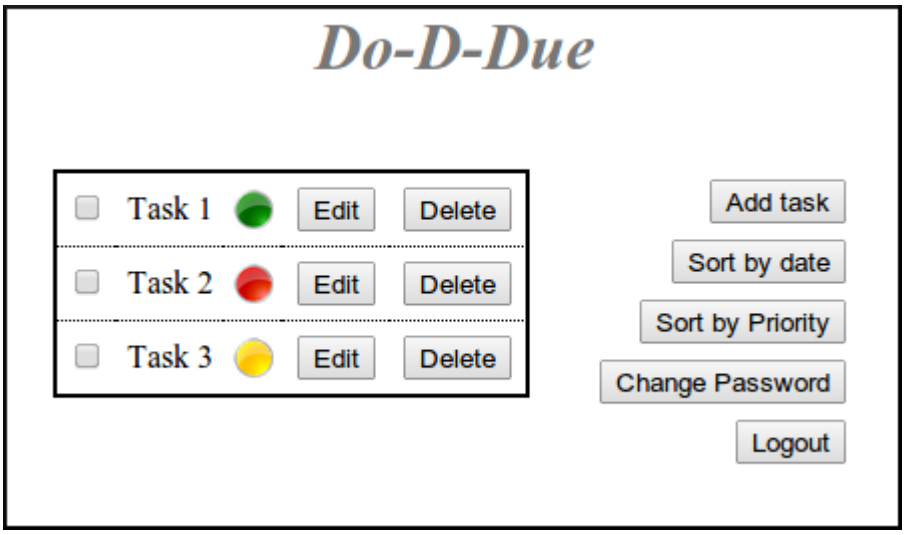
5.2.1 Showing the Login Screen



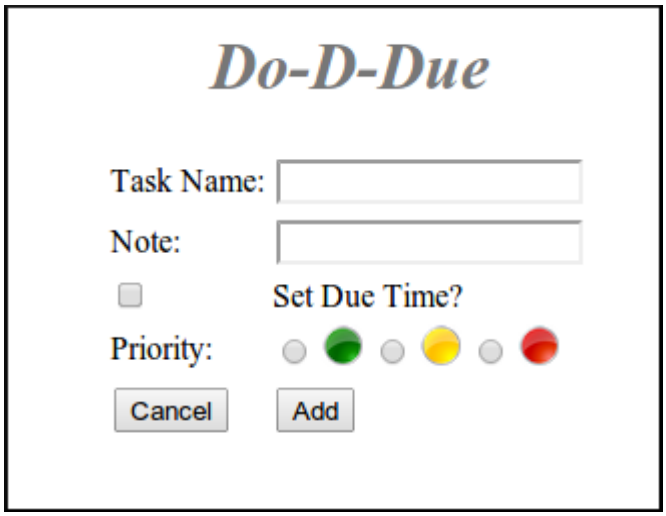
5.2.2 Showing the Create Account Screen



5.2.3 List Screen:



5.2.4 Add/Edit Task Screen:



5.2.5 Change Password Screen: