



Project Plan and First Increment

Fall 2016

TEAM - 2

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1. Introduction

One Stop for CS

The Advancement in the feather of Computer Science had improved immensely in the last decade, as its seeds sowed with 1's and 0's and now engineers with integration of 1's and 0's made many software applications to resolve complex things easily. This project is an attempt to make all the CS stuff available to students at a single point. Our main aim is to develop an application where a user can access all types of resources like presentations, videos, research paper and online courses for any course under computer science.

2. Project Goal and Objectives (revised)

2.1 Overall goal:

Main goal of this application is to provide all the available sources like presentations, videos, research papers and online courses for users to learn any technology in the field of computer science.

2.2 Specific objectives (problem statement)

2.2.1. To create a unique platform where the users can get all the available resources related to any course in the field of computer science.

2.2.2. By searching for a specific course, this application will retrieve available resources in the form of videos, presentations, research papers and online courses.

2.2.3. Notifying the users about current trends in the field of computer science.

2.3 Specific features

2.3.1 Search for presentations: This feature enables the user to search for top presentations related to a particular course.

2.3.2 Search for videos: This feature enables the user to search for top videos related to a particular course.

- 2.3.3 Search for research papers:** This feature enables the user to search for research papers related to a particular course.
- 2.3.4 Search for online courses:** This feature enables the user to search for available online courses related to a particular course.
- 2.3.5 Latest technologies:** User can see the latest trending technologies in the field of computer science.
- 2.3.6 Accepts Suggestions:** User can suggest new resources in the form of videos, presentations, research papers and online courses for any particular course.
- 2.3.7 Bookmarking facility:** A Registered User can bookmark a particular video, presentation, research paper or an online course website. By bookmarking resources, user can find them under bookmarks section.

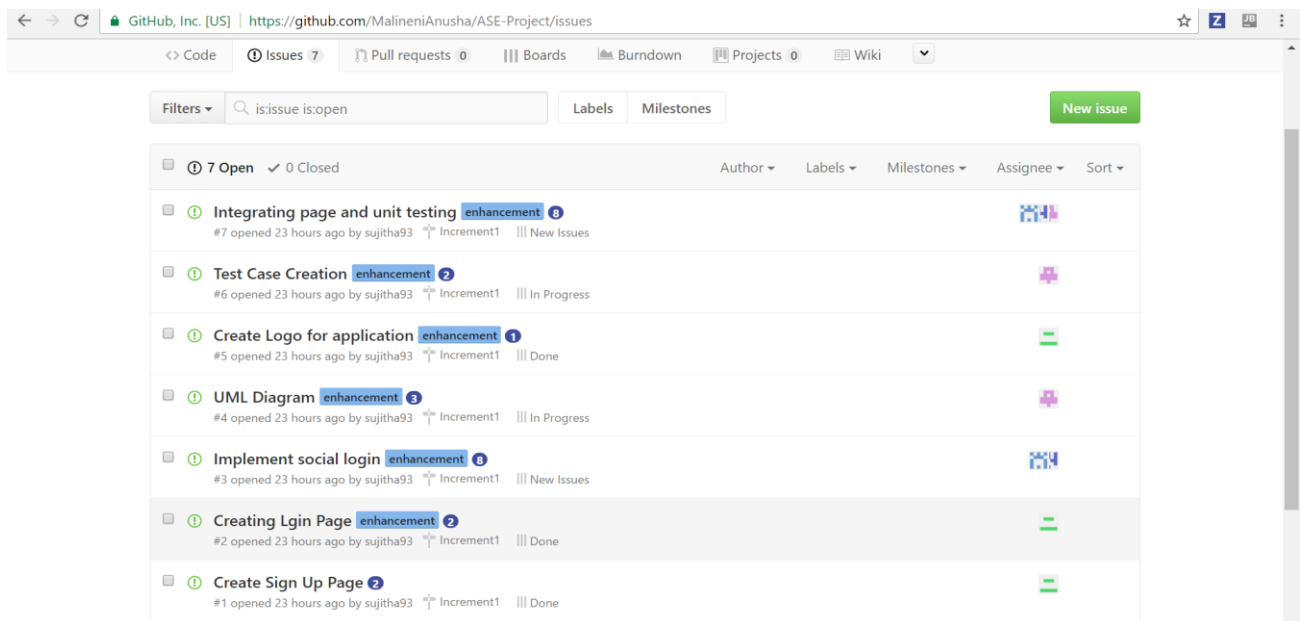
2.4 Significance

The application provides the wide range of resources like PPT's, videos, research papers and online courses at a single point.

3. Project Plan

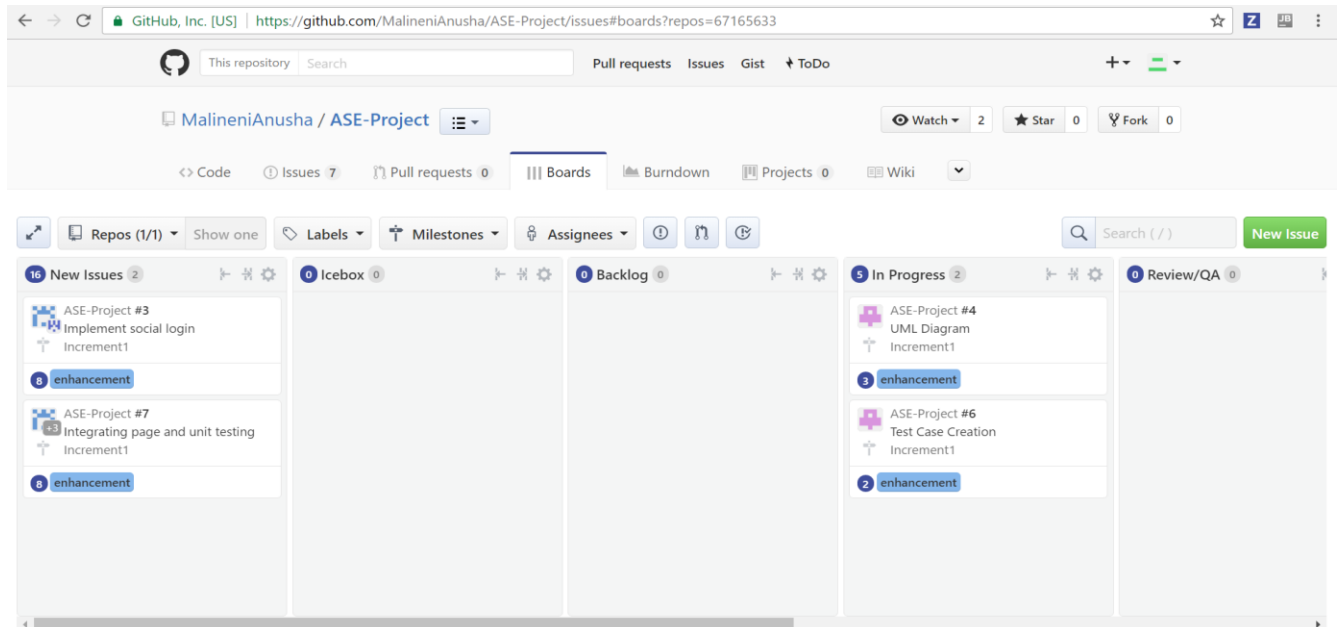
1. Zen- Hub Screenshot:

For the first increment we have issues regarding creating a login page, registration page, integrating Facebook login into the application, working on unit test cases.



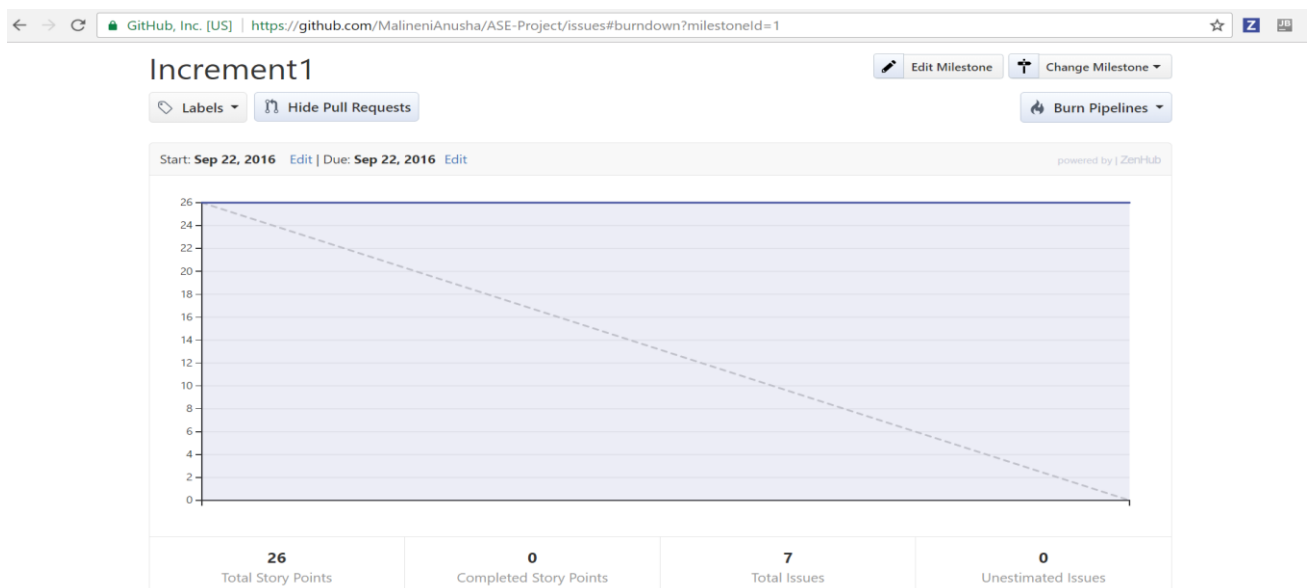
2. Project Timeline, Members, Task Responsibility

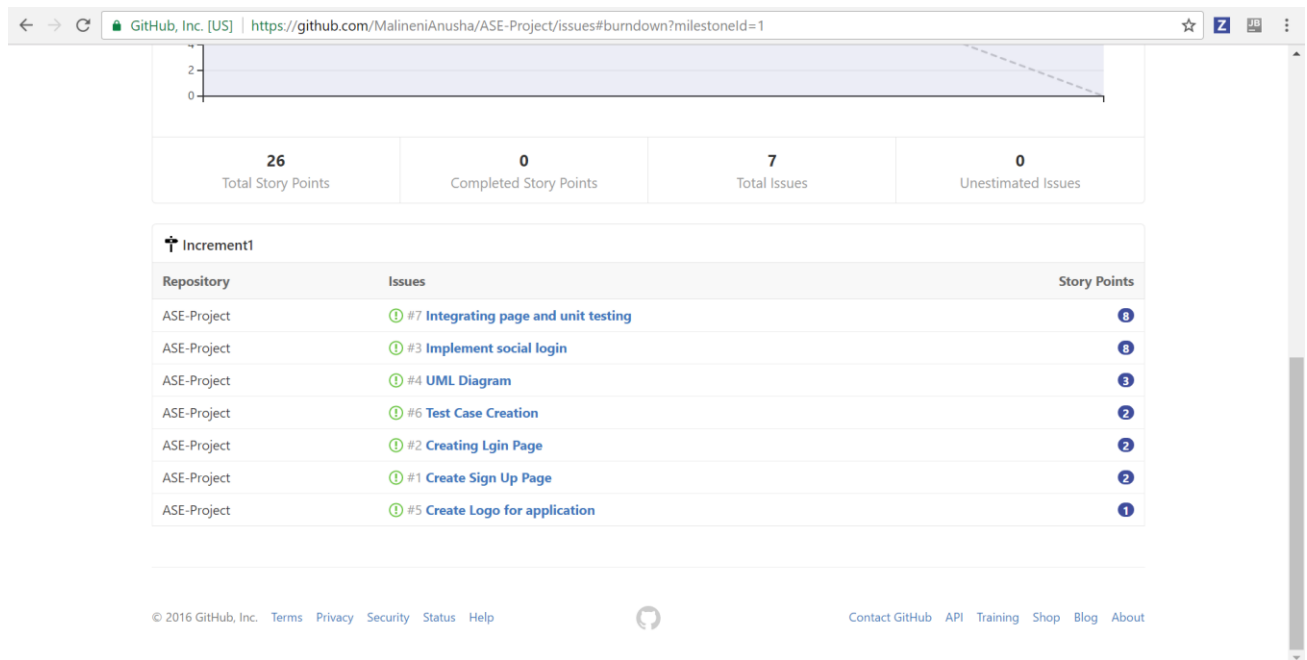
Below is the screenshot describing the new issues and issues which are in progress state, icebox state and all other states too.



3. Burn-Down chart

Burn-Down chart is created for the above described issues as shown below:





4. First Increment Report

4.1 Existing Services/REST API

4.1.1 API's Used

4.1.1.1 Facebook Login API:

We have integrated Facebook login API to our application.

API's to be used

We will be using the below mentioned API's in the next increments to implement the dynamic search for technologies.

- **Google Knowledge Graph API**
- **Slideshare API**
- **YouTube API**
- **Microsoft Cognitive Services API**
- **CS 50 API**

4.2 Detail Design of Features:

4.2.1. Wireframes

- **Login Page**

The wireframe shows a login page with a header bar containing the text "One Stop for CS". Below the header, there are two input fields for "Username" and "Password". A "Sign in" button is positioned below the password field. Underneath the button is the text "Or Login with" followed by a "Facebook" button. At the bottom of the form is a "New User Registration" button.

One Stop for CS

Username

Password

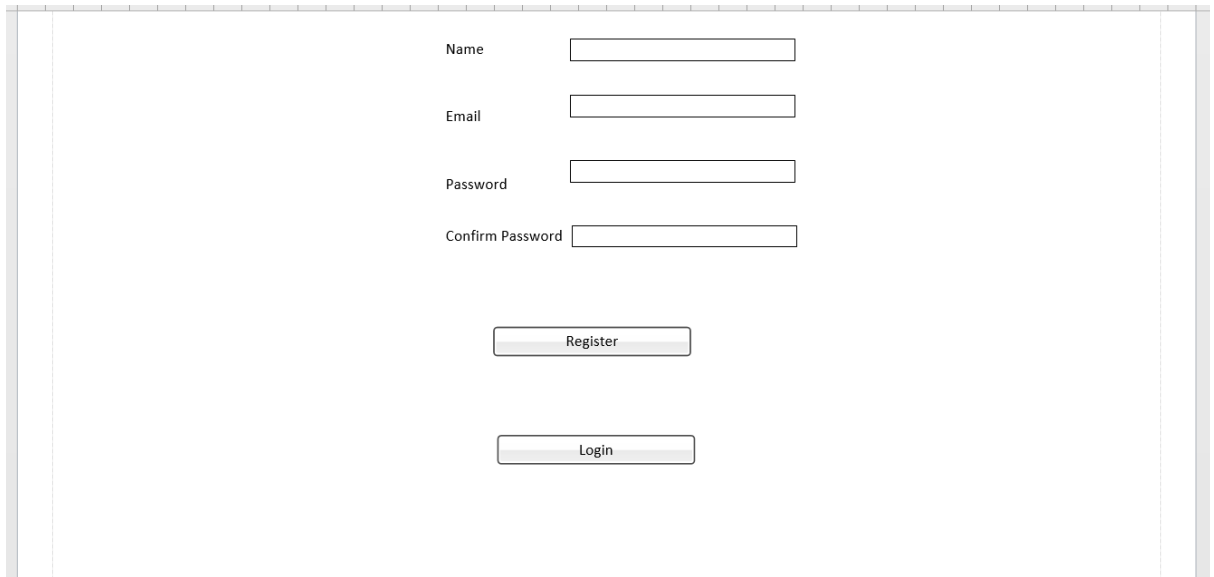
Sign in

Or Login with

Facebook

New User Registration

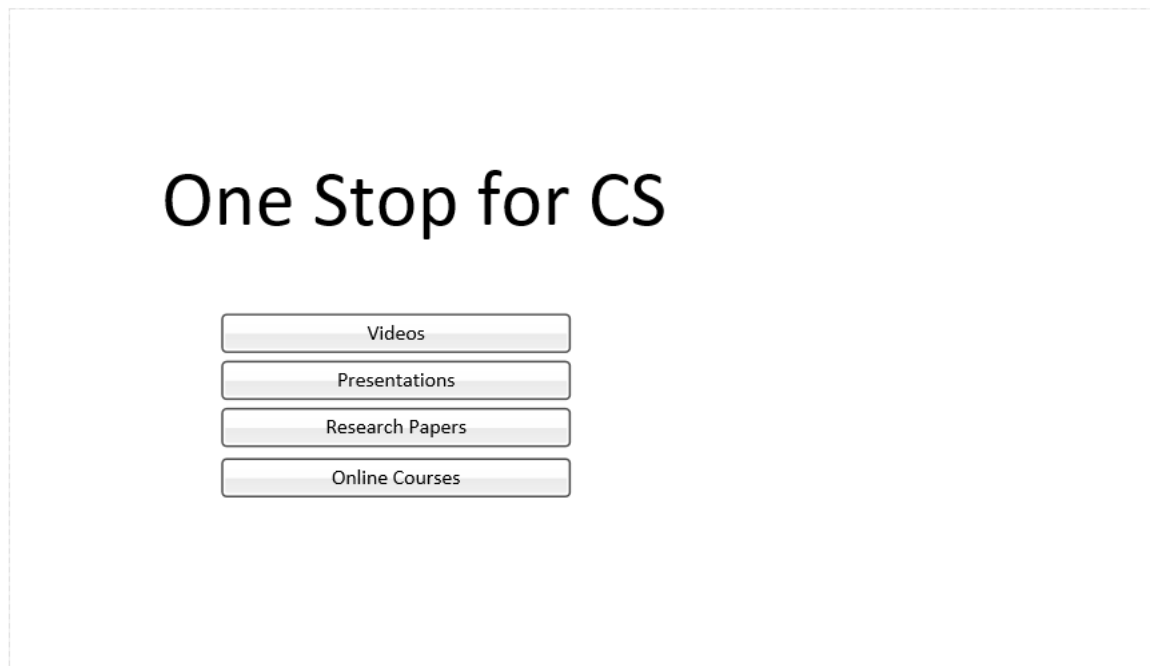
- **Registration Page**



A registration form with a light gray border. It contains four input fields for 'Name', 'Email', 'Password', and 'Confirm Password', each with a label to its left. Below the fields are two buttons: 'Register' and 'Login', both with a light gray gradient and rounded corners.

| | |
|------------------|--------------------------|
| Name | <input type="text"/> |
| Email | <input type="text"/> |
| Password | <input type="password"/> |
| Confirm Password | <input type="password"/> |

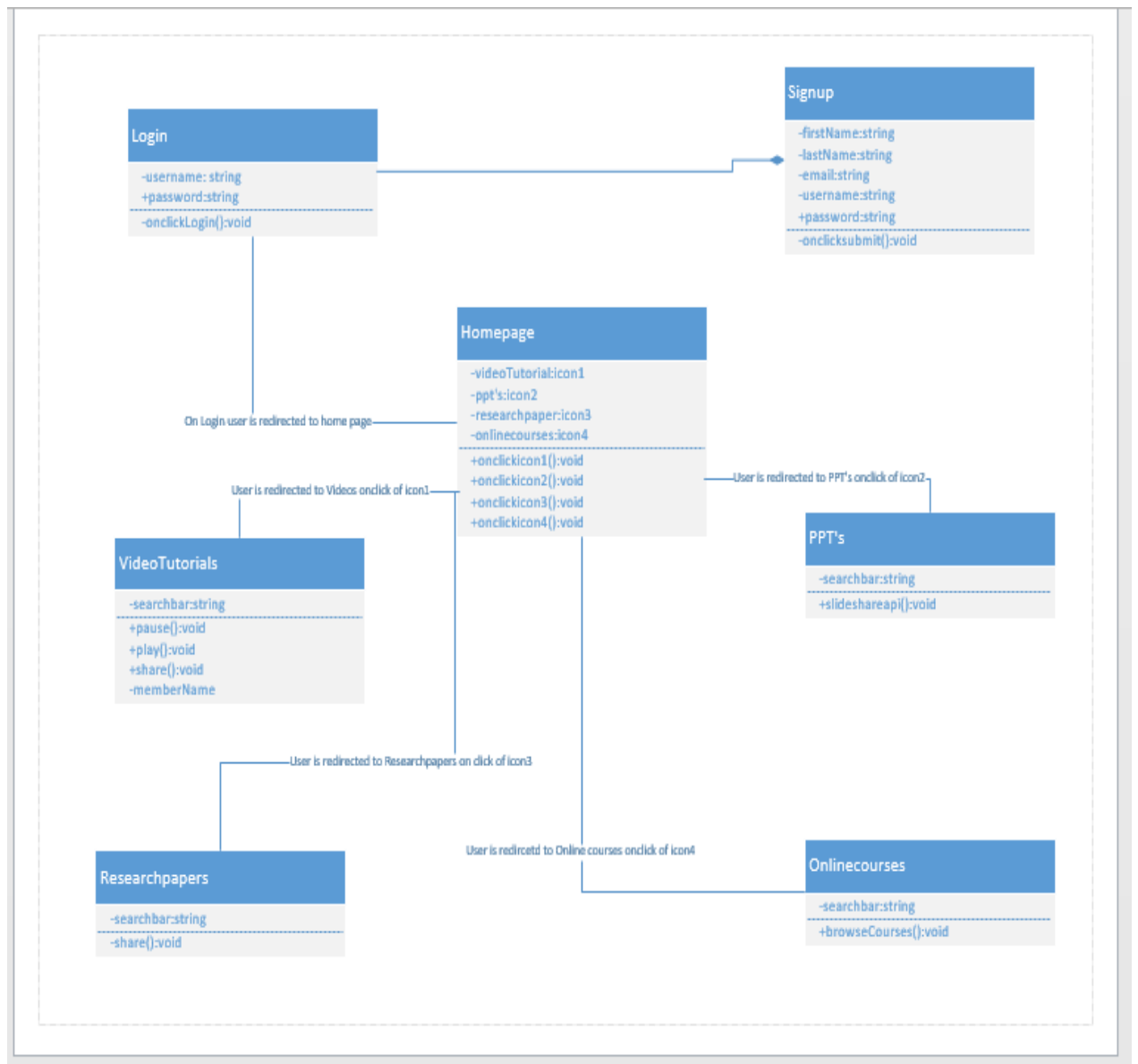
- **Home Page**



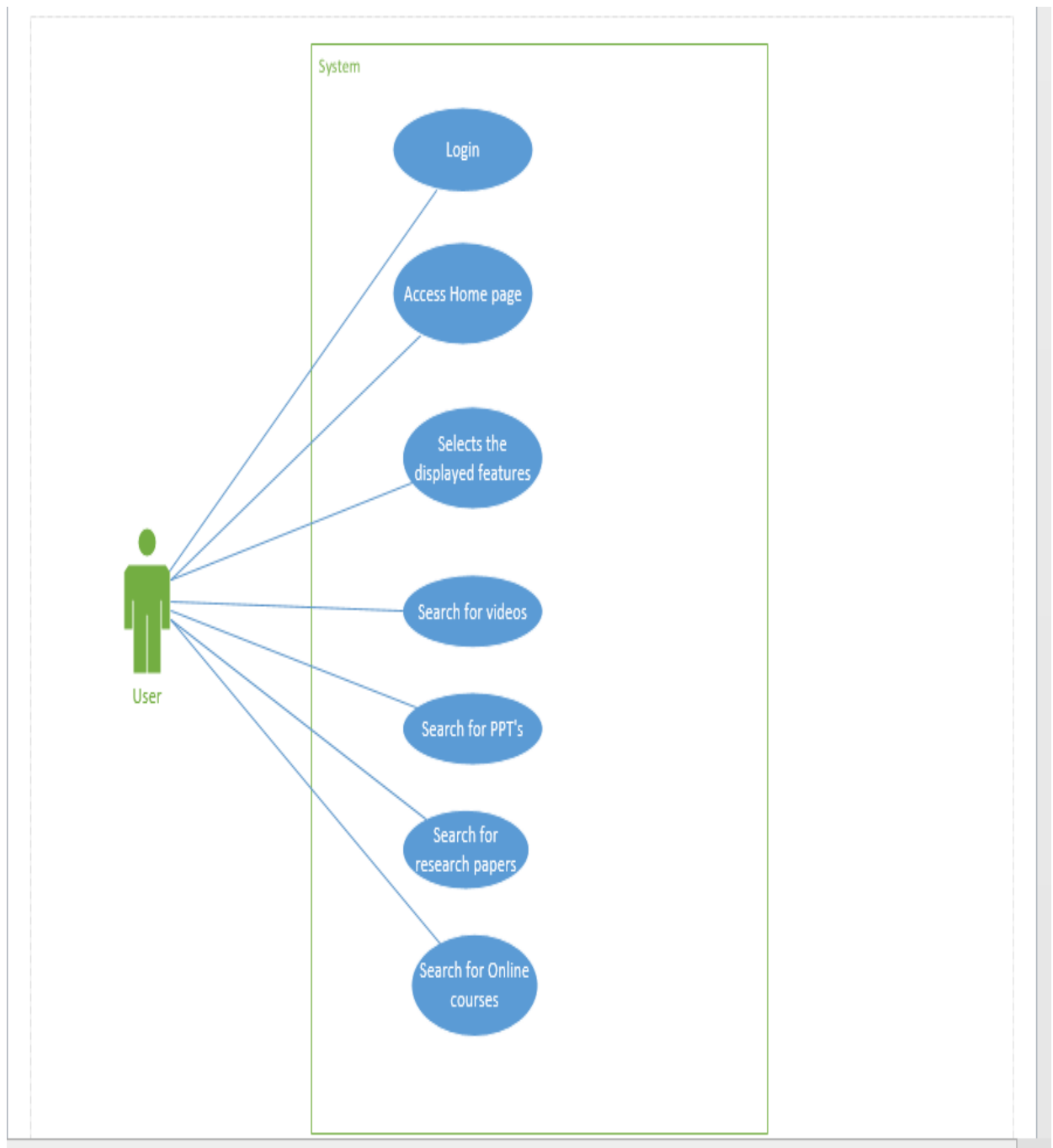
A home page layout with a large heading 'One Stop for CS' and four buttons stacked vertically: 'Videos', 'Presentations', 'Research Papers', and 'Online Courses'. The buttons have a light gray gradient and rounded corners.

One Stop for CS

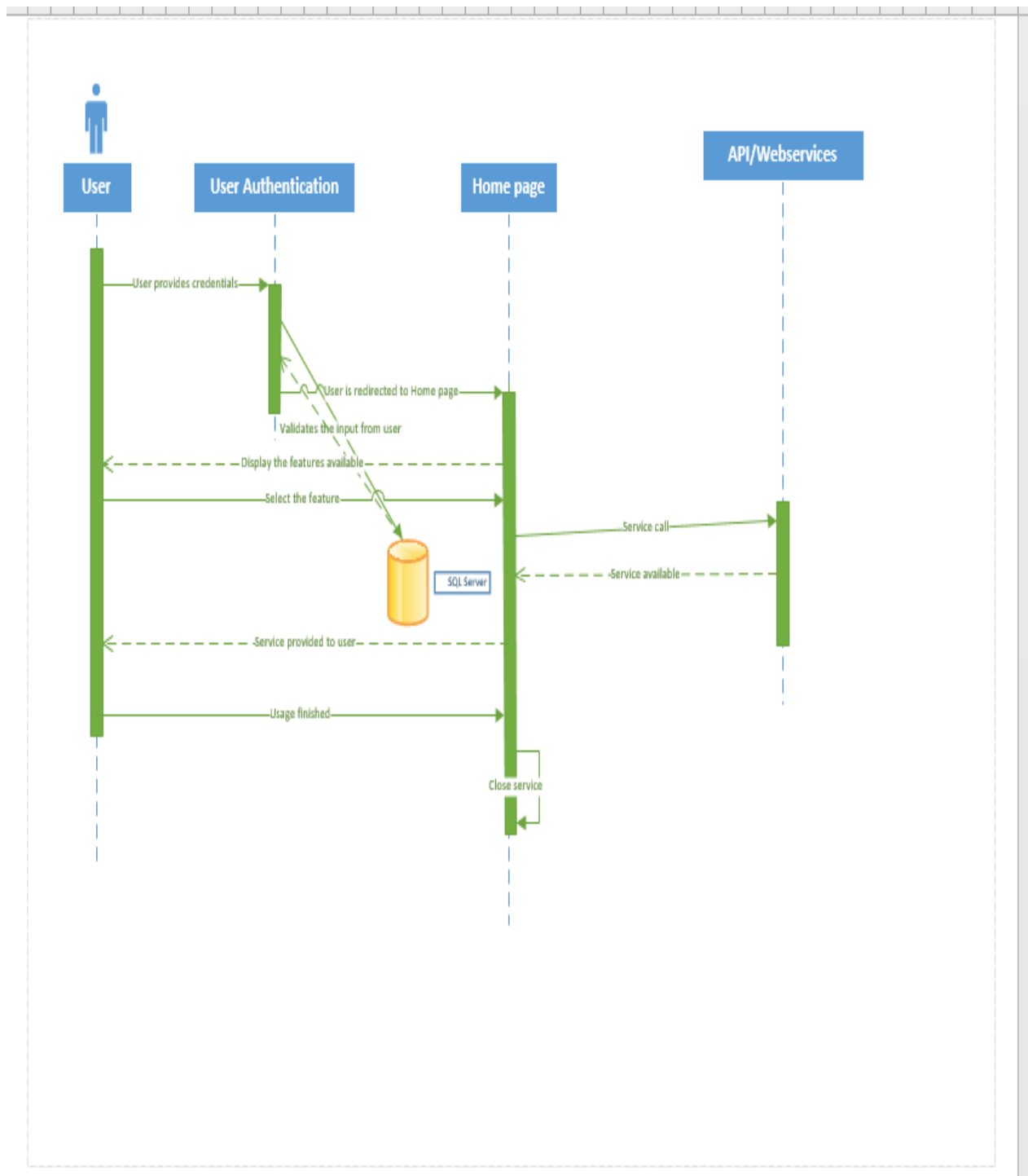
4.2.2 Class Diagram:



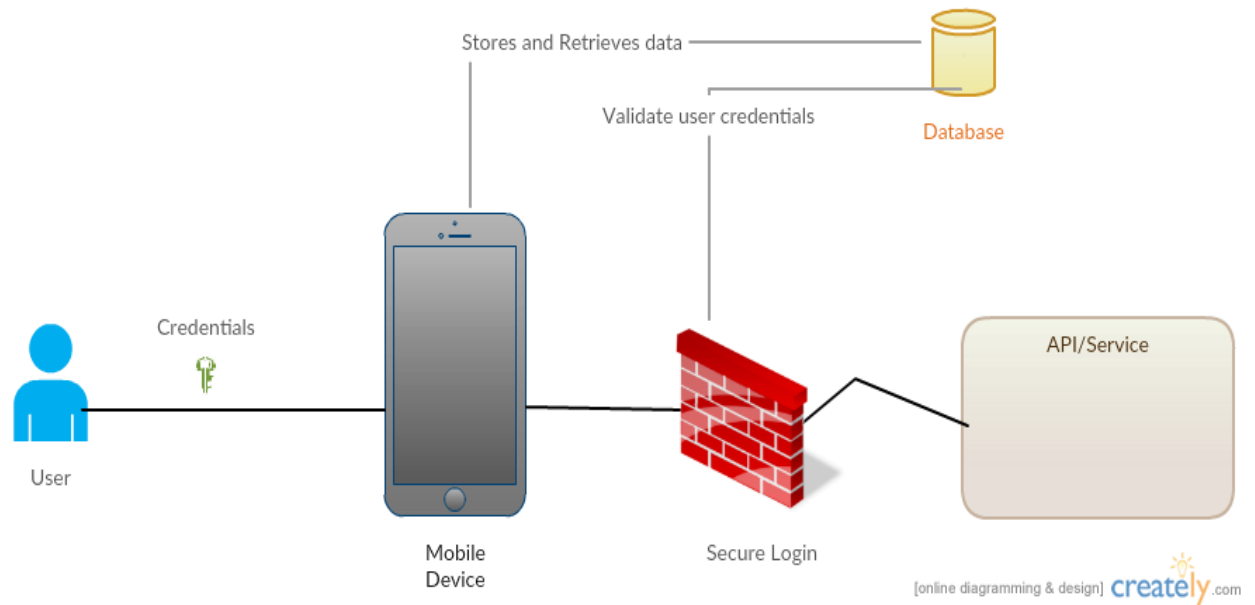
4.2.3 Use Case Diagram:



4.2.4 Sequence Diagram



4.2.5 Architecture Diagram



4.2.6 User Stories

| As a | I want to | So that |
|------|---|--|
| User | search for the resources of computer science | I can learn new technologies in the current industry. |
| | search for video resources according with keyword | I can narrow down the search results to specific content. |
| | get the presentations of computer science topics | I can better understand in brief and can explain to others easily. |
| | search for research paper in particular topic | I can gain more insights of the topic and find out interesting things. |
| | read the topic which is favourite to my interests | I can bookmark the topic to access it easily. |
| | to contribute by providing more resources | I can give suggestions. |
| | do courses online | I can enrol to the course and finish it. |

4.2.7 Unit Testing

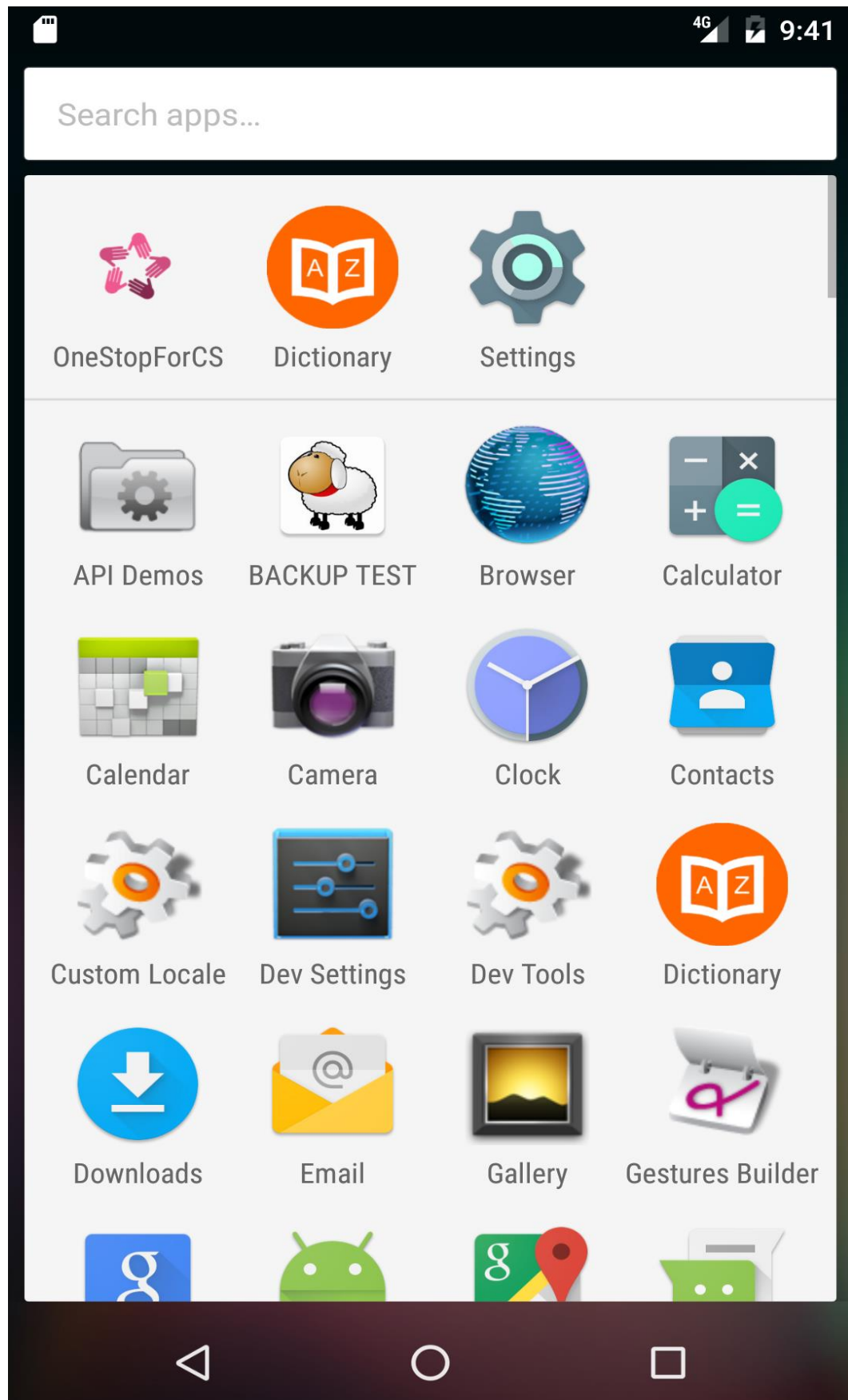
- **Test Cases for Login and Signup page:**

| Case | Test case Description | Expected Result | Actual Result |
|--------|--|---|---------------|
| Login | Enter invalid username and password | Error message should pop up saying invalid credentials. | PASS |
| Login | Enter invalid username and valid password | Error message should pop up saying invalid credentials. | PASS |
| Login | Enter valid username and invalid password | Error message should pop up saying invalid credentials. | PASS |
| Login | Enter valid username and password | Page should redirect to Home page | PASS |
| Signup | Email id format should end with @mail.com | Give error message incorrect email id format | PASS |
| Signup | Password of length 8 characters | Gives error message password is weak | PASS |
| Signup | Password and confirm password should match | If this succeeds it redirects to login page | PASS |

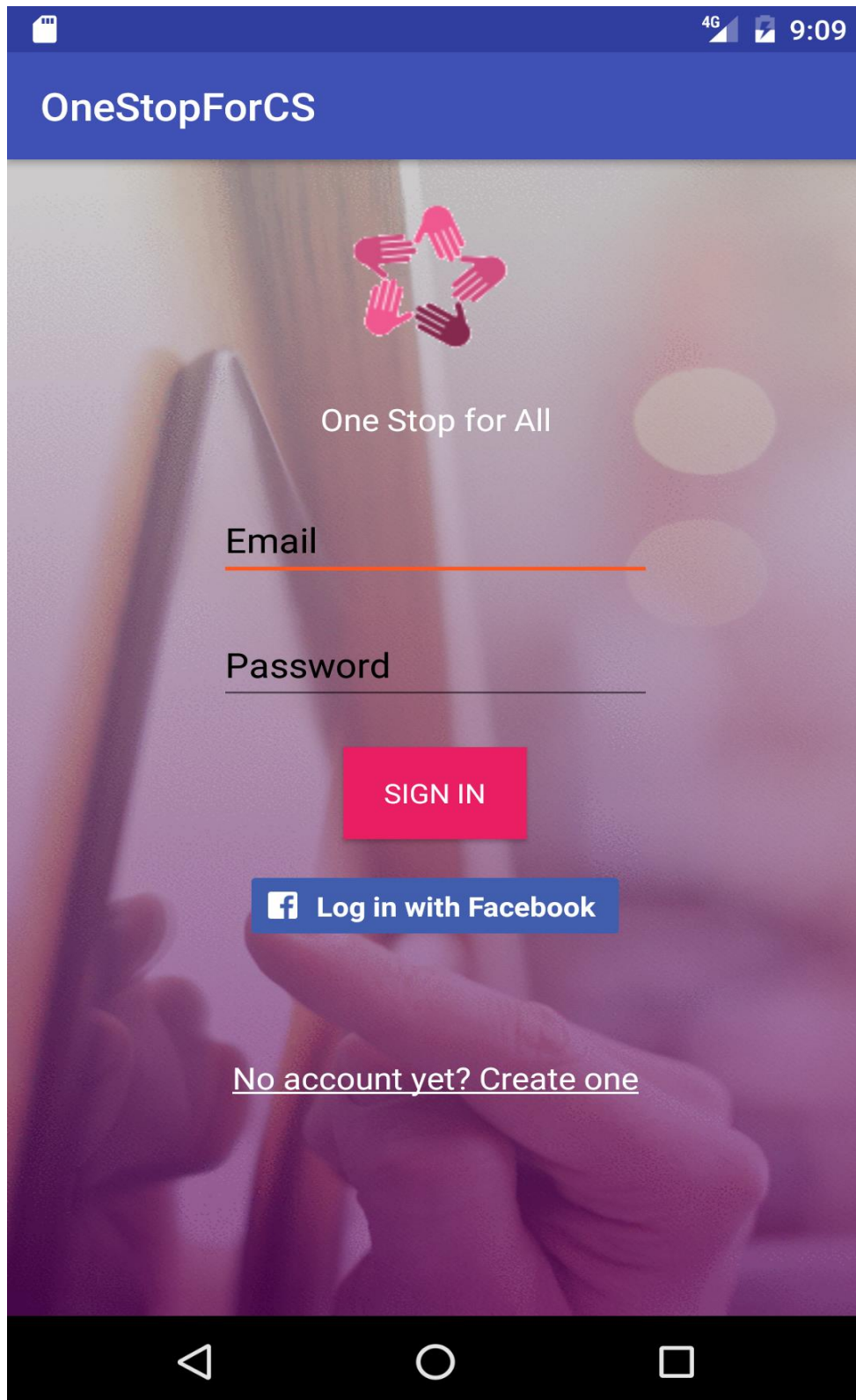
5. Implementation and Deployment

We have implemented the OneStopForCS application in Android Studio onto an emulator. Following screenshots describe the flow of the application.

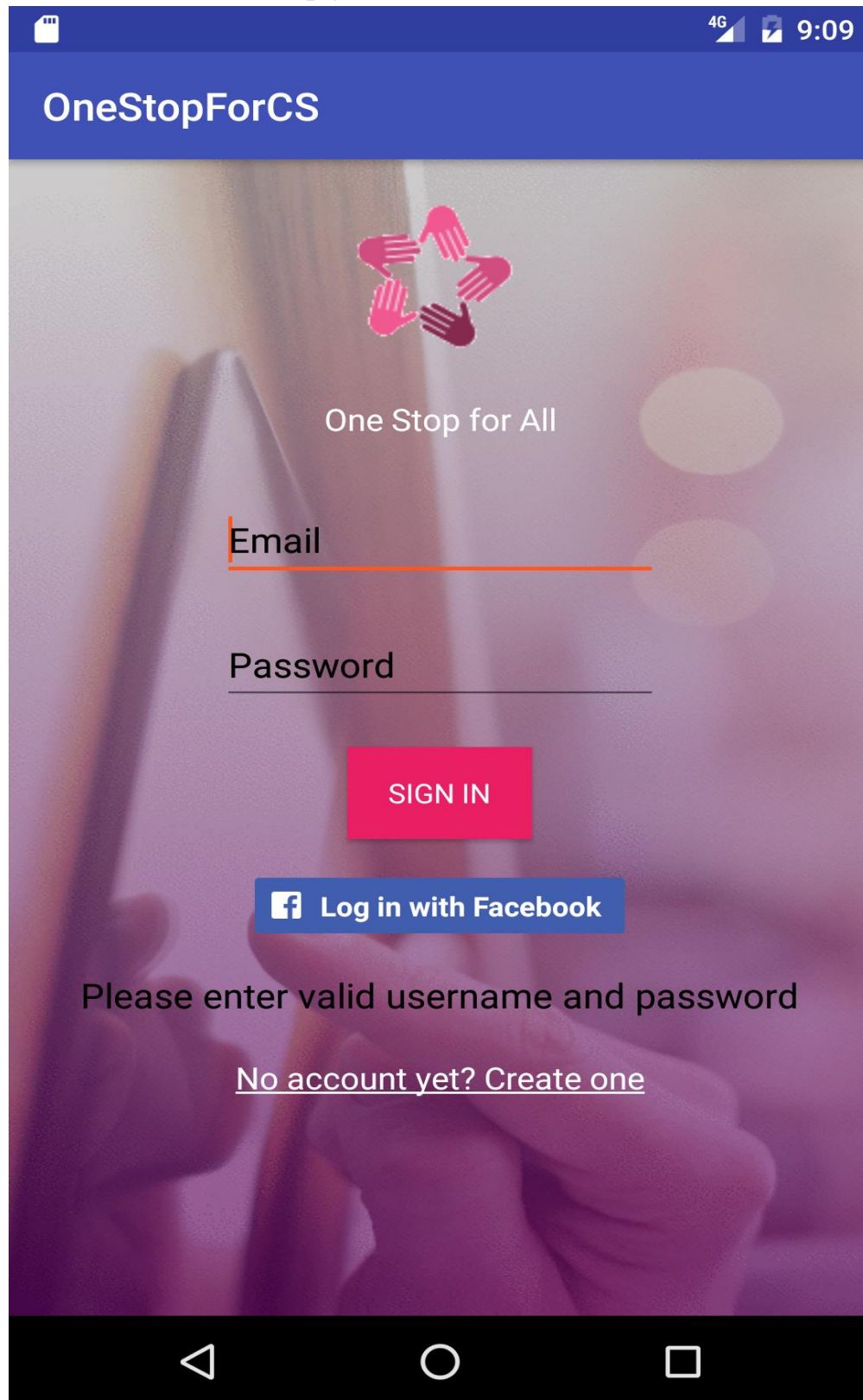
5.1 Following is the screenshot of the installed application 'OneStopForCS'.



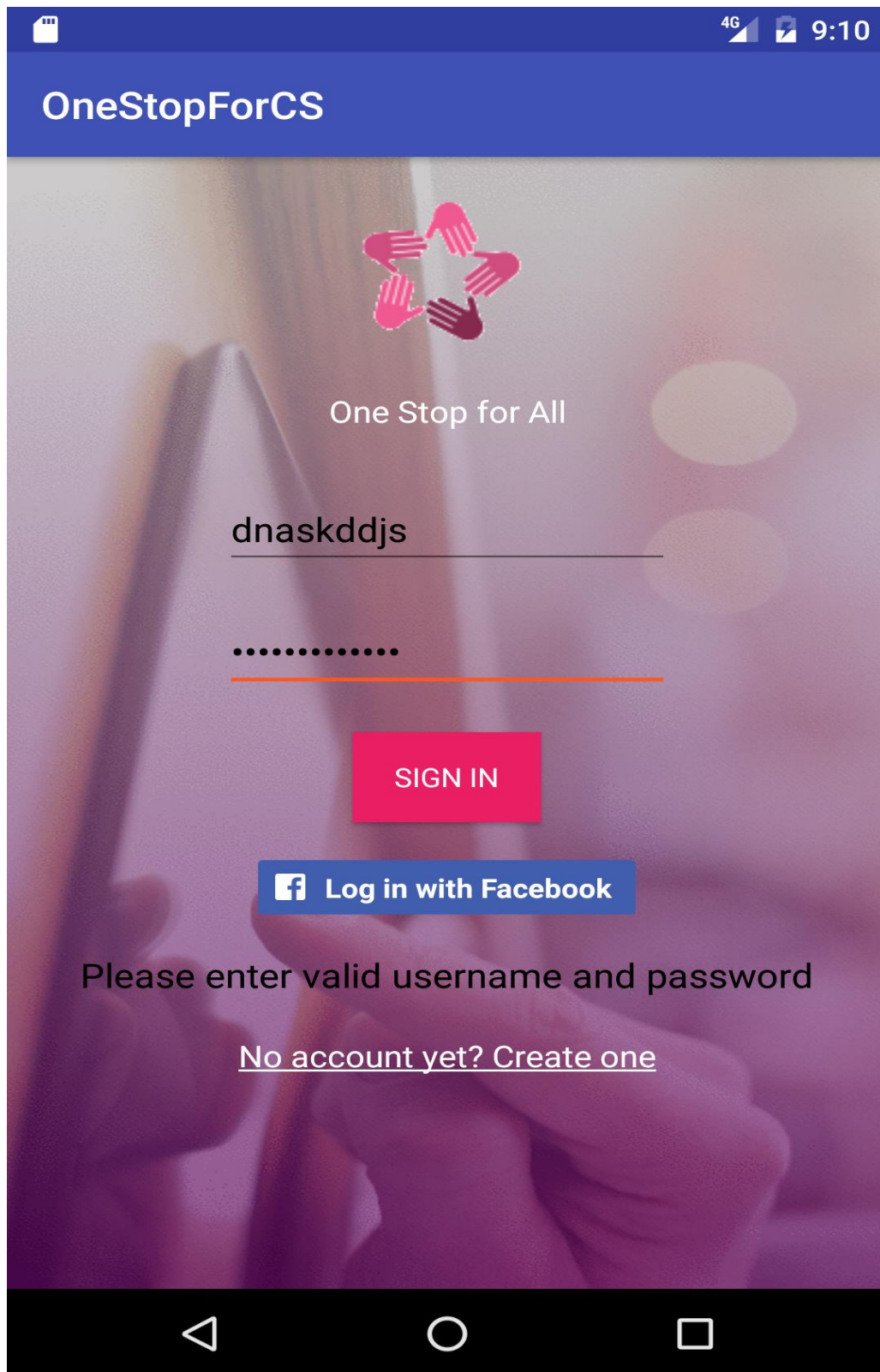
5.2 By clicking on the application 'OneStopForCS' following login page appears.



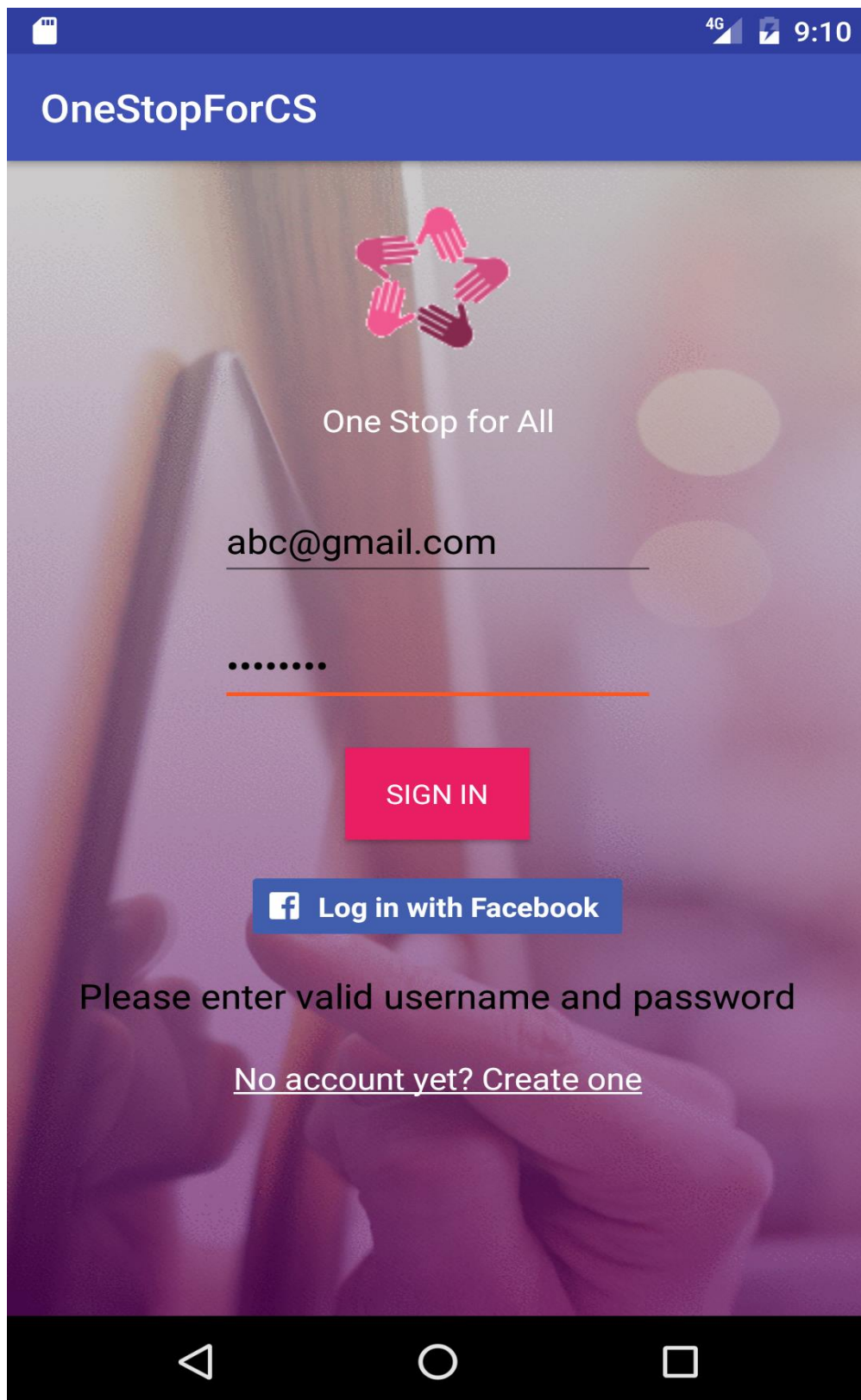
5.3 Application will prompt an error message if both the Email field and Password fields are empty.



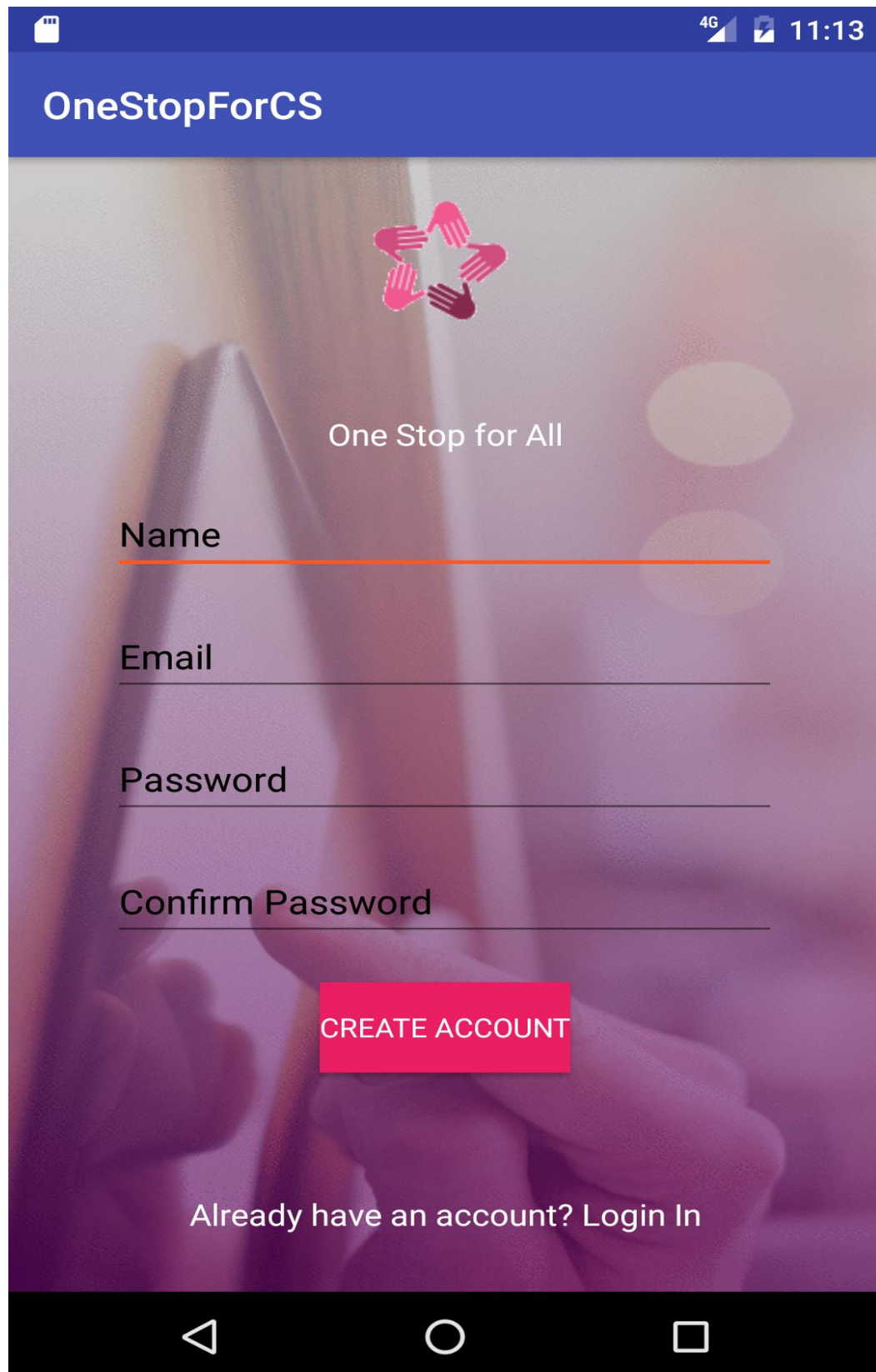
5.4 Also application will prompt an error message if user enter wrong email or password.



5.5 User must enter correct username and password for the application to move to the home page.



5.6 A new user can register by clicking on ‘No account yet? Create one’ button. By clicking on this button, application will be redirected to registration page.



The image shows a mobile application interface for registration. At the top, there is a blue header bar with the text "OneStopForCS". Below the header, there is a background image of hands holding a smartphone. In the center, there is a logo consisting of five hands holding a star. Below the logo, the text "One Stop for All" is displayed. The registration form consists of four input fields: "Name", "Email", "Password", and "Confirm Password". Each field has a red underline. Below the input fields, there is a red button with the text "CREATE ACCOUNT". At the bottom, there is a link that says "Already have an account? Login In". The bottom of the screen shows the Android navigation bar with the back, home, and recent apps buttons.

OneStopForCS

One Stop for All

Name

Email

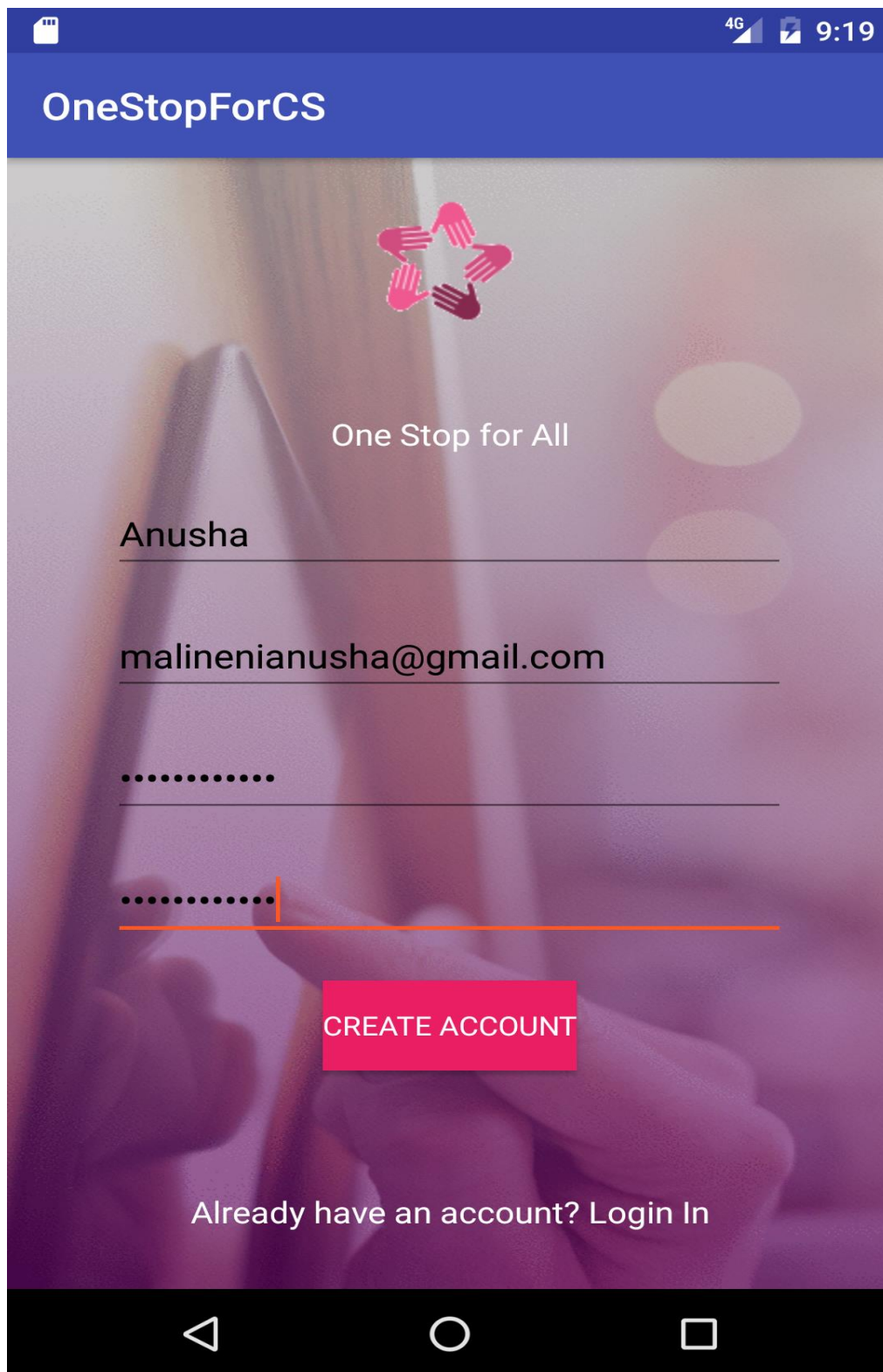
Password

Confirm Password

CREATE ACCOUNT

Already have an account? Login In

5.7 User must enter name, email id, password and confirm password fields to complete the registration.



OneStopForCS

One Stop for All

Anusha

malinenianusha@gmail.com

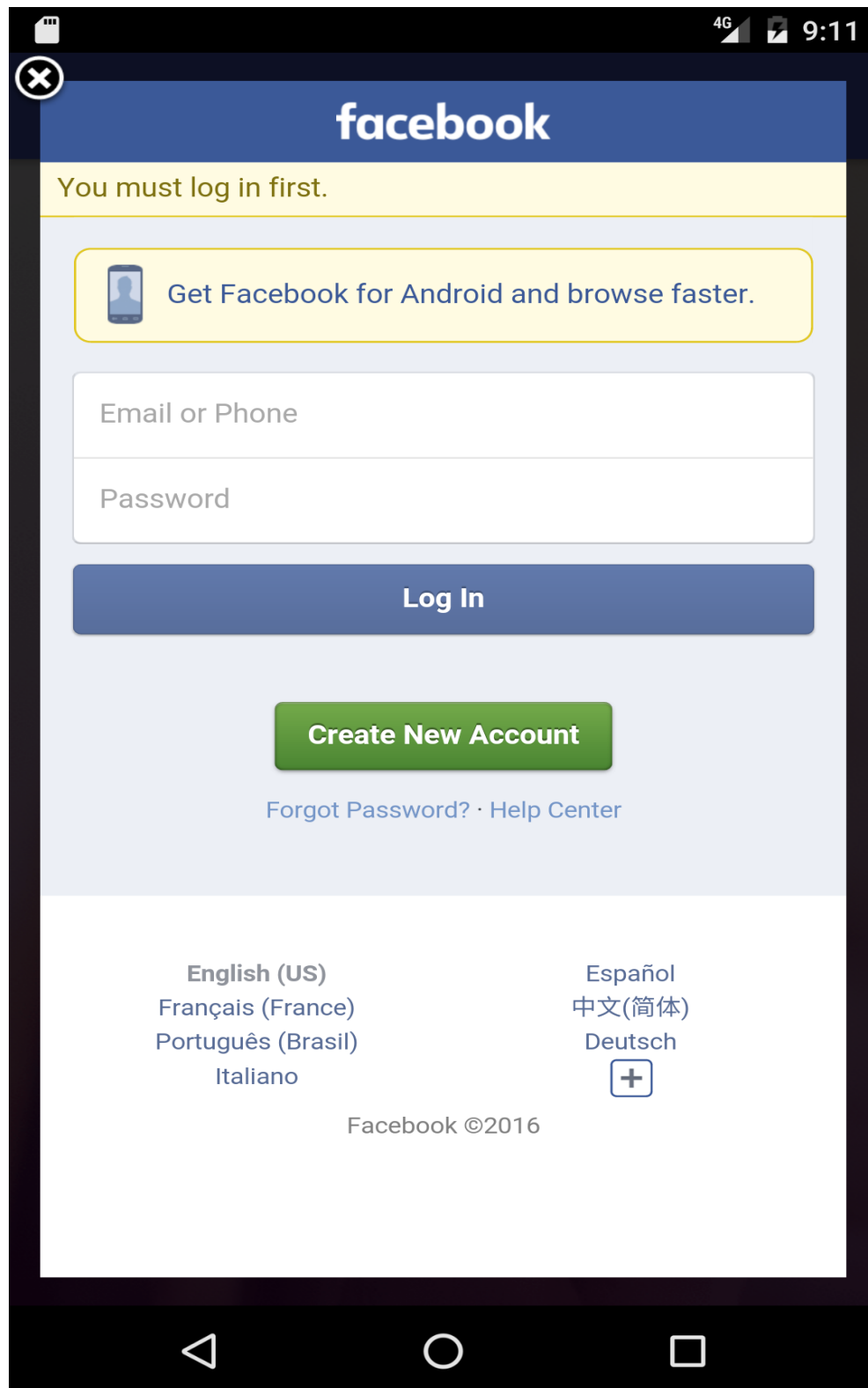
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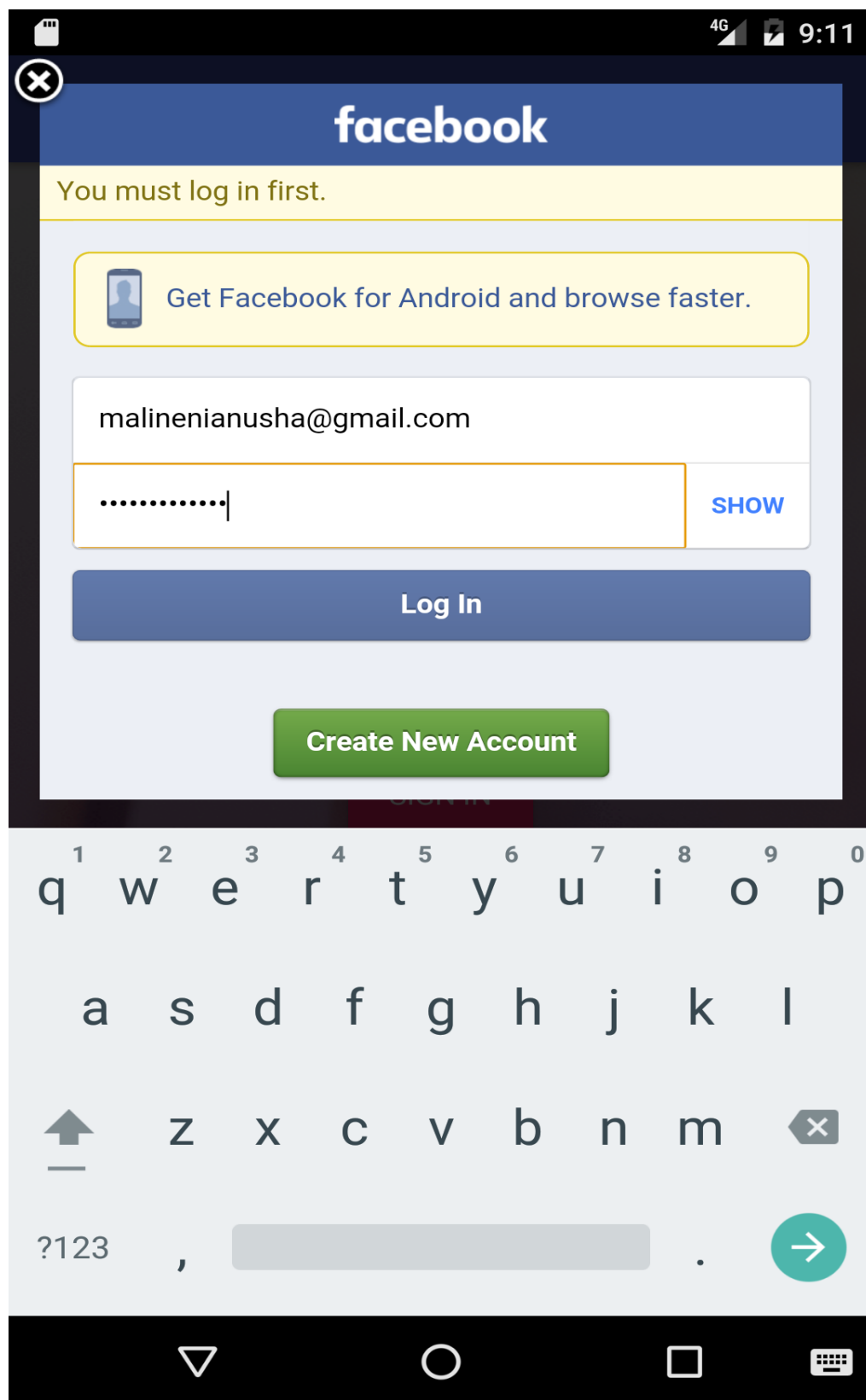
CREATE ACCOUNT

Already have an account? Login In

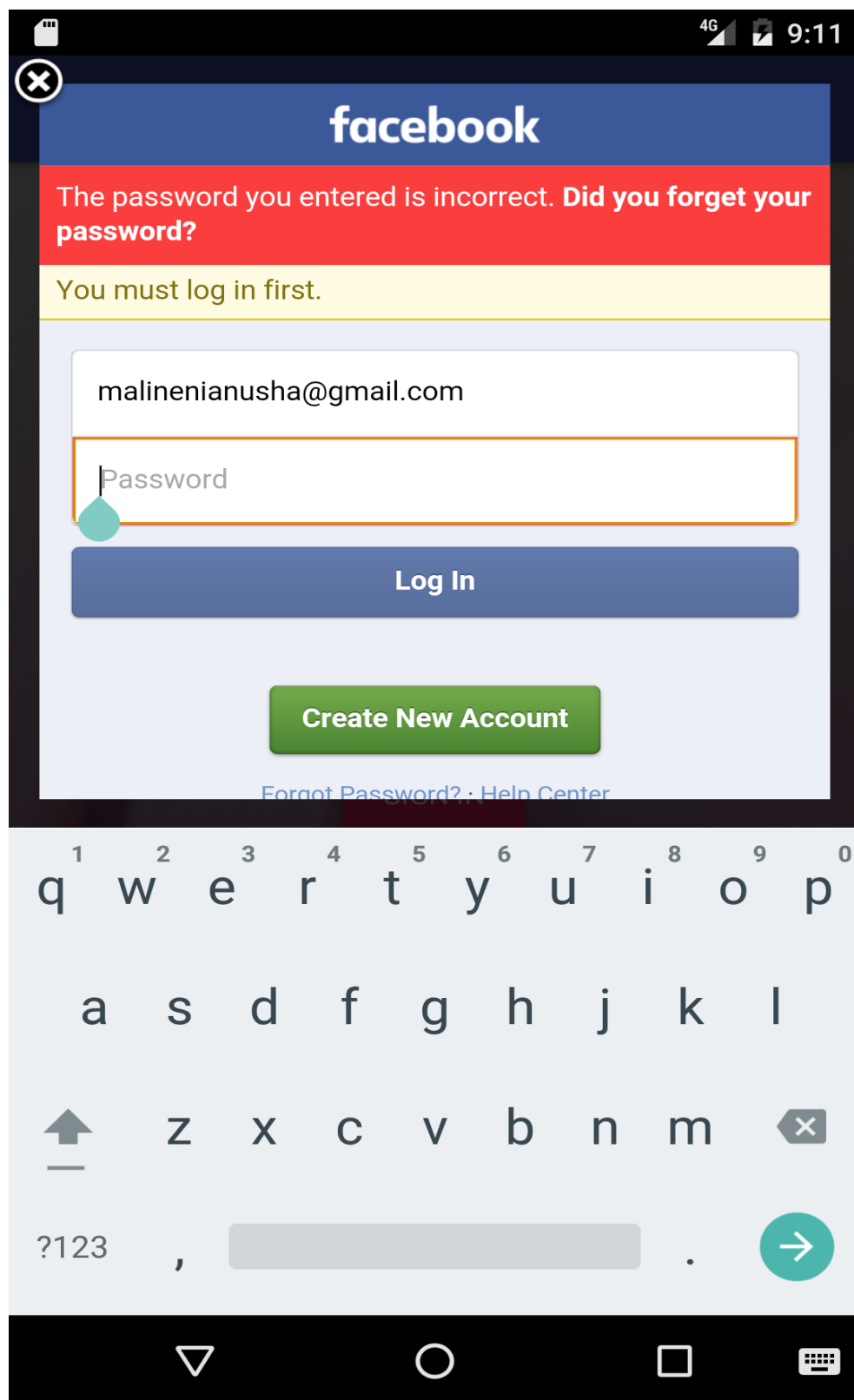
5.8 From the login page, user can also login through Facebook login. By clicking on 'Log in with Facebook button' application will be redirected to Facebook log in page.



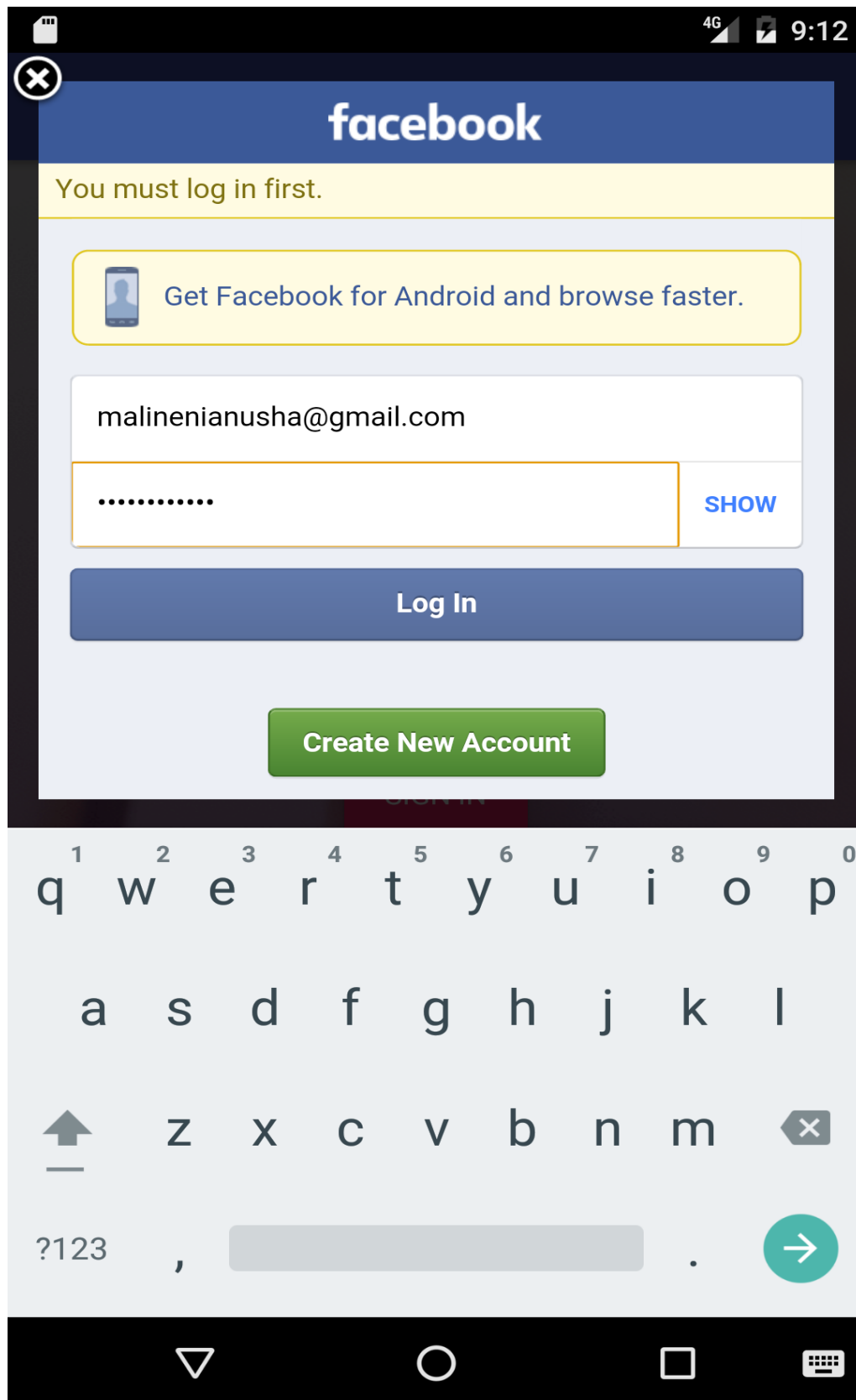
5.9 User must enter his/her Facebook login details. User must enter correct credentials of Facebook to login to application.



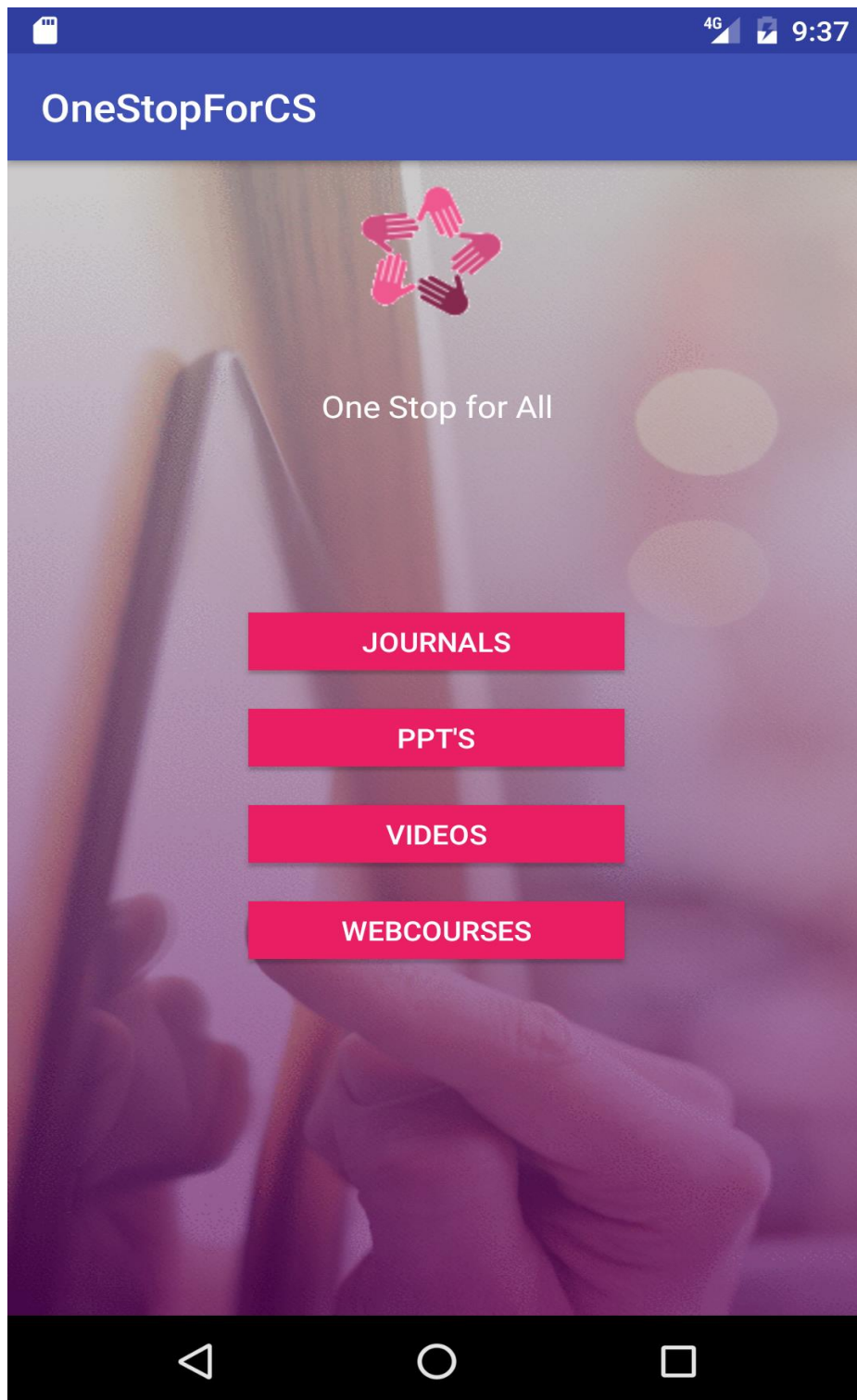
5.10 Following error will prompt if the user enters wrong Facebook login details.



- 5.11 By entering the correct Facebook credentials, application will be redirected to home page.



5.12 Following is the home page of our application. User will be redirected to home page by logging into the system either through application login or through Facebook login.



GitHub wiki page URL: <https://github.com/MalineniAnusha/ASE-Project/wiki/Project-Increment-1>

6. Project Management

Implementation status report

Technologies Used: Android SDK, HTML, CSS, JS, Angular JS, J2EE.

Work Completed

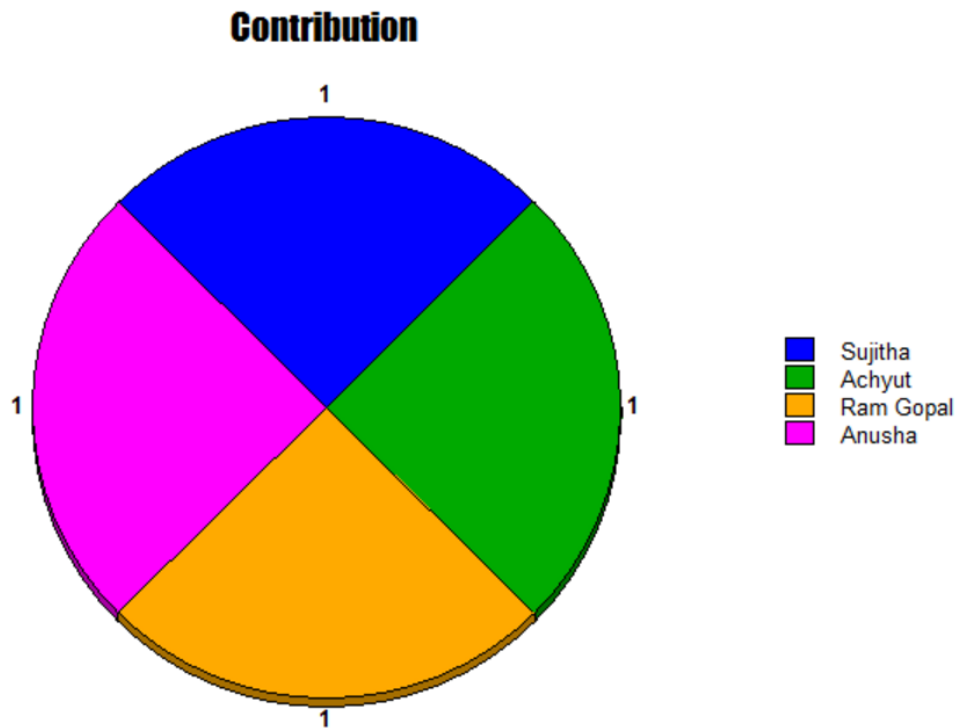
- Design and Architecture of the Application
- Login and Registration using Android
- Collecting the API useful for the application

Work to be Completed

- Integrating the API with the application.
- Navigating the application in ionic.
- Improving the User Interface of the application.

Contributors:

- Sujitha, Puthana – 25 %
- Achyuth Reddy, Nalamadgu – 25%
- Anusha, Malineni – 25%
- Sri Sai Narayana Ram Gopal, Mangena – 25%



7. Bibliography

1. <http://createely.com/>
2. <http://developers.facebook.com>
3. creatly.com
4. stackoverflow.com

