



**Tech Hub**

# Project Fourth Increment

## Fall 2016

### TEAM - 2

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# 1. Introduction

## Tech Hub

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 technical 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

### 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 Wiki's:** This feature enables the user to search topics on Wikipedia 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.

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**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.

**2.4 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:



## 2. Project Timeline, Members, Task Responsibility

GitHub, Inc. [US] | <https://github.com/MalineniAnusha/ASE-Project/issues#boards?repos=67165633>

This repository Search Pull requests Issues Gist To Do

MalineniAnusha / ASE-Project Watch 2 Star 0 Fork 0

Code Issues 7 Pull requests 0 Boards Reports Projects 0 Wiki

Repos (1/1) Show one Labels Milestones Assignees Epics Search (/) New Issue

**22 New Issues 6**

- ASE-Project #24 Implemented you tube API Increment 4
- ASE-Project #26 Shifting to Ionic Project Increment 4
- ASE-Project #27 Updating details of user Increment 4
- ASE-Project #28 Implement settings option for user Increment 4

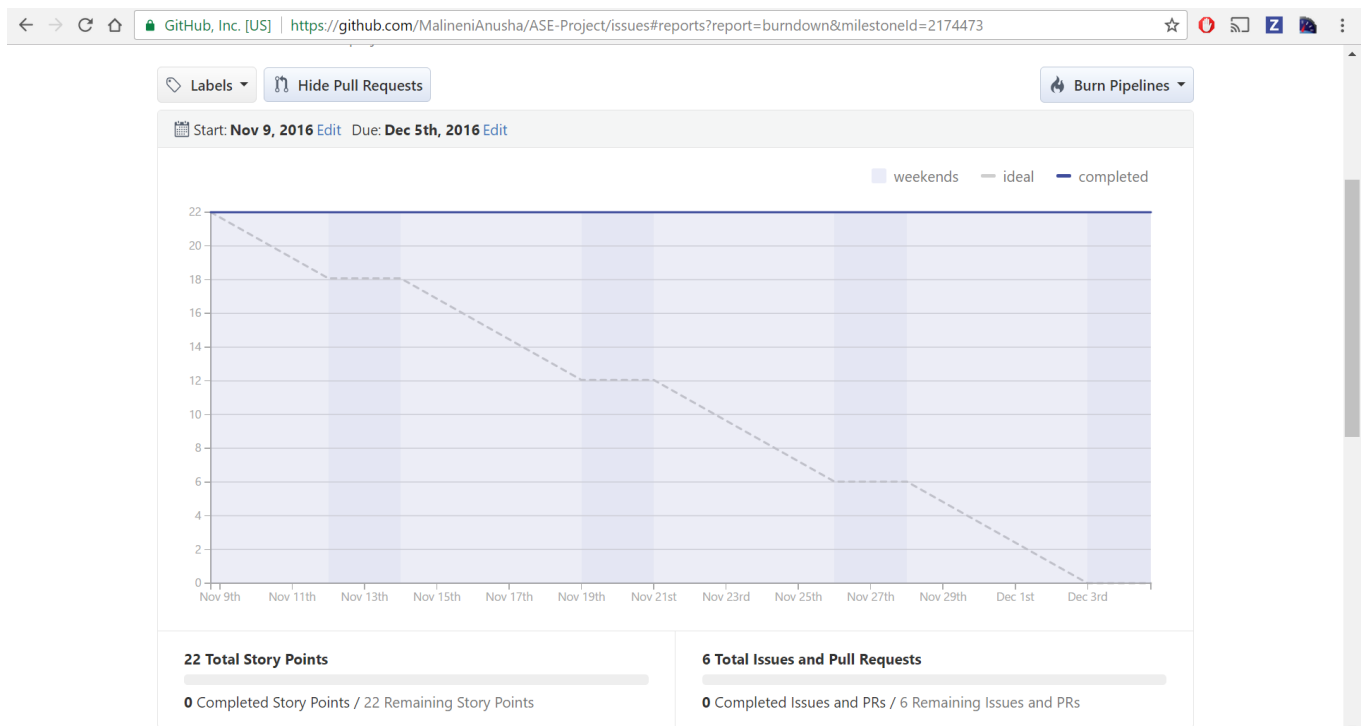
**0 Icebox 0**

**0 Backlog 0**

**0 In Progress 1**

- ASE-Project #14 Implement Bar Code Scan Feature Increment2 enhancement

**0 Review/QA 0**



## 4. Fourth Increment Report

### 4.1 Existing Services/REST API

#### 4.1.1 API's and Plugin's Used

➤ **Facebook Login API:**

We have integrated Facebook login API to our application.

➤ **MongoDb:**

We have integrated MongoDB for registration and login of users of the application.

➤ **Firebase:**

We have integrated firebase for discussion forum of the application.

➤ **Eventful API for Events:**

We have used Eventful API to retrieve the events that are near to user's location.

➤ **YouTube API:**

Implemented YouTube API to retrieve the videos related to search tags.

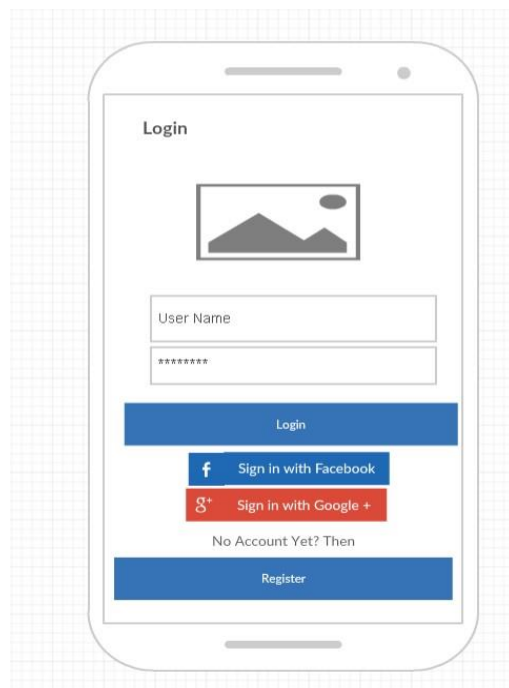
➤ **Wikipedia API:**

Implemented Wiki API to retrieve the data related to tags given in search bar.


## 4.2 Detail Design of Features:

### 4.2.1. Wireframes

#### Login Page

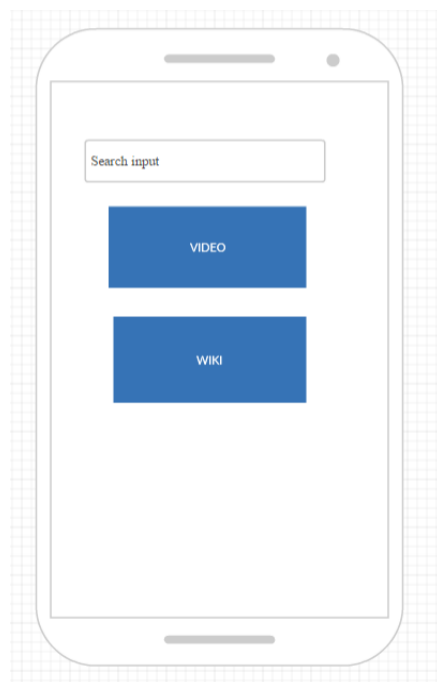


## Registration Page



The registration page features a title 'Register' at the top. Below the title is a placeholder image of a landscape with mountains and a sun. Underneath the image are five stacked text input fields labeled 'First Name', 'Last Name', 'Email', 'User Name', and 'Password'. At the bottom of the form is a blue button labeled 'Register'.

## Home Page



## User profile

Profile

First Name

Last Name

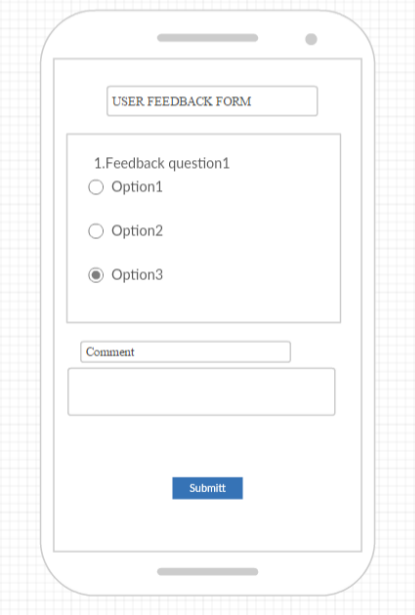
Email

User Name

Password



## Wireframe for feedback page



A wireframe for a mobile feedback form, displayed on a smartphone screen. The form is titled "USER FEEDBACK FORM". It contains a section for "1.Feedback question1" with three radio button options: "Option1", "Option2", and "Option3". "Option3" is selected. Below the options is a "Comment" label and a text input field. At the bottom of the form is a blue "Submit" button.

USER FEEDBACK FORM

1.Feedback question1

☐ Option1

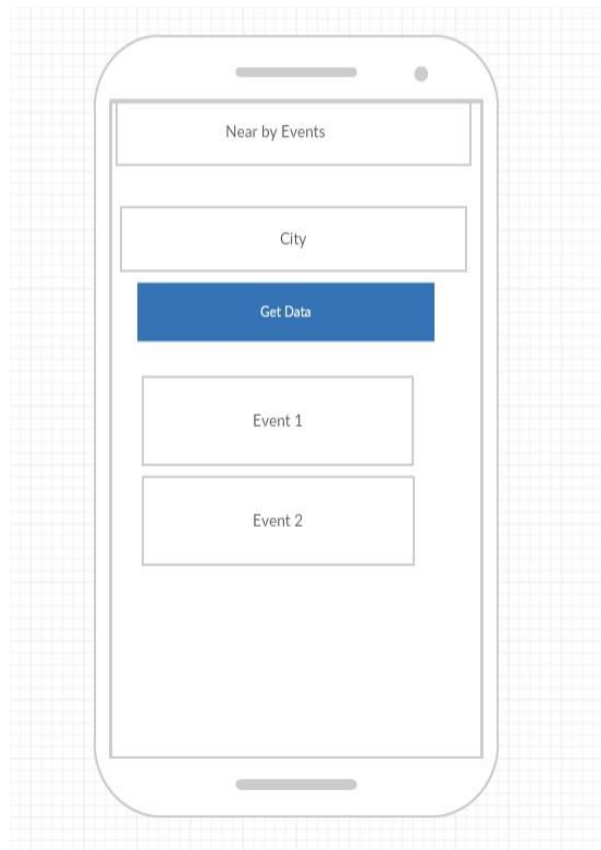
☐ Option2

☒ Option3

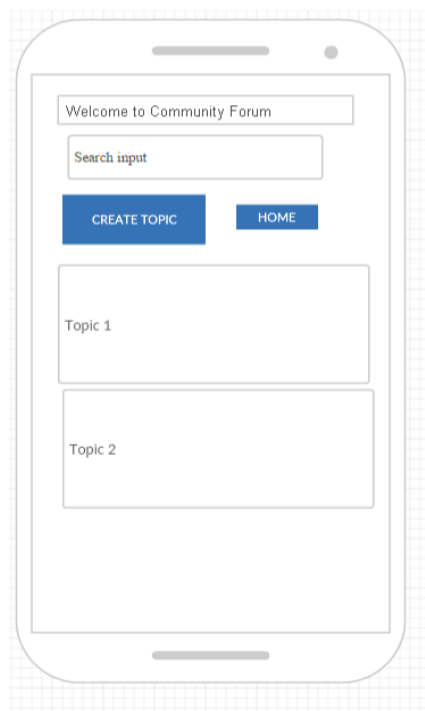
Comment

Submit

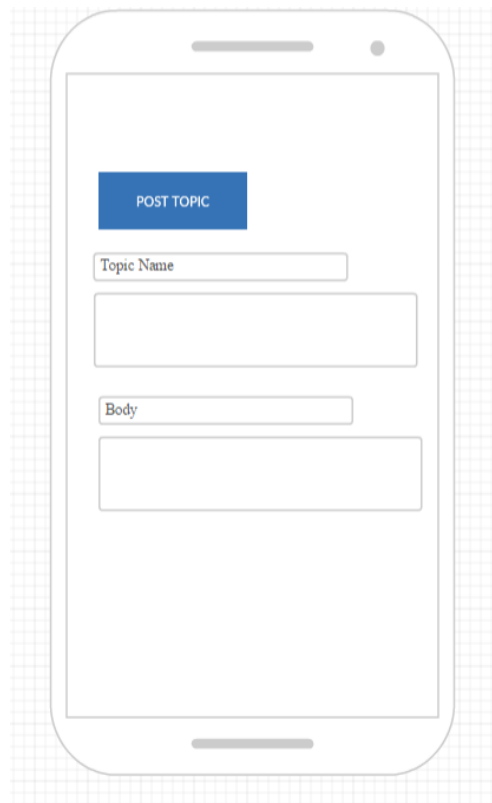
## Wireframe for Eventful API



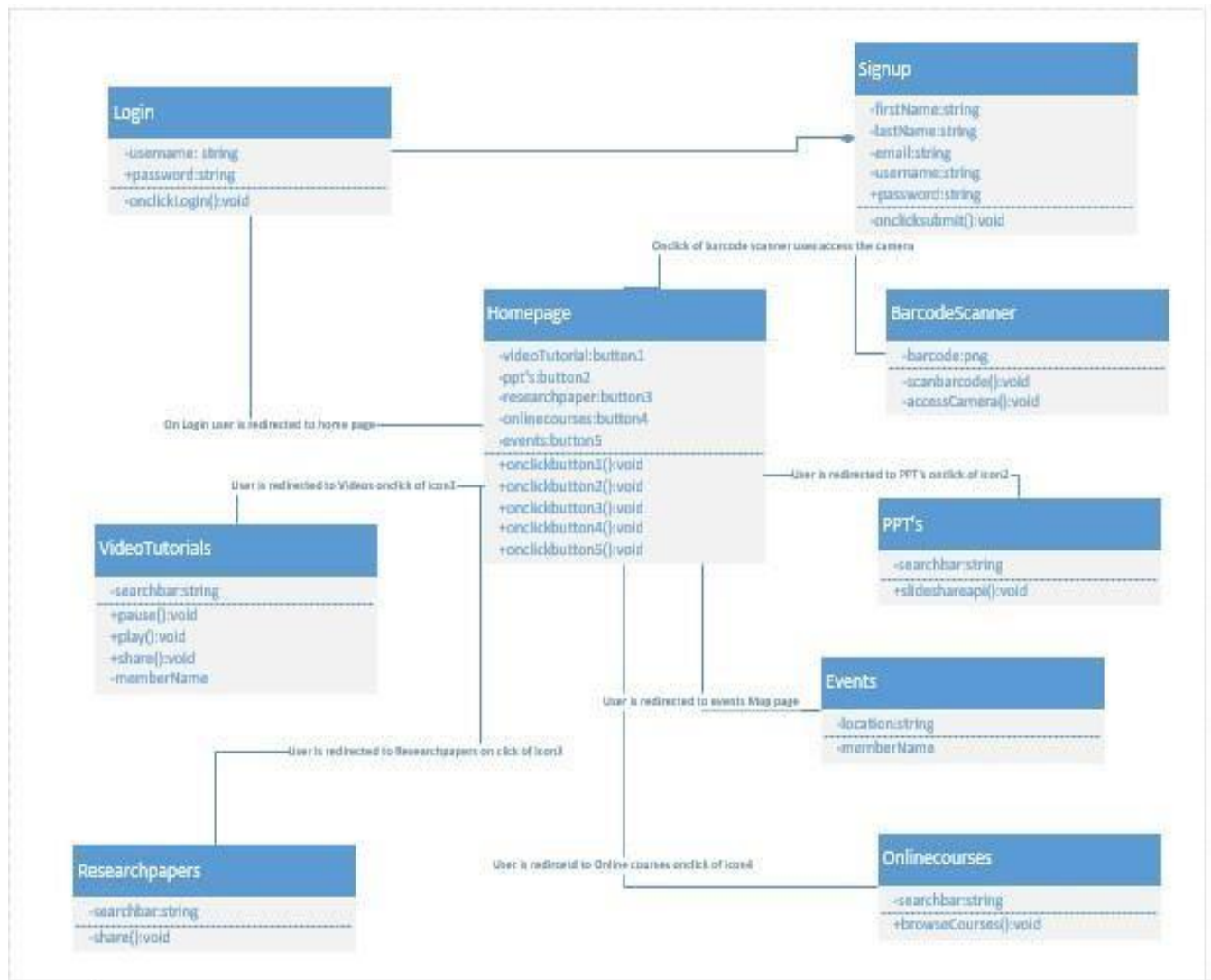
## Wireframe for Discussion Forum



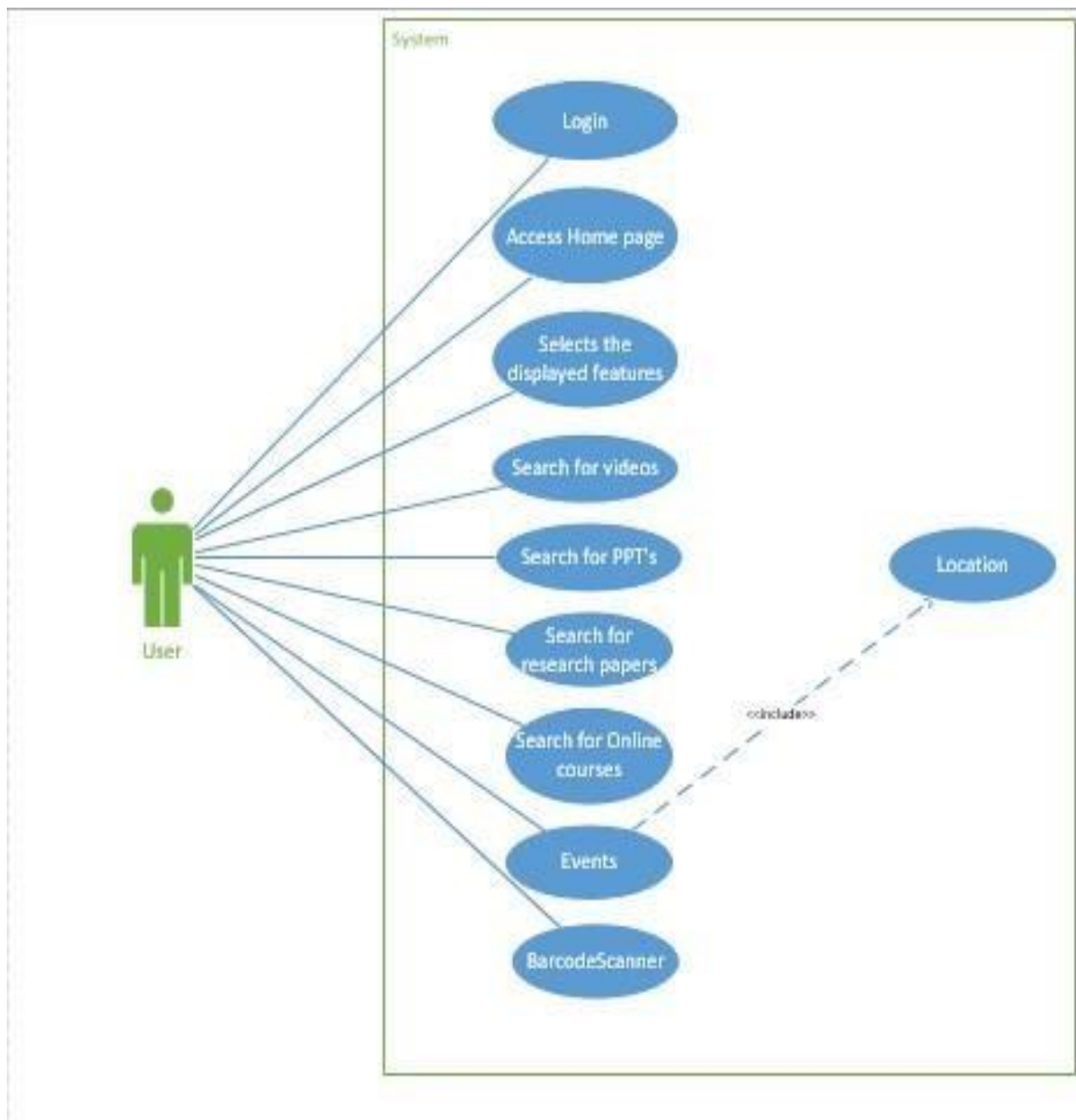
## Wireframe to post the topic on forum



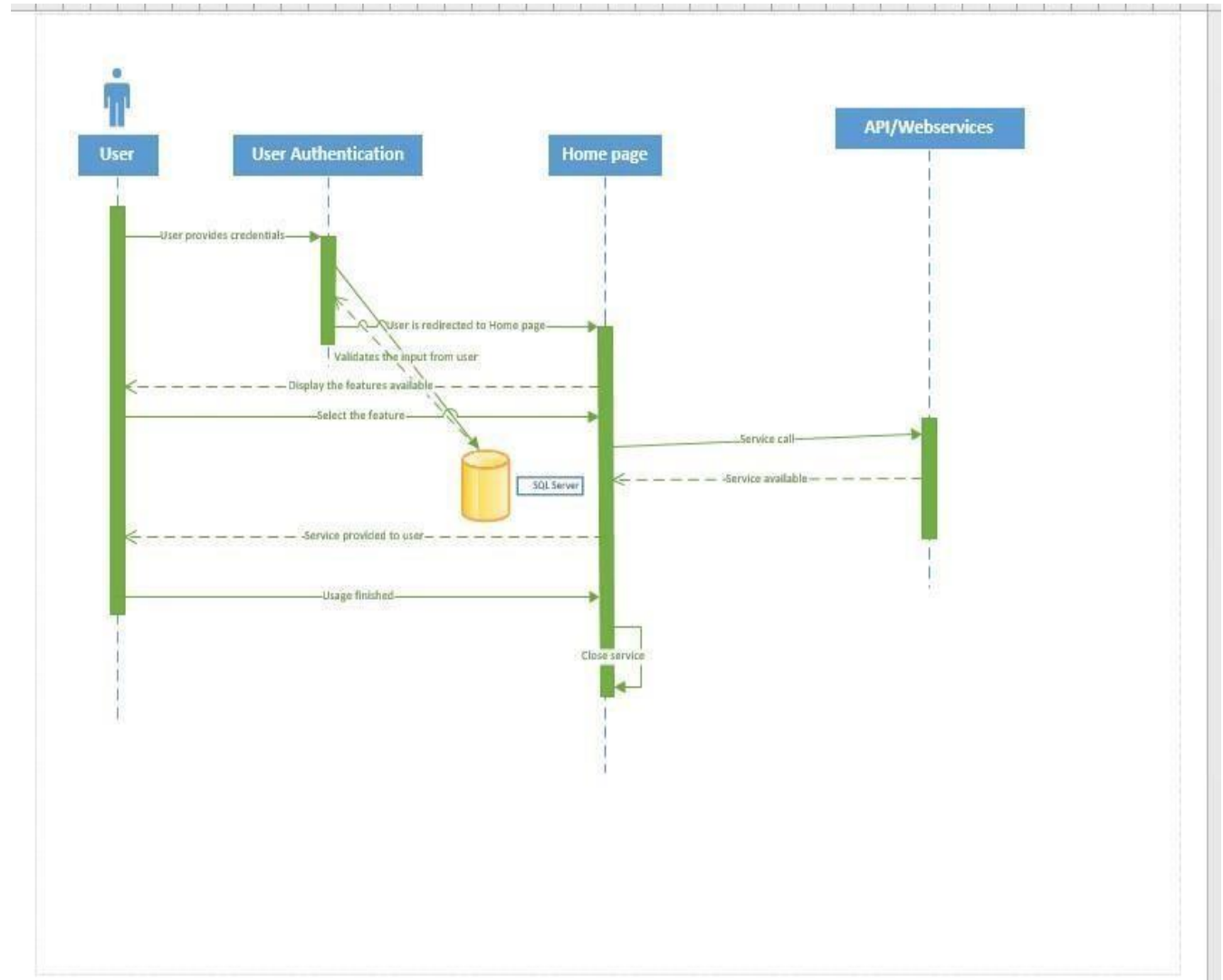
#### 4.2.2 Class Diagram:



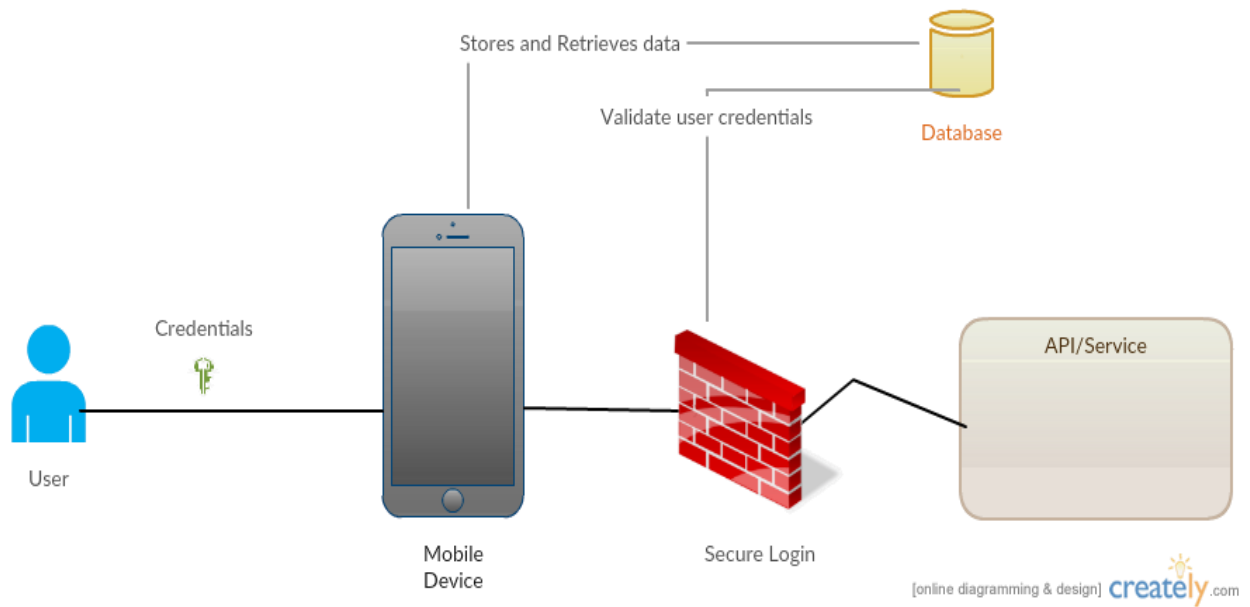
### 4.2.3 Use Case Diagram:



## 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 Wikipedia content of computer science topics	I can better understand in brief and can explain to others easily.
	read the topic which is favorite to my interests	I can bookmark the topic to access it easily.
	to contribute by providing more resources	I can give suggestions through feedback.
	Search courses online	I can search to the course and finish it.



## 4.2.7 Unit Testing

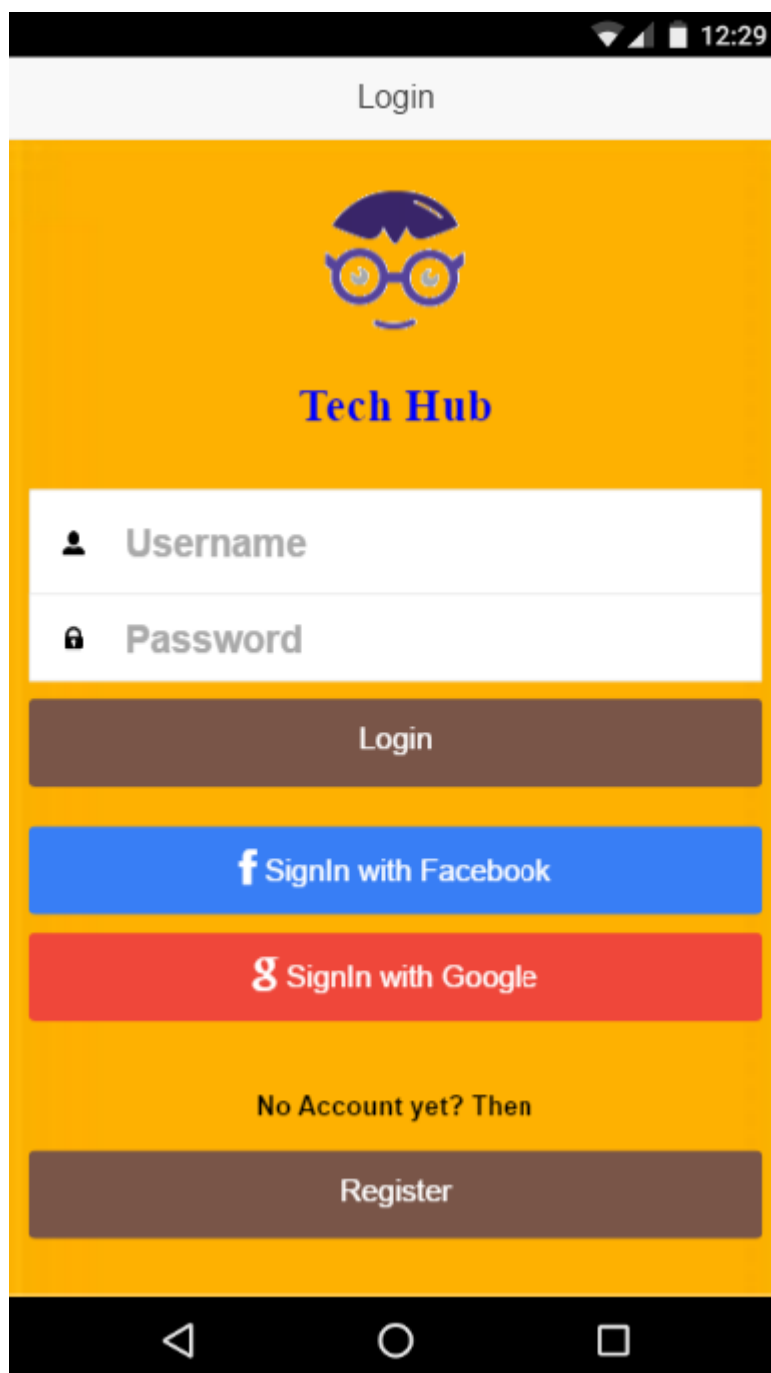
### • Test Cases for Login and Signup page:

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
Eventful	On searching the location	Display the nearby events	PASS
Youtube	On searching for the videos	Display list of videos related to search word	PASS
Wikipedia	On searching the content on the wikipedia	Displays list of topics related to search results	PASS

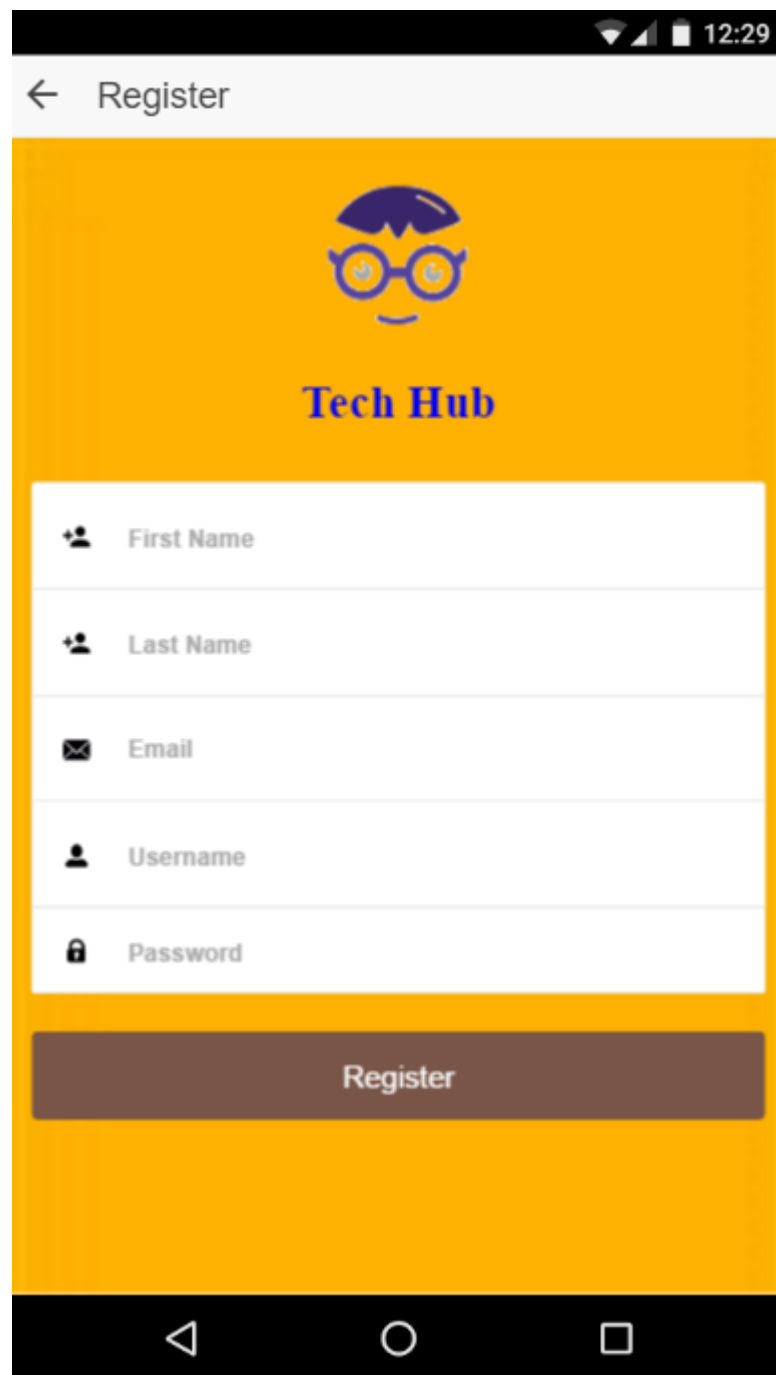
## 5. Implementation and Deployment

We have implemented the Tech Hub application in Ionic onto an emulator. Following screenshots describe the flow of the application.

5.1 Login page for the application “Tech Hub” as shown below :

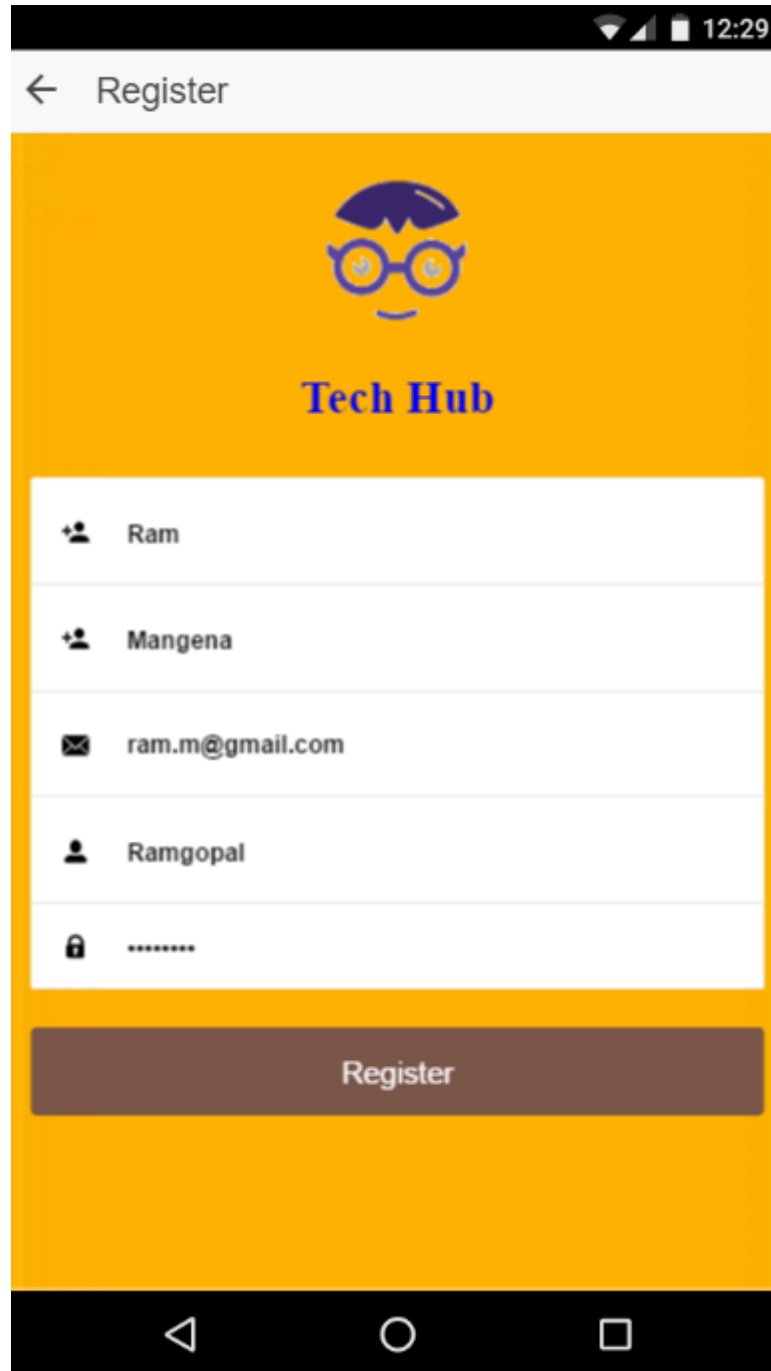


5.2 A new user can register by clicking on ‘No account yet? Create one’ button. By clicking on this button, application will be redirected to registration page.



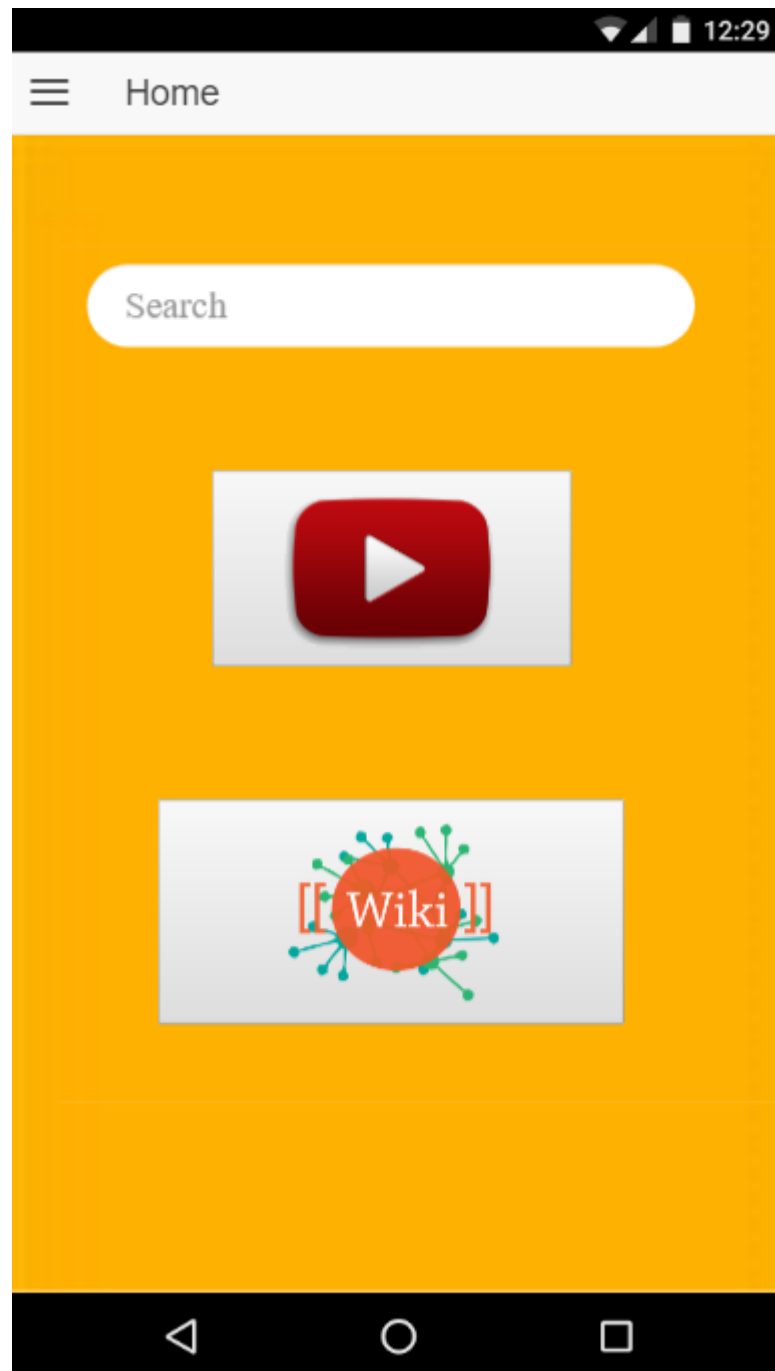
The screenshot shows a mobile application interface for registration. At the top, there is a status bar with the time 12:29 and signal indicators. Below the status bar is a header with a back arrow and the word "Register". The main background is orange. In the center, there is a cartoon character with a purple umbrella and glasses, and the text "Tech Hub" in blue. Below this, there is a white form with five input fields: "First Name", "Last Name", "Email", "Username", and "Password". Each field has a corresponding icon (person, person, envelope, person, and lock respectively). At the bottom of the form is a brown "Register" button. The bottom of the screen shows the Android navigation bar with back, home, and recent apps buttons.

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



The screenshot shows a mobile application interface for registration. At the top, there is a status bar with the time 12:29 and signal indicators. Below the status bar is a header with a back arrow and the text "Register". The main background is orange. In the center, there is a logo of a person wearing glasses and a hat, with the text "Tech Hub" below it. Below the logo, there is a white form with five input fields, each with an icon on the left: a person icon for "Ram", a person icon for "Mangena", an envelope icon for "ram.m@gmail.com", a person icon for "Ramgopal", and a lock icon for a password field containing seven dots. Below the form is a large brown button with the text "Register". At the bottom, there is a black navigation bar with three white icons: a triangle, a circle, and a square.

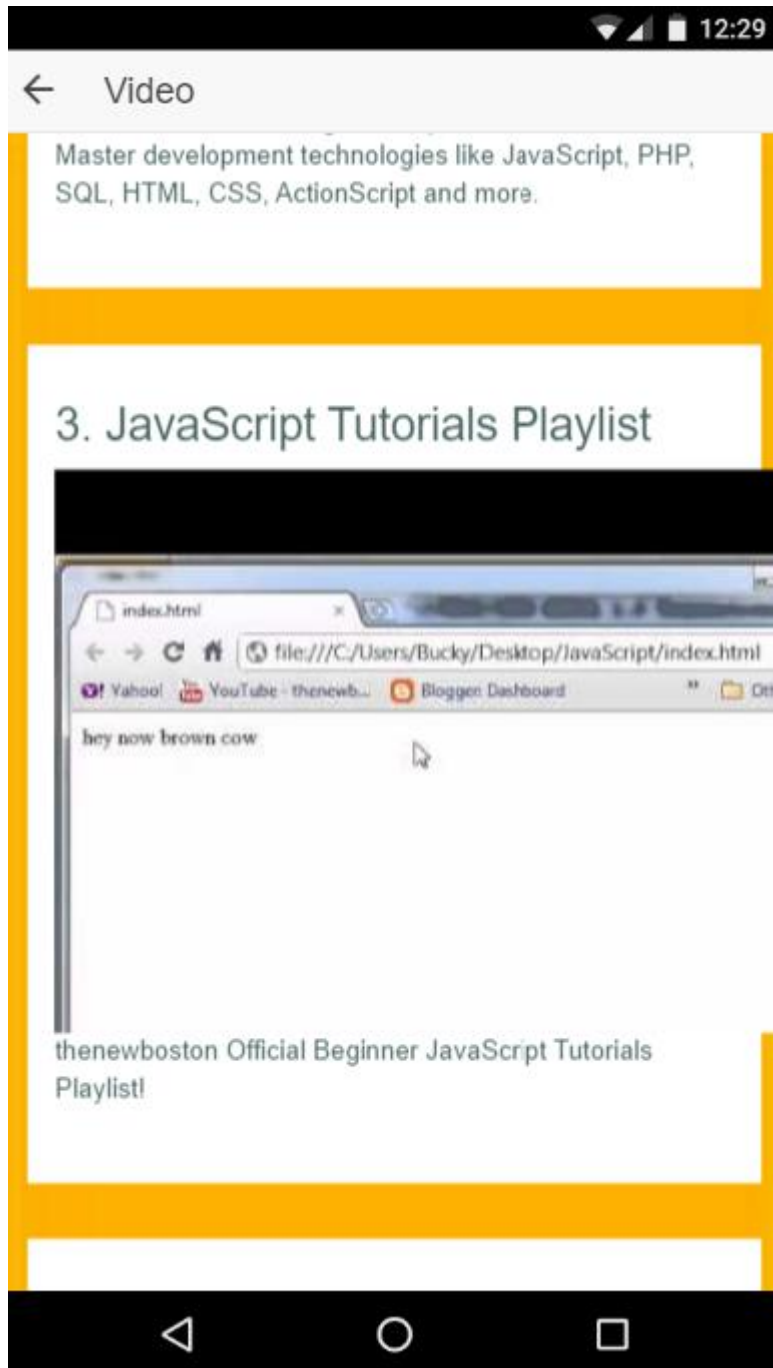
5.4 Following is the home page of our application. User will be redirected to home page by logging into the system either through application login or through Facebook login.



5.5 User can search for any technology on home page by giving the search string in the provided textbox.



5.6 By clicking on video, results related to videos will be displayed.



5.7 By clicking on wiki search, user will be redirected to a page with wiki results.

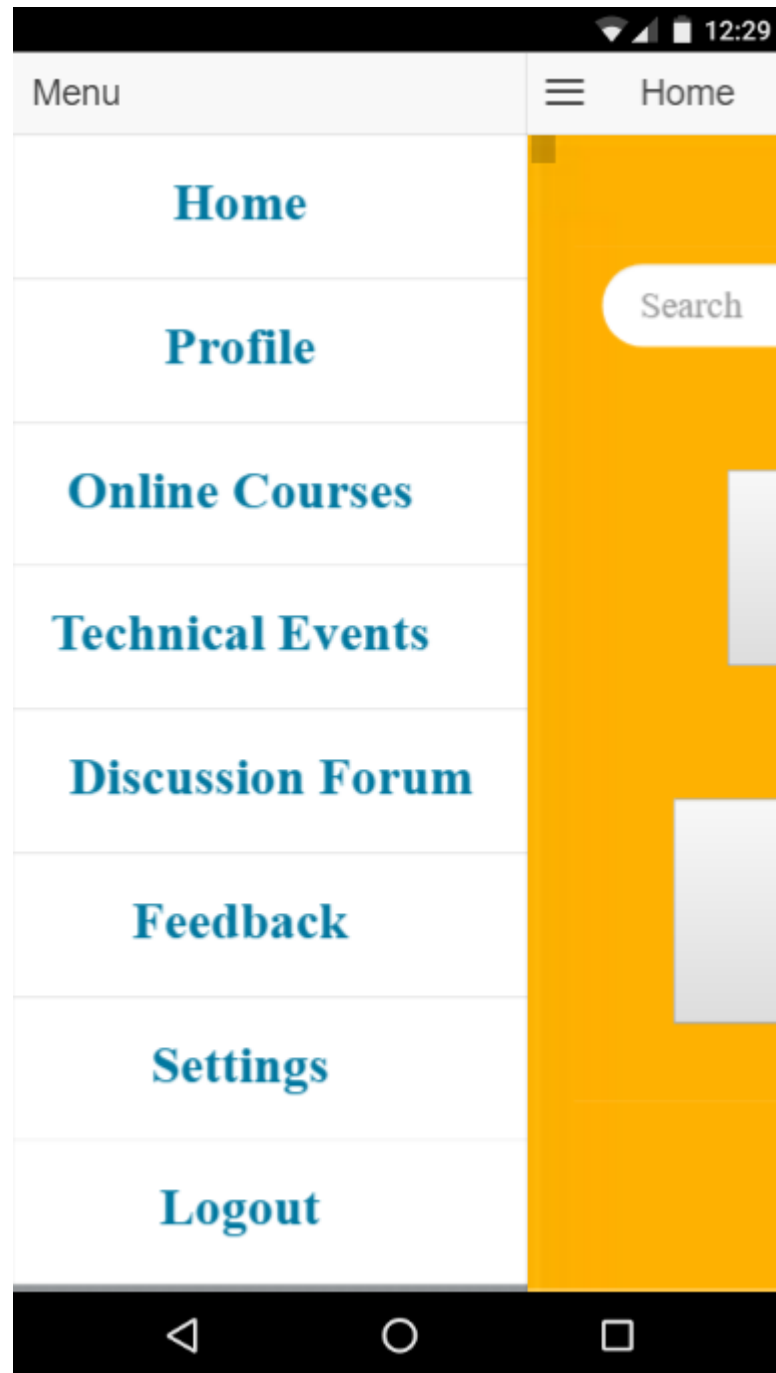




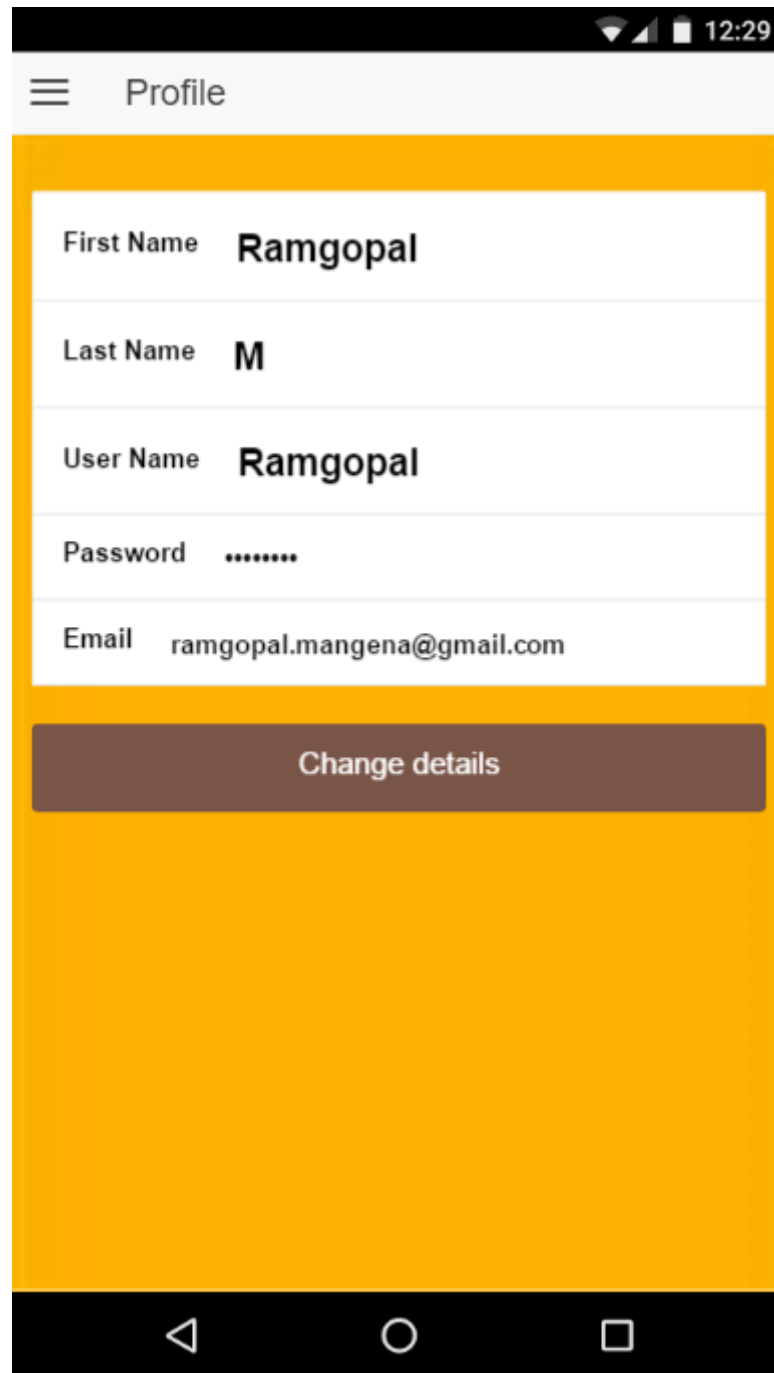
5.8 By clicking on any wiki link, corresponding wiki page will be displayed.



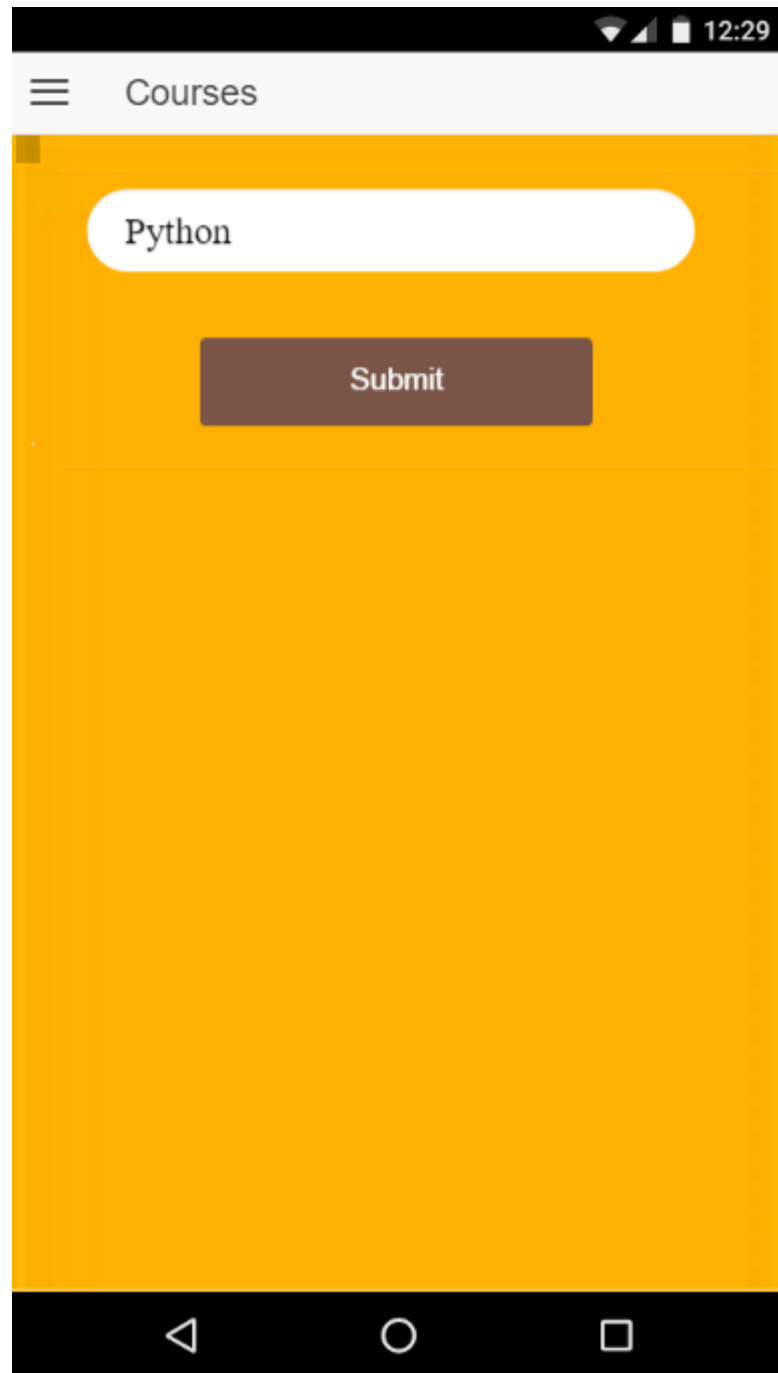
5.9 This is the side menu of our application.



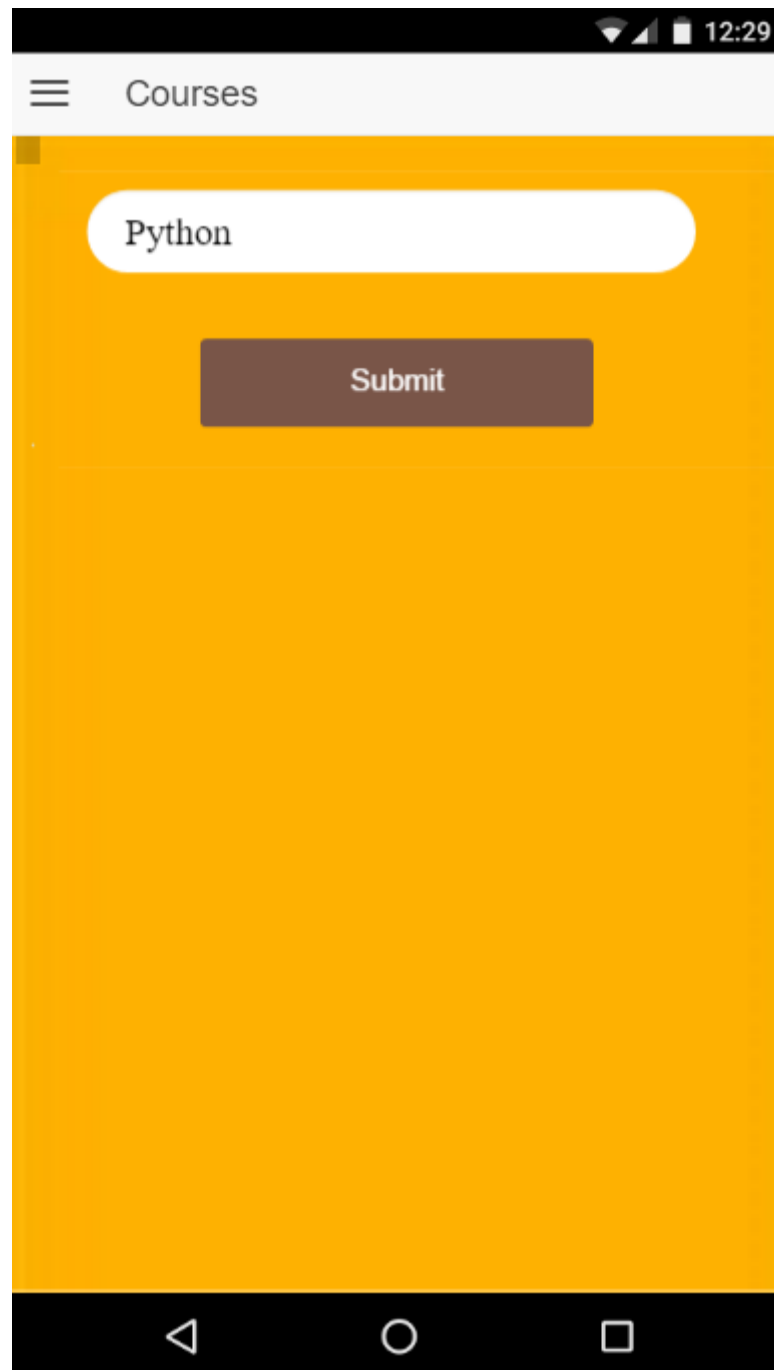
5.10 By clicking on profile, user details will be displayed.



5.11 By clicking on 'online courses' button from side menu, courses home page will be displayed.



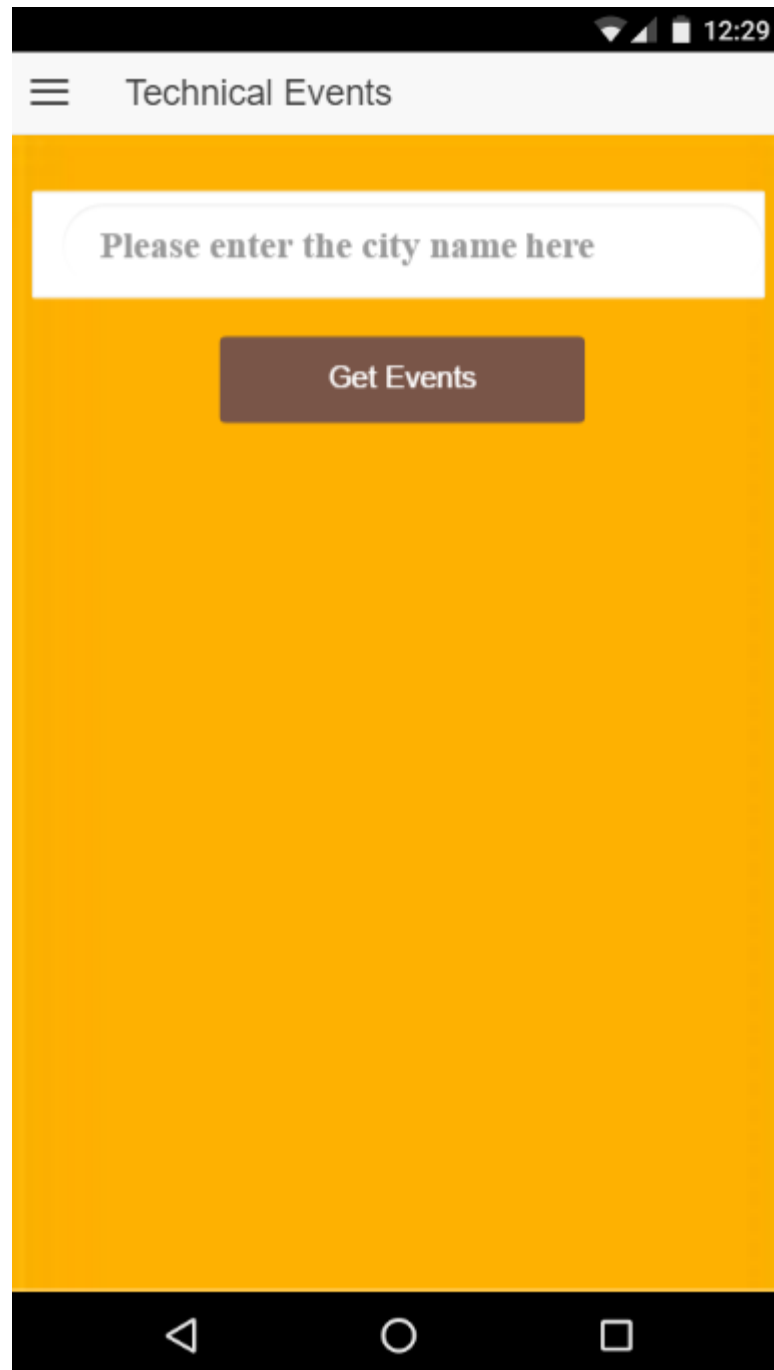
5.12 User can give any search string and corresponding courses will be retrieved from coursera website.



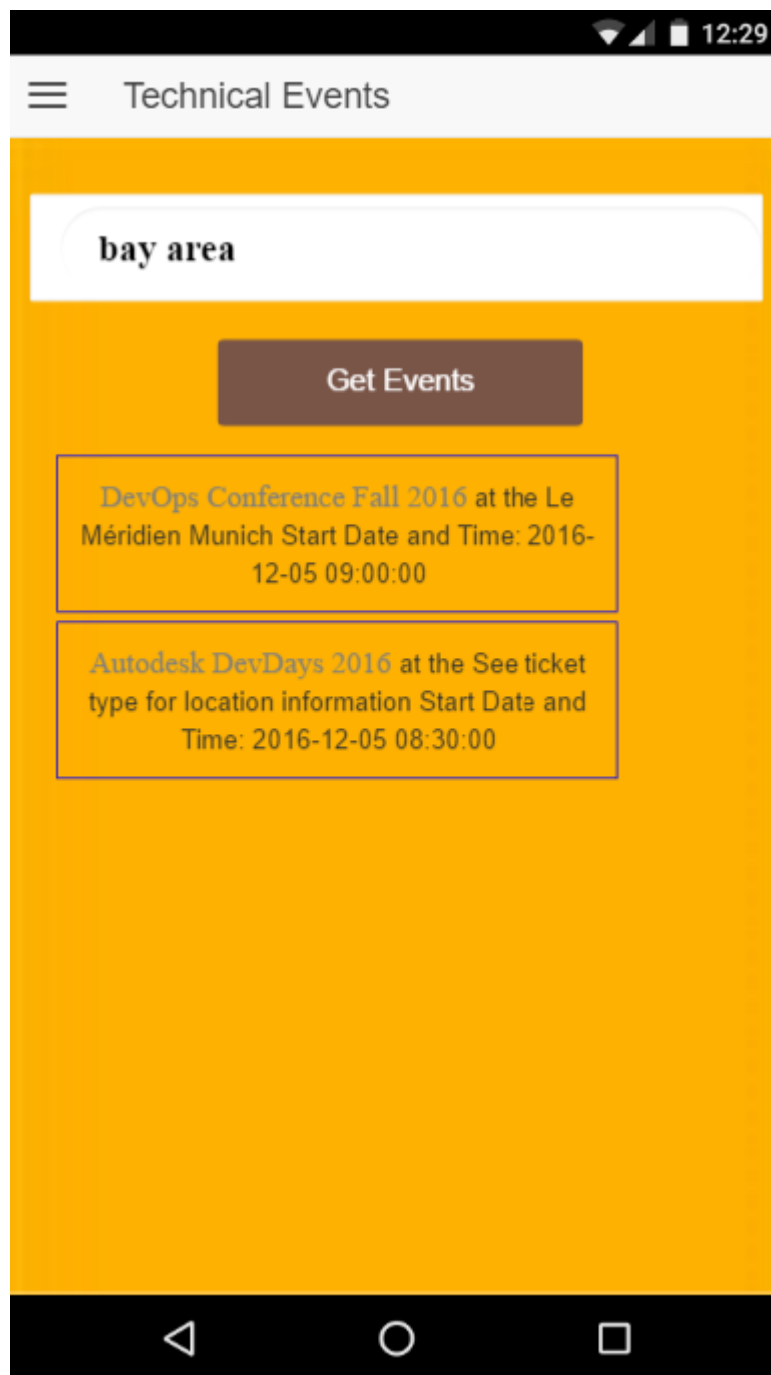
5.13 Following are the search results for the word 'python'. Our application will display all available courses related to python from coursera website.



5.14 By clicking on 'Technical events' button on side menu, user will be redirected to a page that will provide all the technical events in the given area.



5.15 Following screenshots refers the search results for the key word 'bay area'. Our application retrieves all the technical events from the given area.

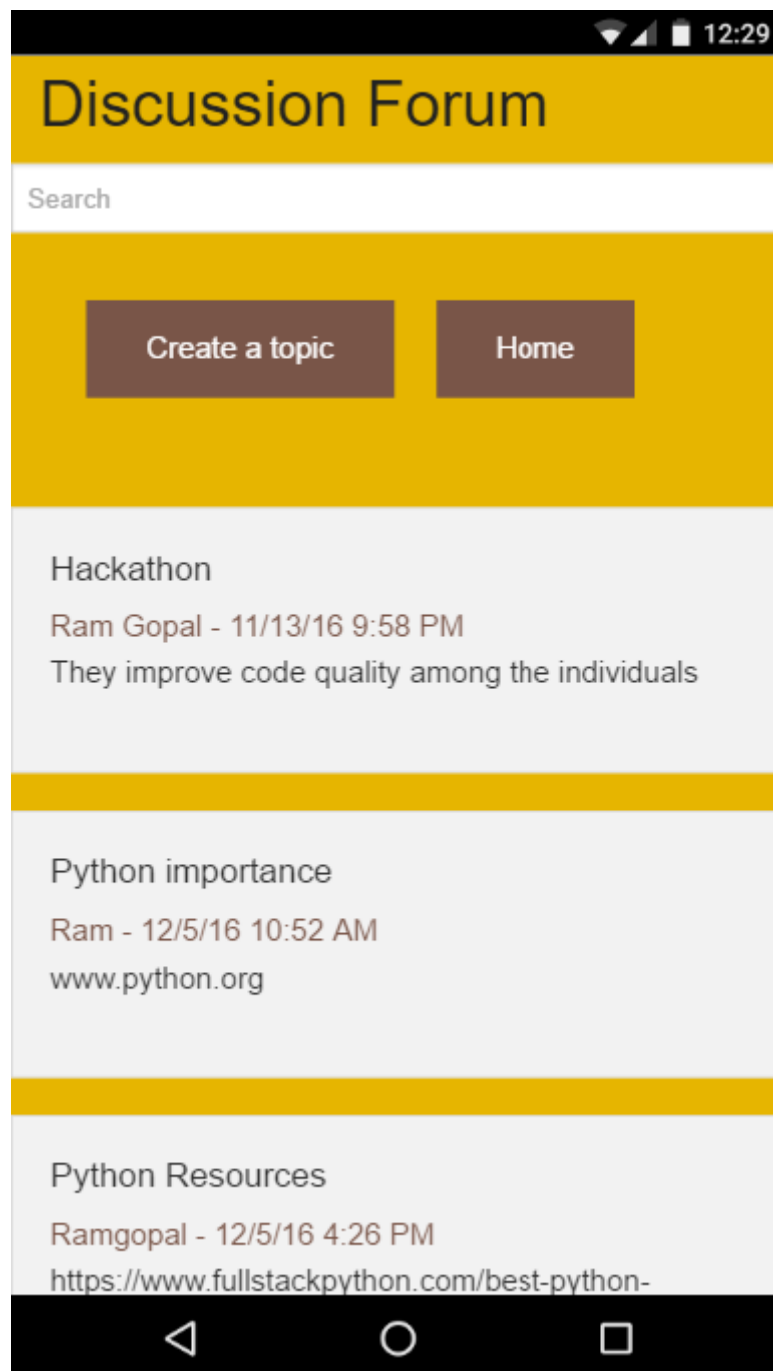


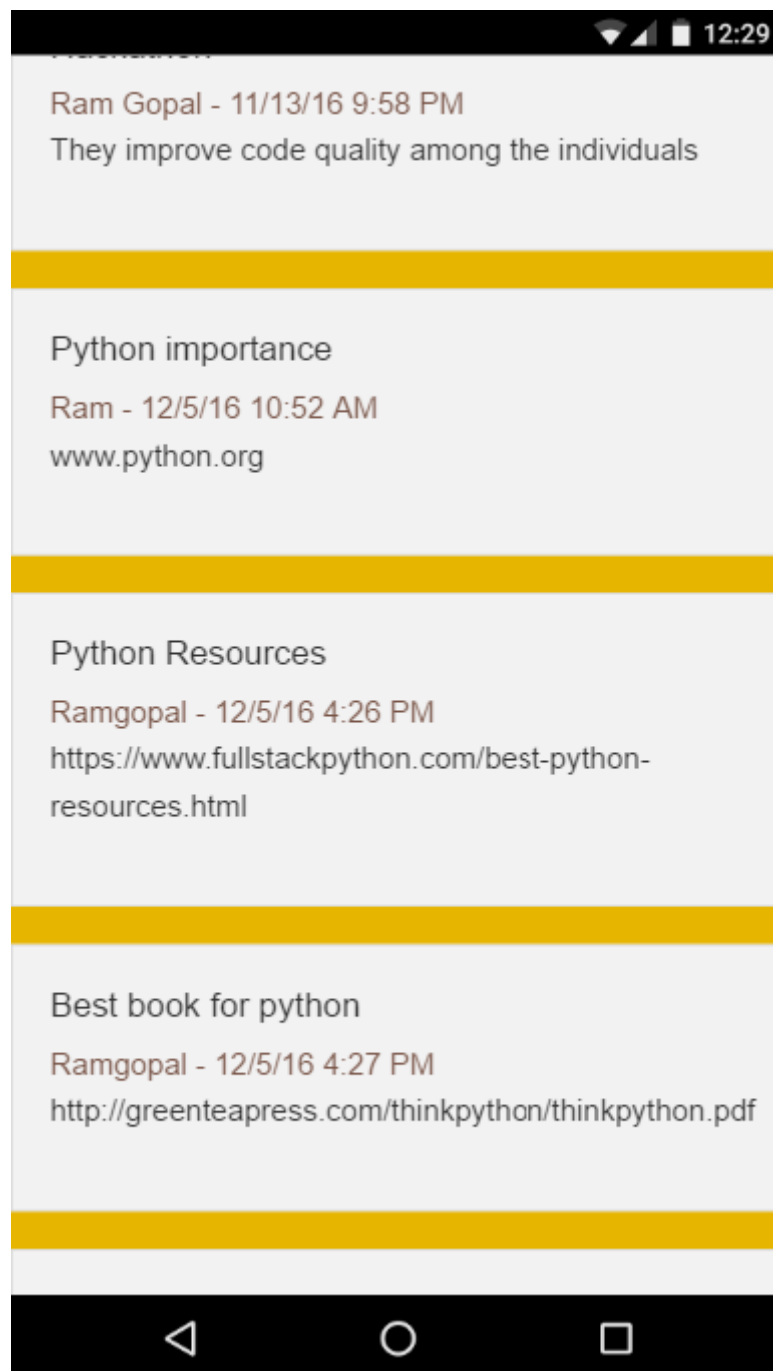


5.16 Following image corresponds to the event search results for another area.

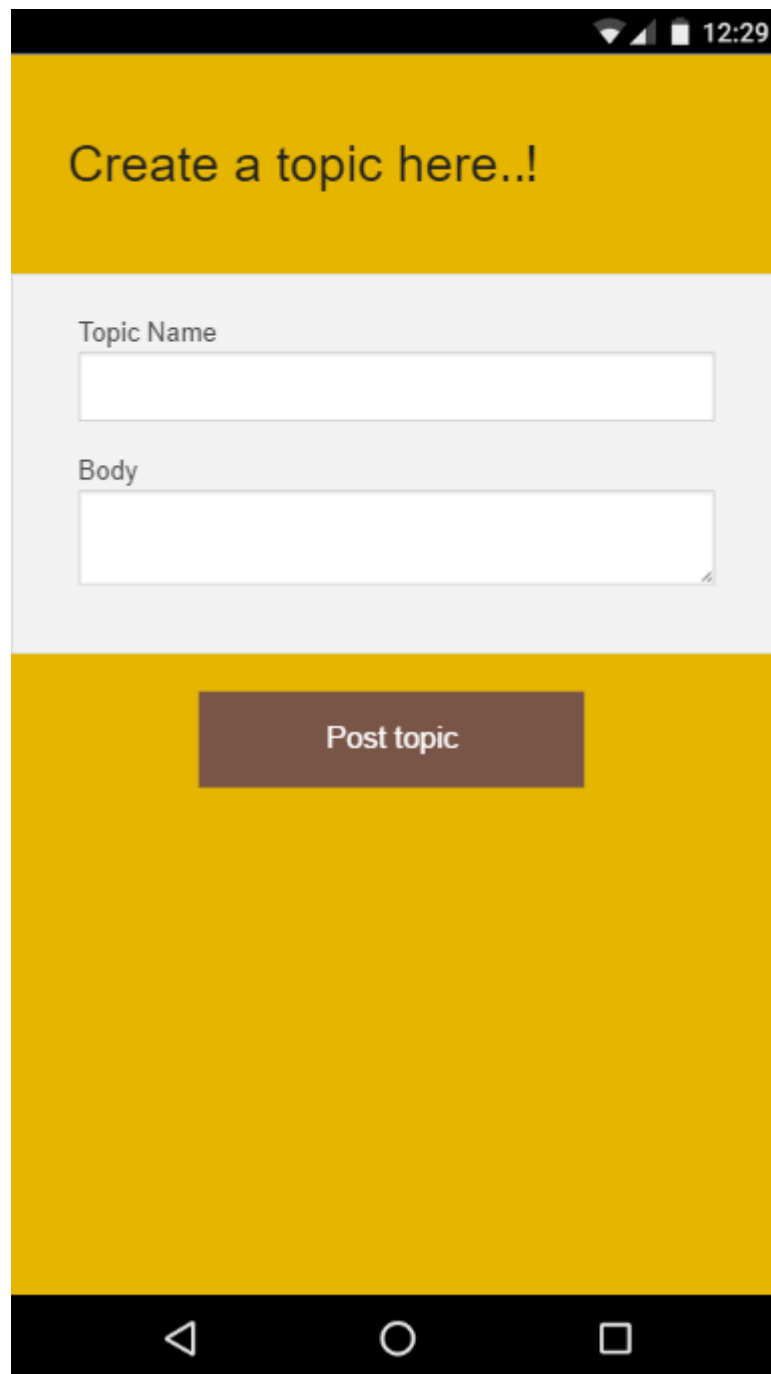


5.17 By clicking on 'discussion forum' user will be redirected to discussion forum, where users can post questions and any other user can answer for those posts.

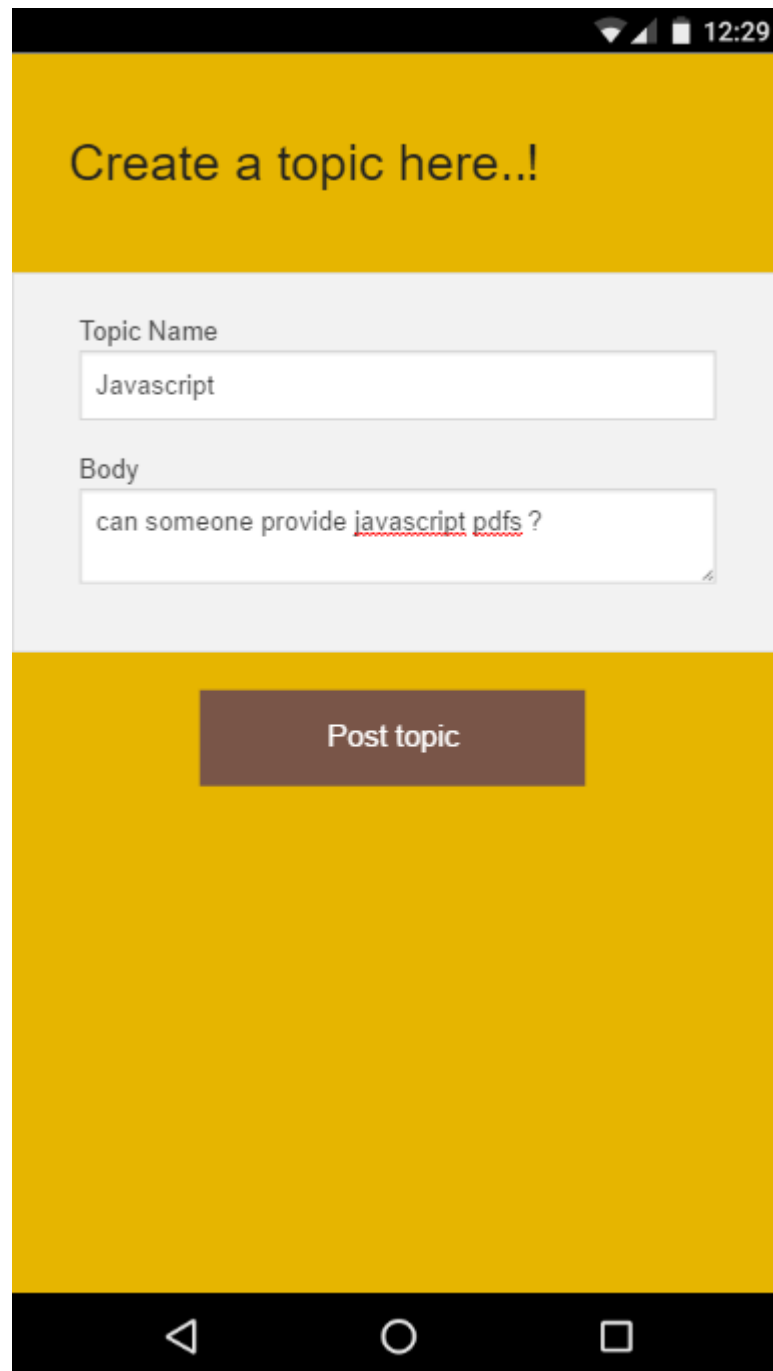




5.18 Any user can create post by clicking on 'create a topic' button.



The screenshot shows a mobile application interface for creating a new topic. The top status bar displays the time as 12:29. The main header is a solid yellow bar with the text "Create a topic here..!". Below this, there is a light gray form area containing two input fields: "Topic Name" and "Body". The "Body" field is a larger text area. At the bottom of the form area is a dark brown button labeled "Post topic". The entire form area is set against a yellow background. The bottom of the screen shows the standard Android navigation bar with back, home, and recent apps icons.



The screenshot shows a mobile application interface for creating a new topic. At the top, there is a black status bar with icons for signal, battery, and the time 12:29. Below this is a yellow header section with the text "Create a topic here..!". The main content area has a light gray background and contains two input fields. The first field is labeled "Topic Name" and contains the text "Javascript". The second field is labeled "Body" and contains the text "can someone provide javascript pdfs ?". Below the input fields is a yellow section with a brown button labeled "Post topic". At the bottom, there is a black navigation bar with three white icons: a back arrow, a circle, and a square.

12:29

## Create a topic here..!

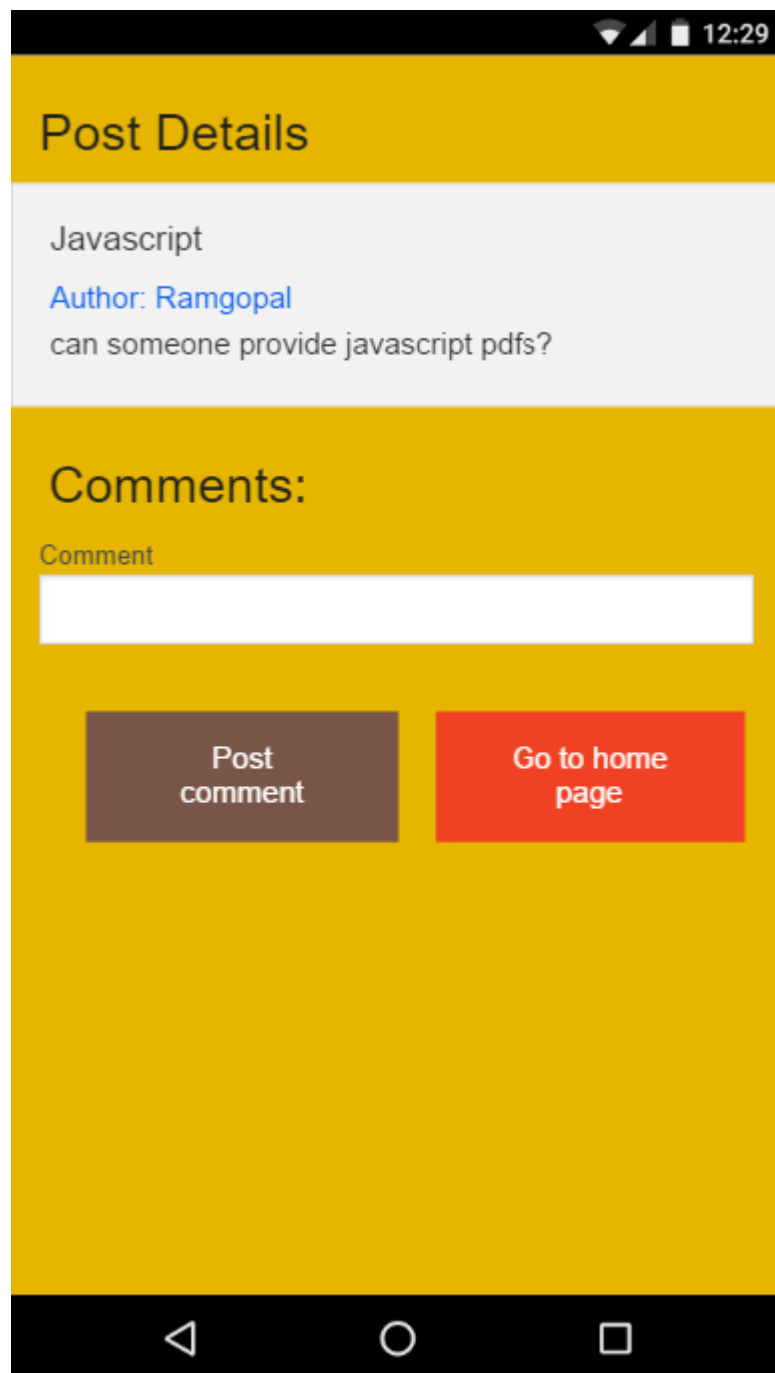
Topic Name

Javascript

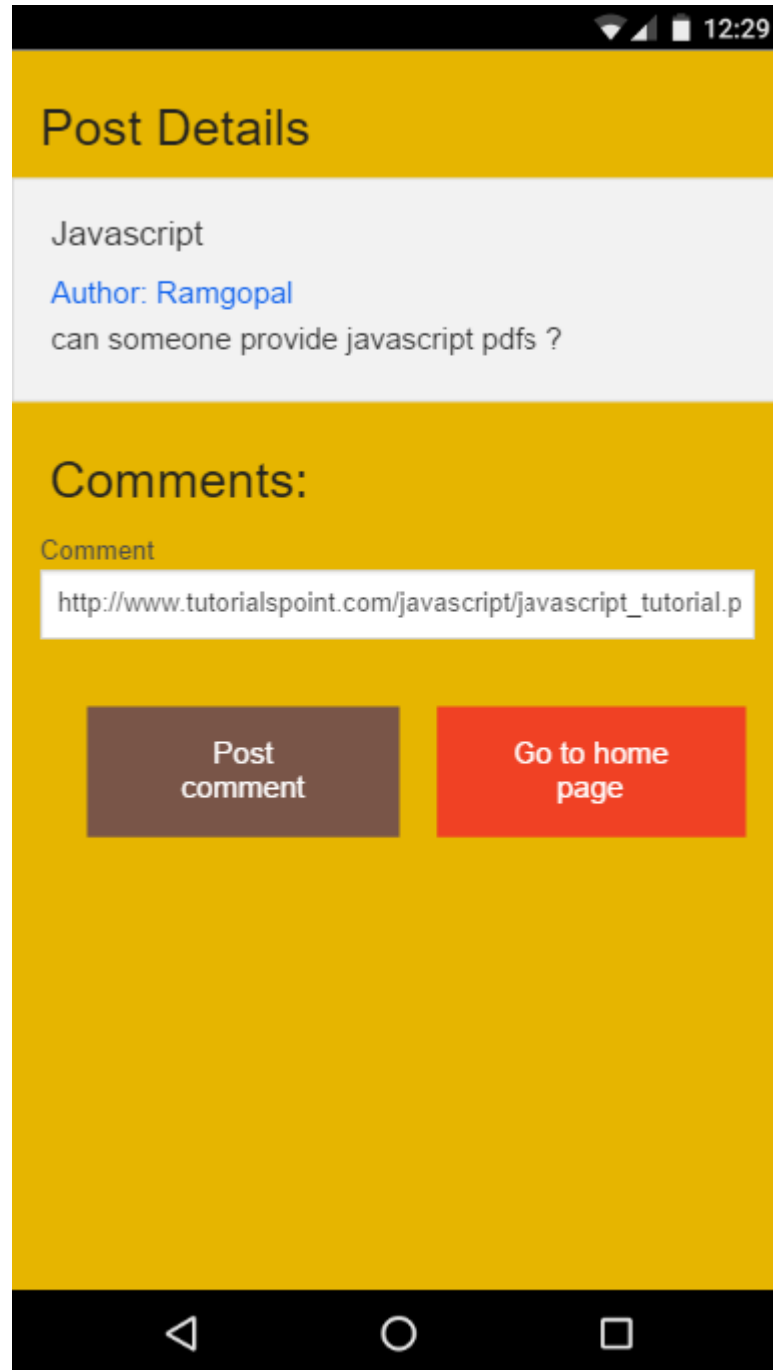
Body

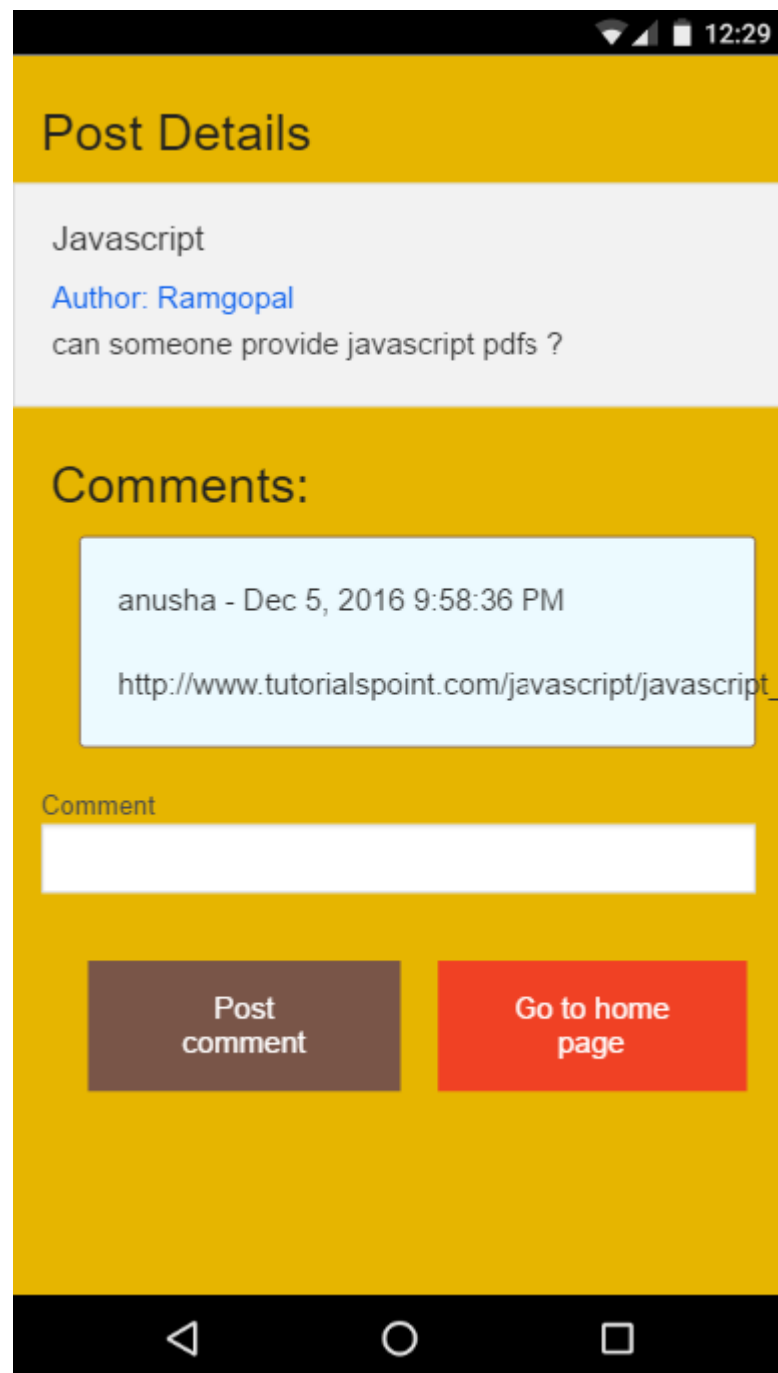
can someone provide javascript pdfs ?

Post topic



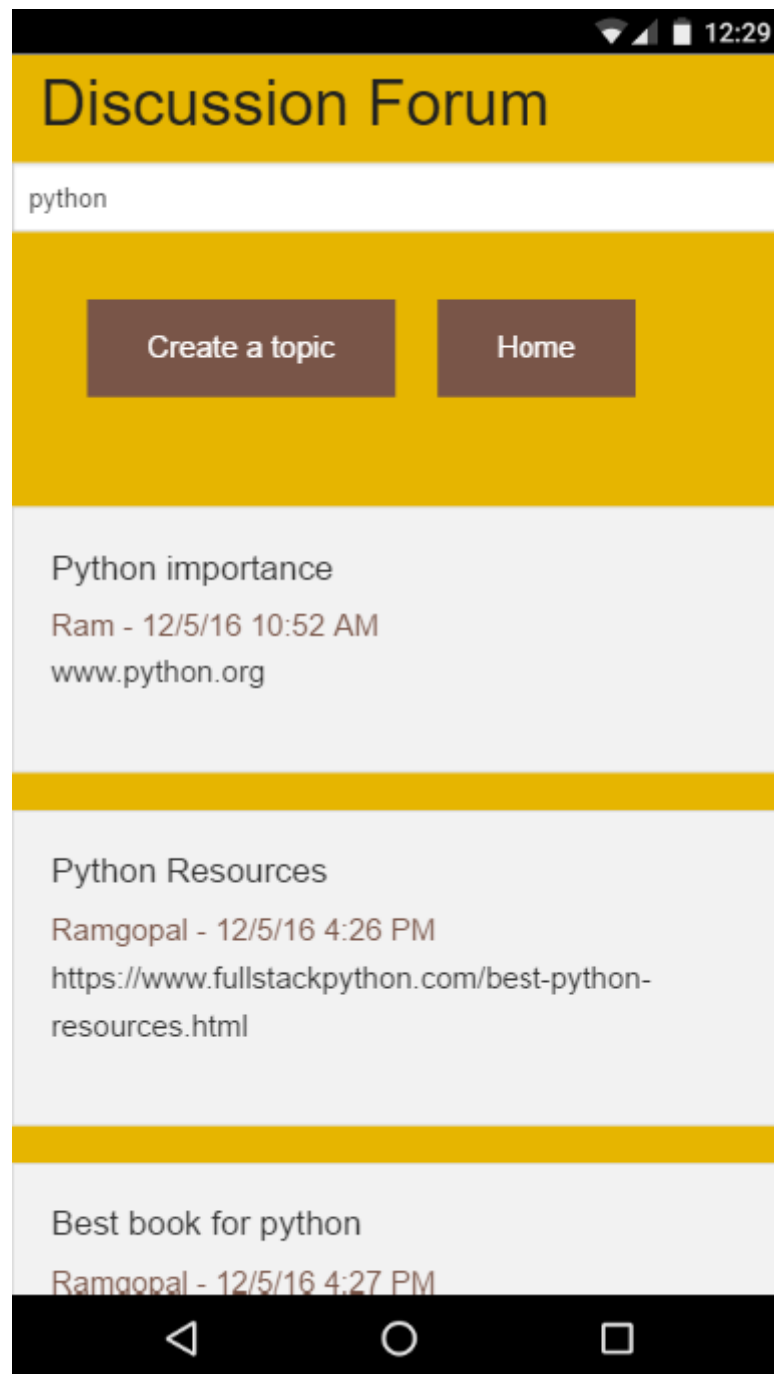
5.19 Any other user can comment on the existing post.



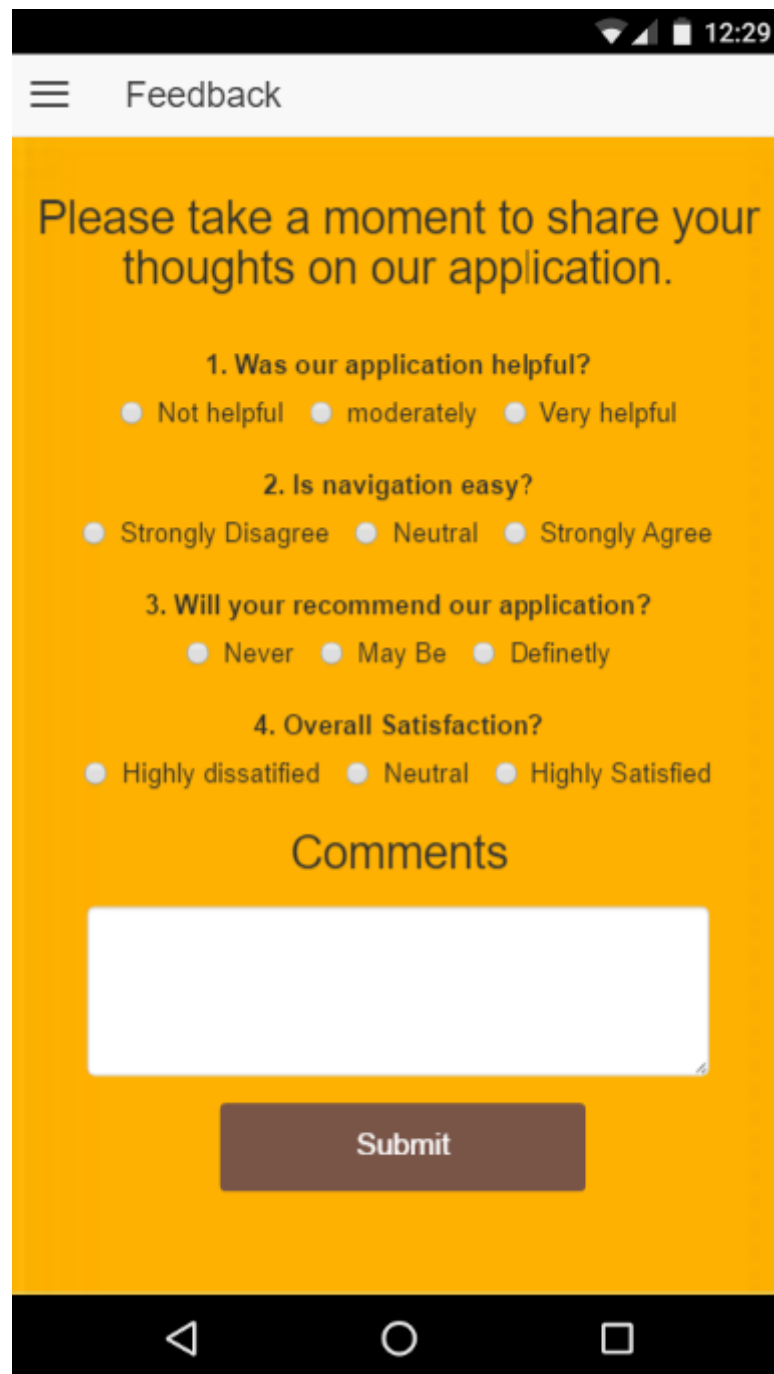




5.20 User can search for any existing post in the forum.



5.21 User can give feedback by clicking on 'feedback' button from the side menu.



The image shows a mobile application interface for a feedback form. At the top, there is a black status bar with a Wi-Fi icon, a signal strength icon, a battery icon, and the time 12:29. Below this is a white header bar with a hamburger menu icon on the left and the word "Feedback" in the center. The main content area has a yellow background. It starts with the text "Please take a moment to share your thoughts on our application." followed by four questions, each with three radio button options:

- 1. Was our application helpful?  
☐ Not helpful   ☐ moderately   ☐ Very helpful
- 2. Is navigation easy?  
☐ Strongly Disagree   ☐ Neutral   ☐ Strongly Agree
- 3. Will you recommend our application?  
☐ Never   ☐ May Be   ☐ Definitely
- 4. Overall Satisfaction?  
☐ Highly dissatisfied   ☐ Neutral   ☐ Highly Satisfied

Below the questions is a section titled "Comments" with a large white text input field. At the bottom of the form is a brown "Submit" button. The entire form is set against a yellow background. At the very bottom of the screen is a black Android navigation bar with the back, home, and recents icons.

12:29

Feedback

Please take a moment to share your thoughts on our application.

1. Was our application helpful?

☐ Not helpful ☒ moderately ☐ Very helpful

2. Is navigation easy?

☐ Strongly Disagree ☒ Neutral ☐ Strongly Agree

3. Will you recommend our application?

☐ Never ☐ May Be ☒ Definitely

4. Overall Satisfaction?

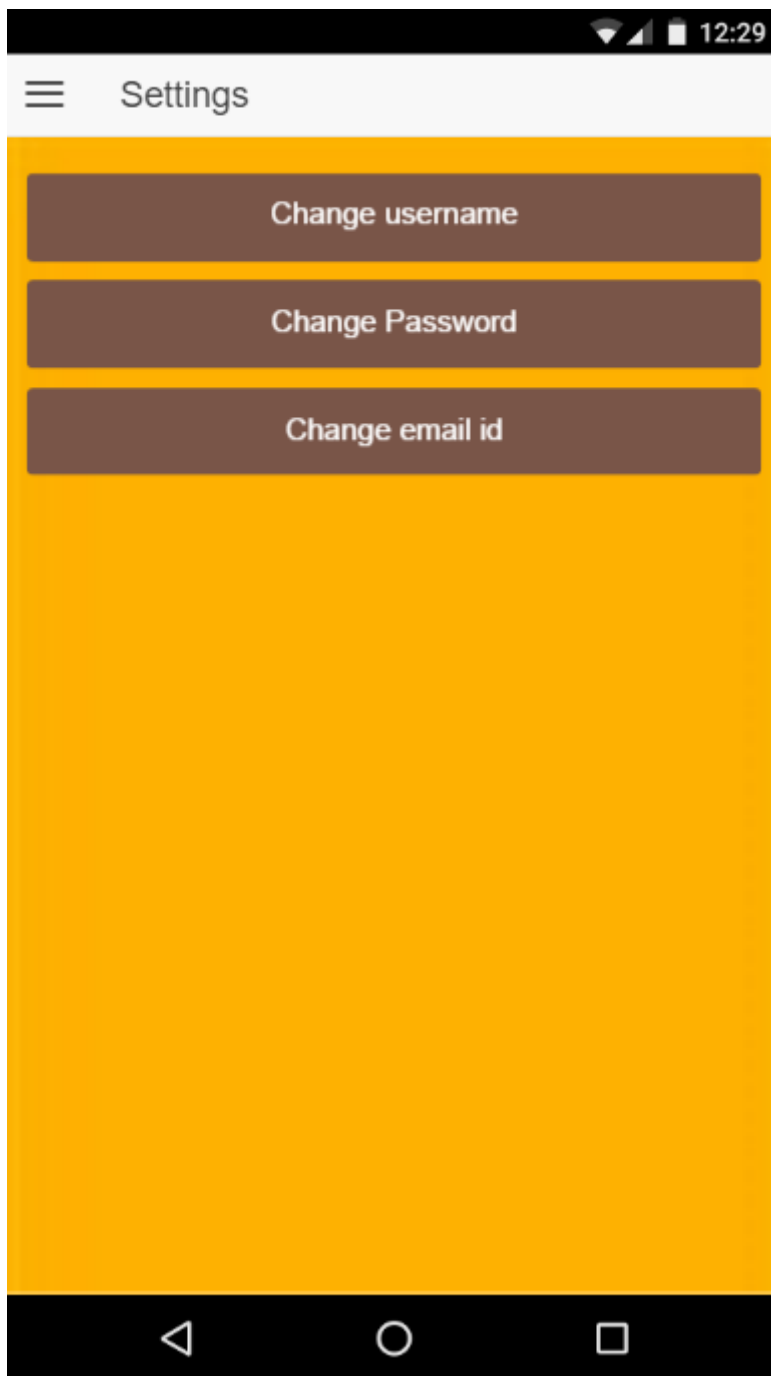
☐ Highly dissatisfied ☐ Neutral ☒ Highly Satisfied

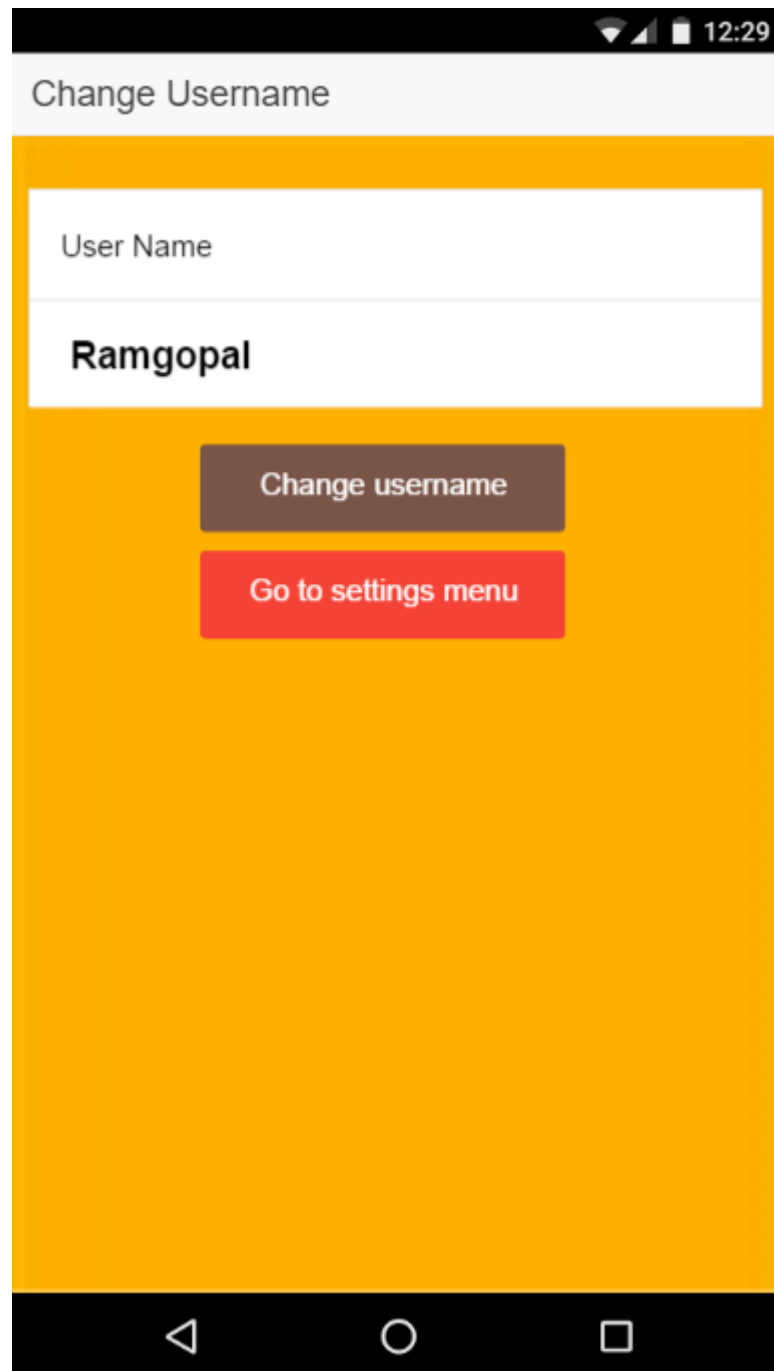
Comments

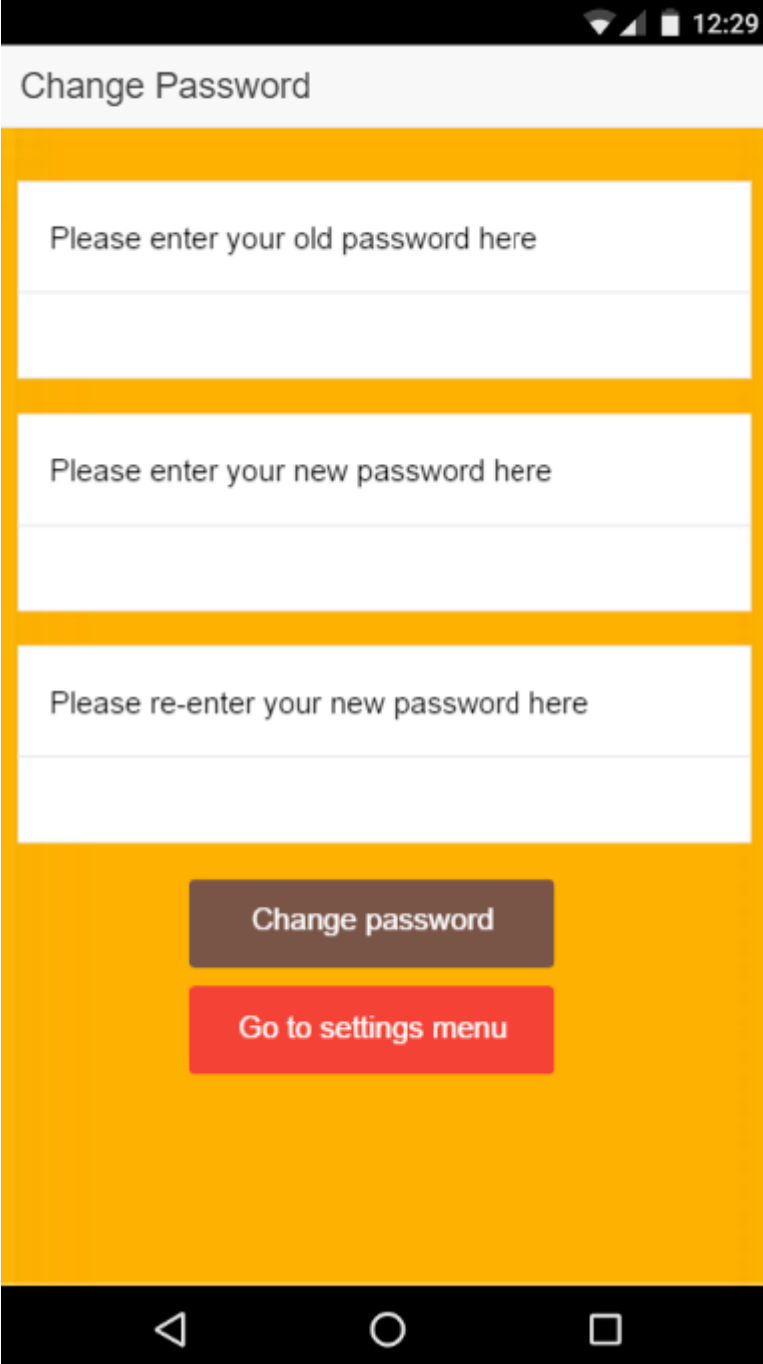
Good application.

Submit

5.22 User will be redirected to settings page by clicking on settings button from side menu.







12:29

## Change Password

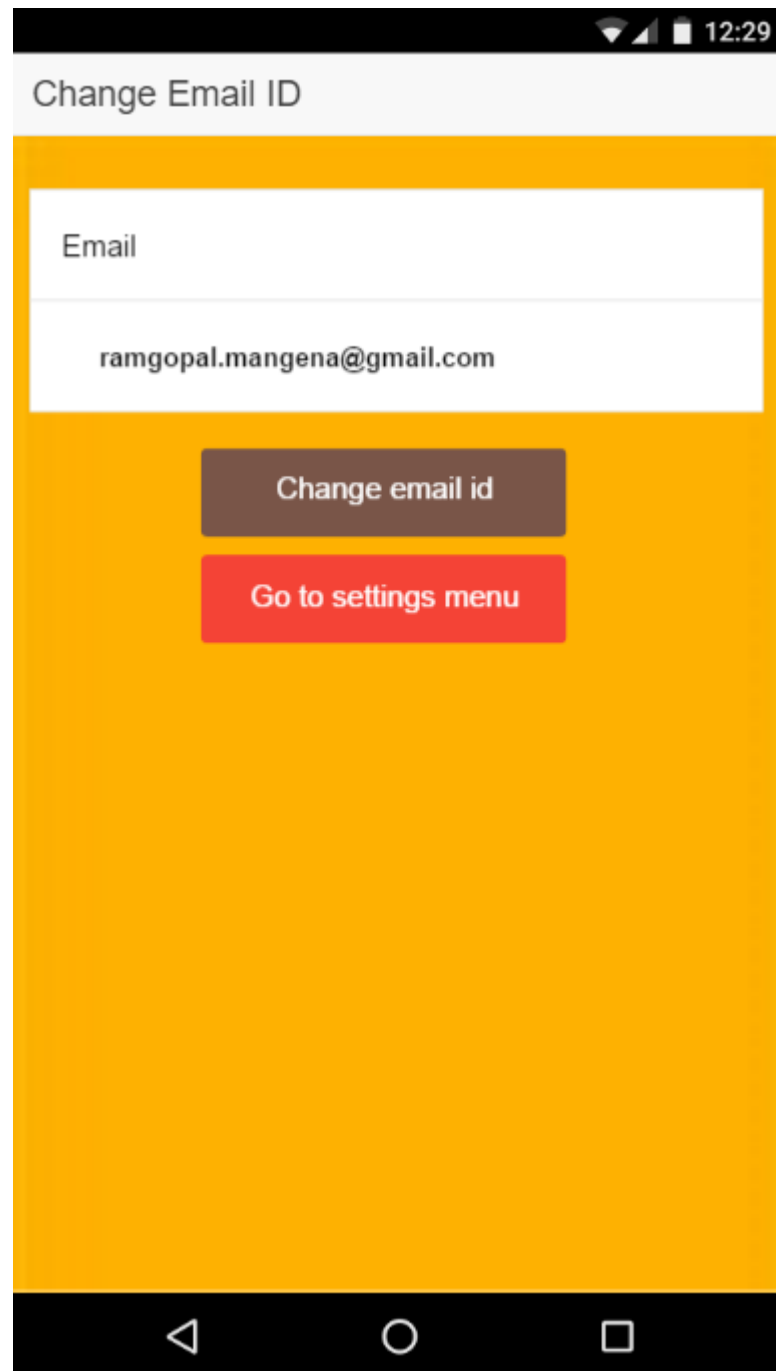
Please enter your old password here

Please enter your new password here

Please re-enter your new password here

Change password

Go to settings menu



**GitHub wiki page URL:**

<https://github.com/MalineniAnusha/ASE-Project/wiki/Project-Increment-4>

**YouTube URL:**

<https://www.youtube.com/watch?v=XqjHlozLcoc&feature=youtu.be>

## 6. Project Management

**Implementation status report**

**Technologies Used:** Ionic Framework, HTML, CSS, JS, Angular JS.

**Work Completed**

- Design and Architecture of the Application
- Login and Registration using MongoDB.
- Implemented on Eventful API
- Implemented YouTube API.
- Implemented Coursera API.
- Implemented Wiki search API.
- Implemented search mashup.
- Integration firebase in discussion forum.
- Improving the User Interface of the application.
- Implemented discussion forum in application.



**Contributors:**

<b>Achyuth</b>	<b>Sujitha</b>	<b>Ram Gopal</b>	<b>Anusha</b>
YouTube API to retrieve the list of videos.	Wikipedia API to retrieve data from Wiki.	Coursera API to retrieve coursera details.	Eventful API to retrieve, technical events in the location
App Login & Facebook Login	Search mashup results from YT & WIKI.	User registration module.	User profile retrieval
UI for login page, Registration page.	Reset enable in settings	UI for Home page & other pages	Feedback module
Retrieval of data in Discussion forum.	Discussion forum search functionality.	Discussion forum firebase integration & module to post a discussion	Discussion forum, post comment from another user module

## 7.Bibliography

- <http://stackoverflow.com/>
- <https://forum.ionicframework.com>
- <https://developers.facebook.com/>
- <https://developers.google.com/youtube/>
- <https://github.com>