

Interactive Quiz Application (Team 12)

Team Members:

Class ID	Name
26	Makani,Sai Teja
38	Neelima-Putta,Divya-Sai-Lakshmi
9	Chinthakindhi,Nikhila
62	Arun

Introduction:

Interactive Quiz application is a dynamic application which facilitates users to take quizzes online through web portal. Details of the tests taken with their results are accessible to the user at any time.

Users can take tests, retake tests and view written tests results in this application.

Objectives:

- Objective is to create user friendly Interactive quiz application with register page, login page and home page using ionic framework.
- Home page would contain tabs for user profile and to take online quiz.
- User would receive an instant score as soon as he/she is done with the quiz.

Features:

- User can select topic for quiz from the various topics displayed in the home page.
- User can listen to questions in their quizzes while taking test.
- Scribble pad is available for users for scratch work. It is saved for user's future use to analyse wrong answers if any.
- Application is built on ionic framework.

Detailed design of features:

- **Wire Frames:**

Wire frame design for Start/Index page of the Interactive quiz application is as follows:

LOGIN

```
graph TD; subgraph LOGIN; direction TB; Username[UserName]; Password[Password]; Login[Login]; CreateAccount[Or Create account]; Facebook[Login with Facebook]; end;
```

The wireframe for the LOGIN page consists of the following elements:

- A text input field labeled "UserName".
- A text input field labeled "Password".
- A button labeled "Login".
- A link labeled "Or Create account".
- A link labeled "Login with Facebook".

Wire frame design for sign up page of the Interactive quiz application is as follows:

SIGNUP

User Name

Email ID

Phone No

Password

Confirm PWD

Sign Up

Wire frame design for profile page of the Interactive quiz application is as follows:

PROFILE

UserName

Email ID

Phone Number

Number of Exams Taken:
Link of that exam
Subject

Wire frame design for quiz selection page of the Interactive quiz application is as follows:

SELECT SUBJECT

C Language

Java

Angular JS

MongoDB

Next

Wire frame design for quiz questions page of the Interactive quiz application is as follows:

QUIZ

Question?

Option A

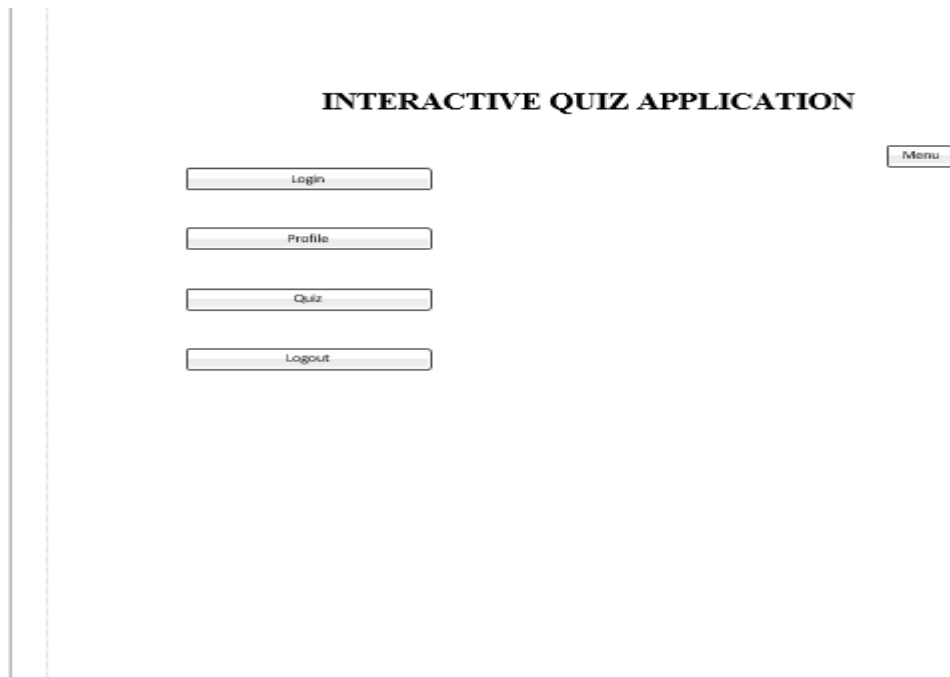
Option B

Option C

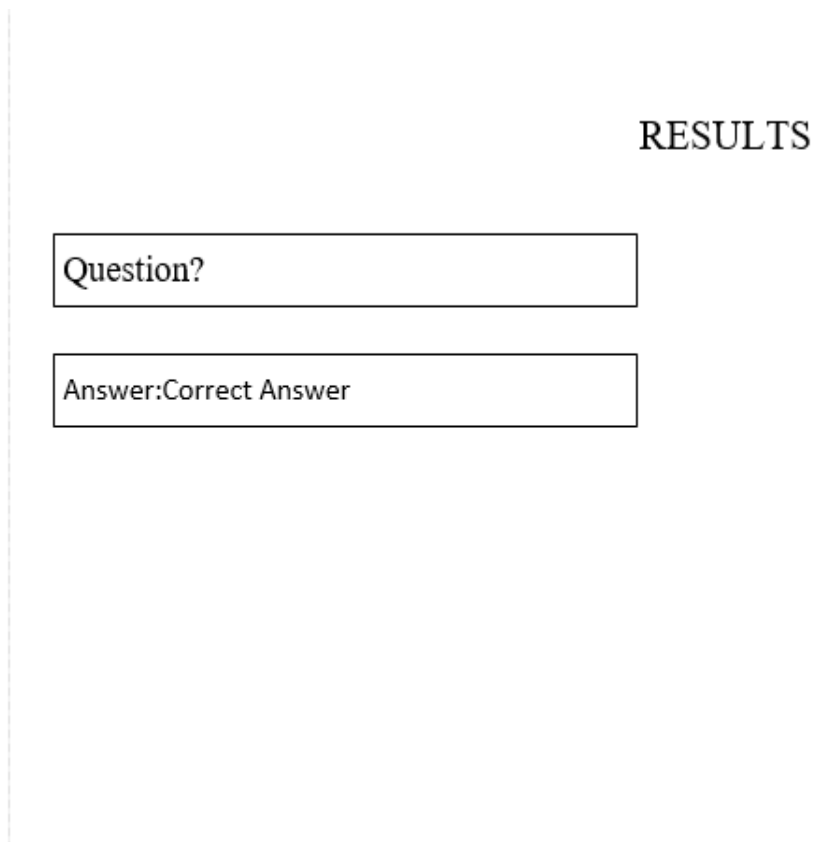
Option D

Next Submit

Wire frame design for tabs available in Interactive quiz application is as follows:

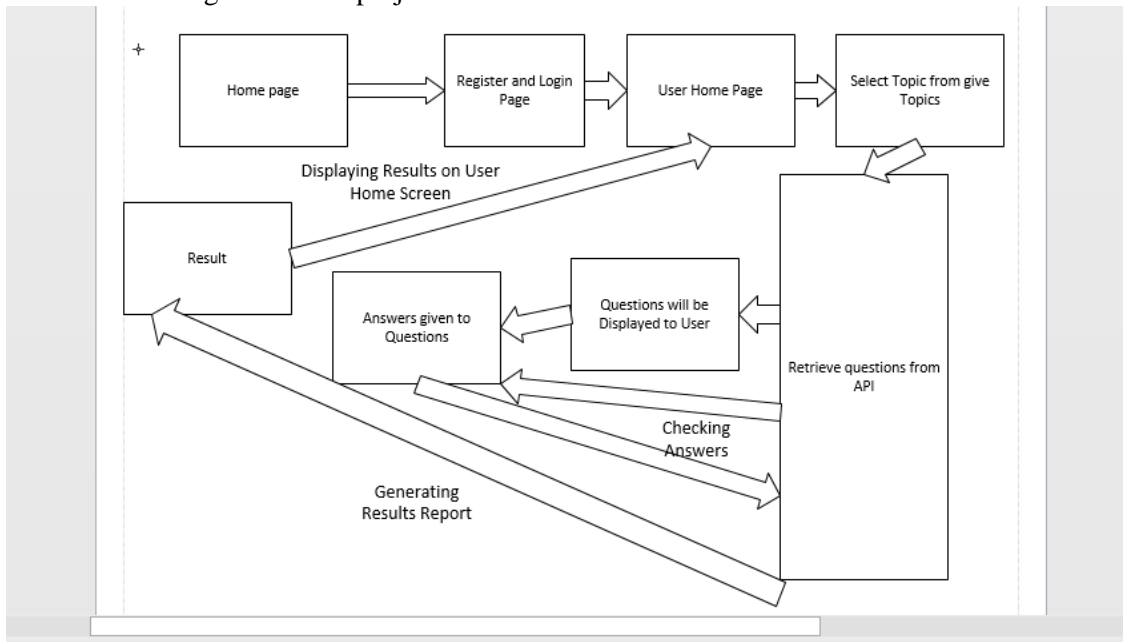


Wire frame design for quiz history page of the Interactive quiz application is as follows:



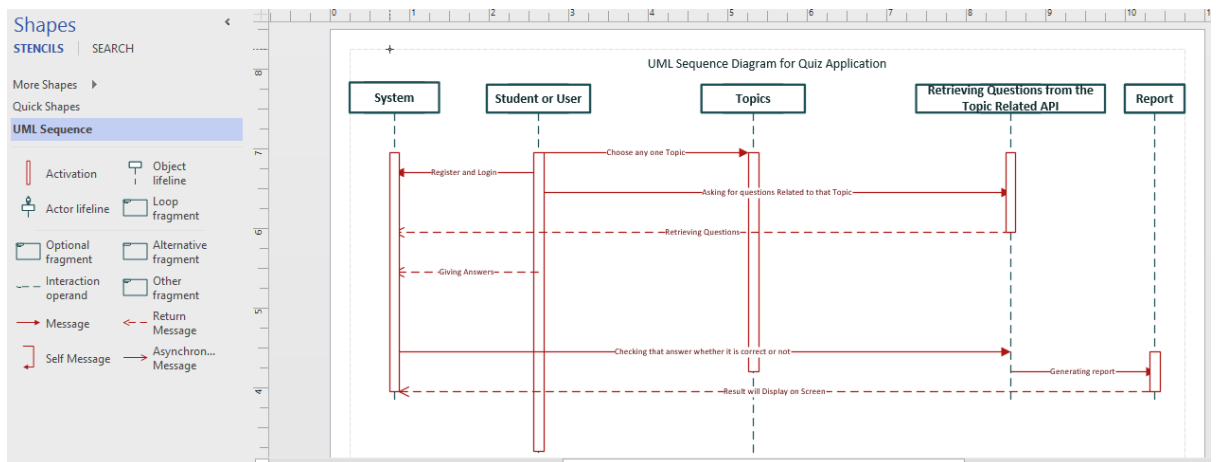
- **Architectural diagram:**

Architectural diagram for the project is as follows:



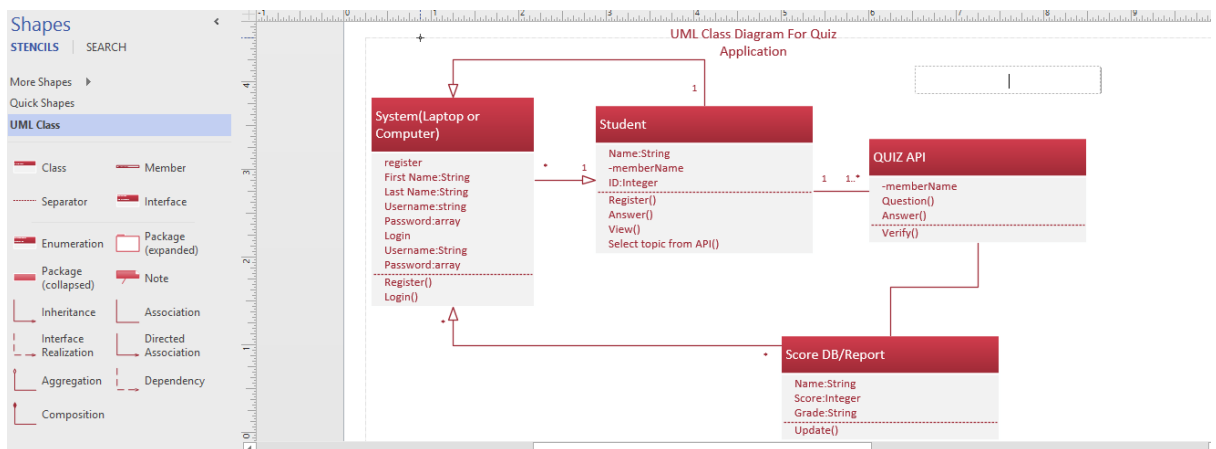
- **Sequence diagram:**

Sequence diagram for the project is as follows:



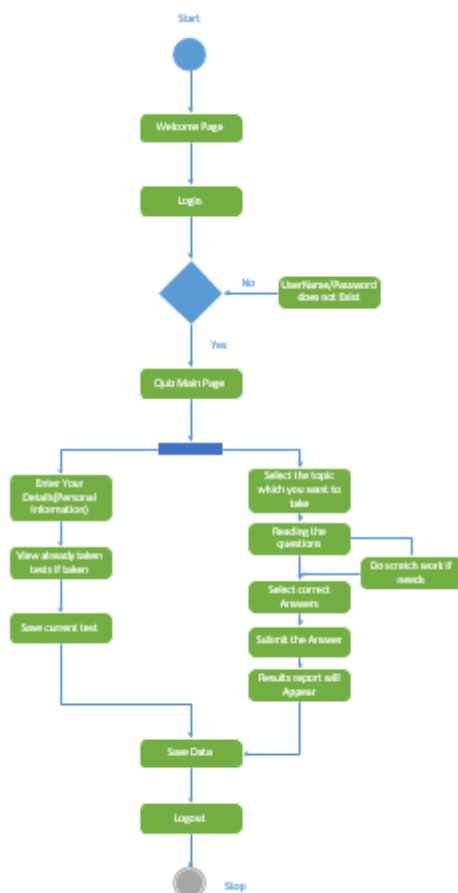
- **Class diagram:**

Class diagram for the project is as follows:



- **Activity diagram:**

Activity diagram for the project is as follows:



▪ **User story:**

- Students/users can take online quizzes through this Interactive quiz application.
- They can select any domain from the listed domains in the home page to take test.
- Users can listen to the questions/options by clicking them.
- Personal information is displayed in profile page.
- Test score is provided immediately after the quiz is completed.
- Users can assess their mistakes by the answers shown after the test.

▪ **Use case:**

- User must register himself/herself in the application.
- Upon successful registration user can login into the app.
- After logging in user has option to select domain among the domains listed.
- Upon selecting domain, user can take tests and view scores after completing the tests.

▪ **Service description:**

- Interactive quiz application provides quizzes to the users.
- Users can take tests and view results after the test.
- As results are provided instantly users can assess their mistakes.
- Users can listen to questions in the quizzes.
- Scribbling pad is provided for scratch work.

Testing:

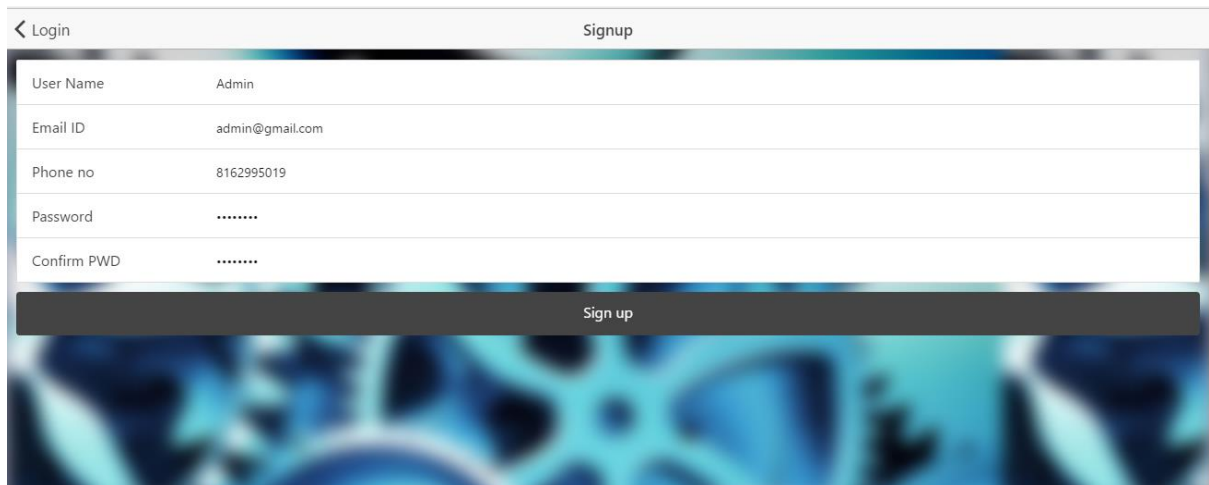
The following are the unit test cases and their results:

S.No	Test case	Description/Process	Expected result	Actual result	Pass/Fail
1	Registration	User has to register in registration page	Registration has to be successful	Registration is successful	Pass
2	Registration	Invalid email ID	Error has to be shown stating invalid email ID	Error has been shown stating invalid email ID	Pass
3	Registration	Password criteria must be met	Error has to be shown when password length criteria is not met	Error has been shown when password length criteria is not met	Pass
4	Log in	User has to login with valid credentials	Login has to be successful	Login successful	Pass
5	Home	User must select a topic for taking quiz	Quiz must start	Quiz has started	Pass
6	Quiz	User must answer a question to go to next question	Error has to be shown if user tries to go to next page without answering current page question.	Error has been shown when user tried to go to next page without answering current page question.	Pass
7	Quiz submission	User must submit quiz upon completion	After submission of the quiz test score has to be shown	After submission of the quiz test score has been shown	Pass

Deployment:

Deployed code screenshots are attached below:

Registration page on web:

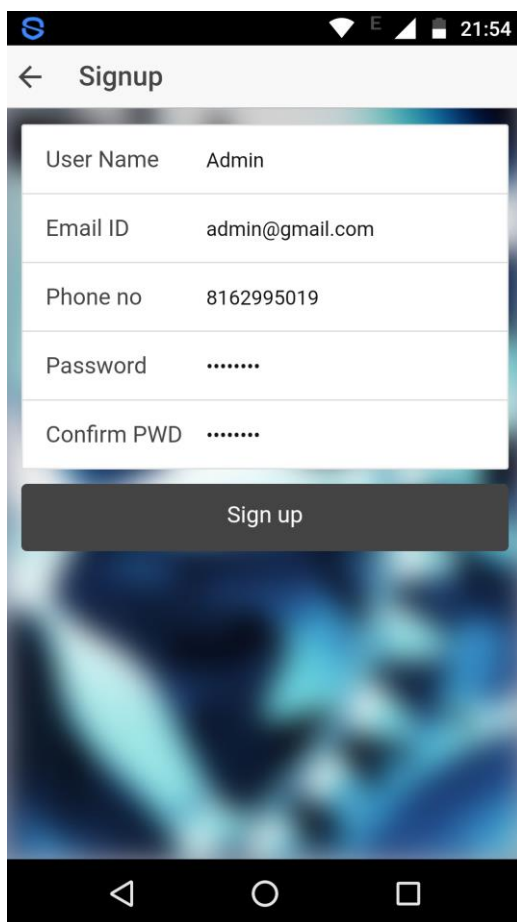


A screenshot of a web browser displaying a registration form. The page has a header with a back arrow and 'Login' on the left, and 'Signup' on the right. The form contains five input fields: 'User Name' with the value 'Admin', 'Email ID' with 'admin@gmail.com', 'Phone no' with '8162995019', 'Password' with masked characters '.....', and 'Confirm PWD' with masked characters '.....'. Below the form is a dark grey button labeled 'Sign up'. The background of the page is a blue abstract pattern.

User Name	Admin
Email ID	admin@gmail.com
Phone no	8162995019
Password
Confirm PWD

Sign up

Registration page on mobile:

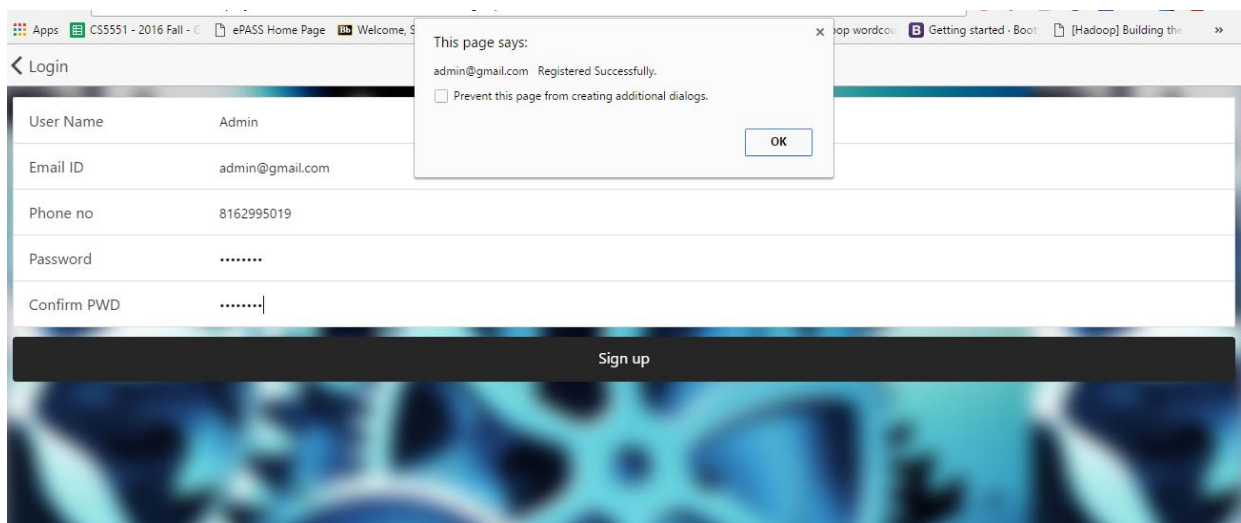


A screenshot of a mobile application displaying the same registration form as the web version. The top status bar shows a blue 'S' icon, signal strength, battery level, and the time '21:54'. The app header has a back arrow and 'Signup'. The form fields are identical to the web version: 'User Name' (Admin), 'Email ID' (admin@gmail.com), 'Phone no' (8162995019), 'Password' (.....), and 'Confirm PWD' (.....). A dark grey 'Sign up' button is at the bottom. The background is a blue abstract pattern. The bottom of the screen shows the Android navigation bar with back, home, and recent apps icons.

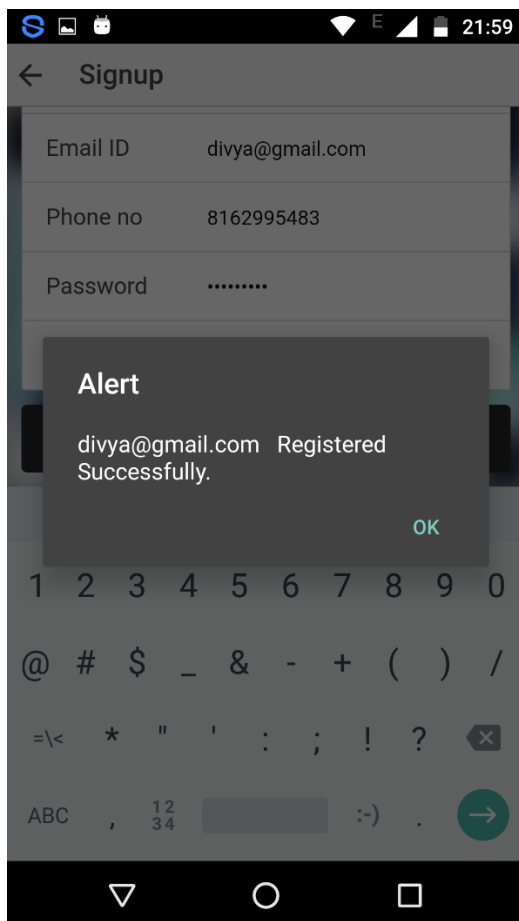
User Name	Admin
Email ID	admin@gmail.com
Phone no	8162995019
Password
Confirm PWD

Sign up

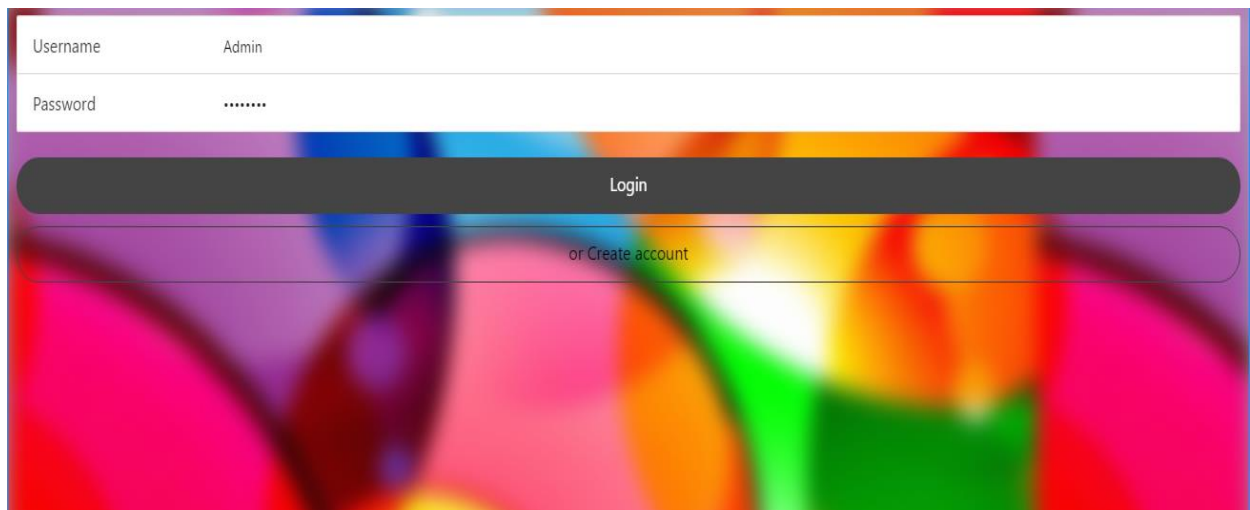
Registration successful on web:



Registration successful on mobile:

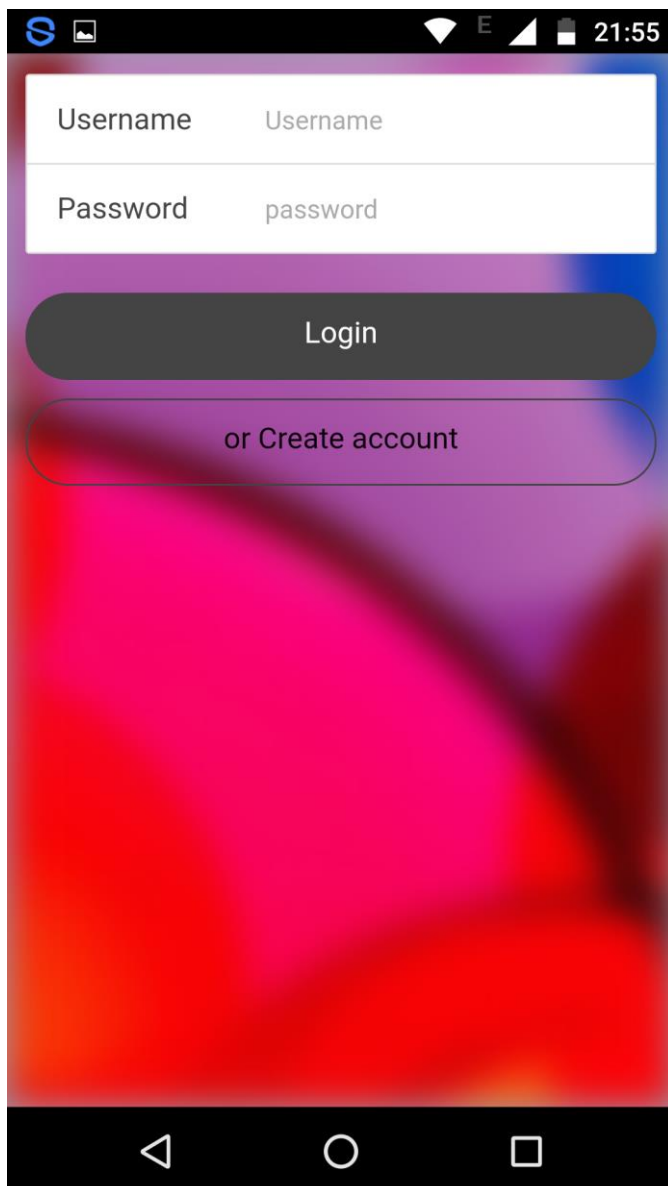


Login page on web:



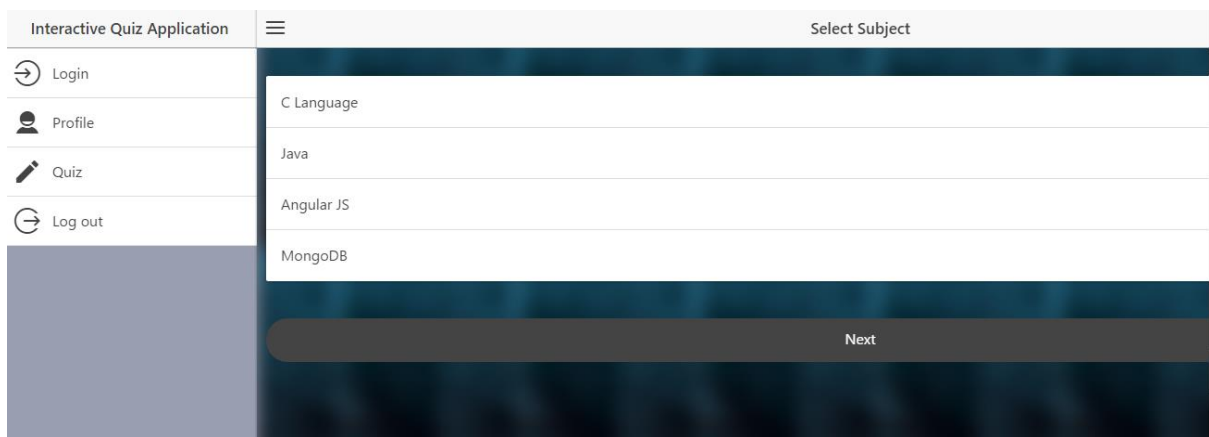
A screenshot of a web login page. It features a white form with two input fields: 'Username' containing the text 'Admin' and 'Password' containing seven dots. Below the form is a dark grey 'Login' button. Underneath the button is a link that says 'or Create account'. The background is a vibrant, abstract pattern of pink, purple, and green.

Login page on mobile:

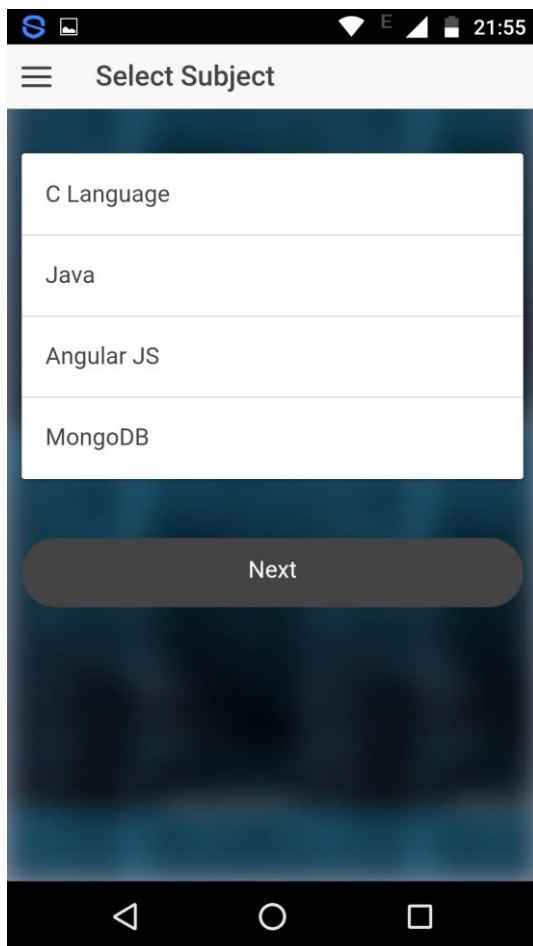


A screenshot of a mobile login page. The top status bar shows a blue 'S' icon, signal strength, 'E' for 4G, and the time '21:55'. The login form is white and contains two fields: 'Username' with the placeholder text 'Username' and 'Password' with the placeholder text 'password'. Below the form is a dark grey 'Login' button. Underneath the button is a link that says 'or Create account'. The background is a vibrant, abstract pattern of pink, purple, and green. At the bottom, there is a black navigation bar with three white icons: a triangle, a circle, and a square.

Home page on web:



Home page on mobile:



Quiz page on web:

Quiz

1 . %f access specifier is used for?

integer
character
floating
none

Next Scribble Submit

Quiz page on mobile:

S 21:56

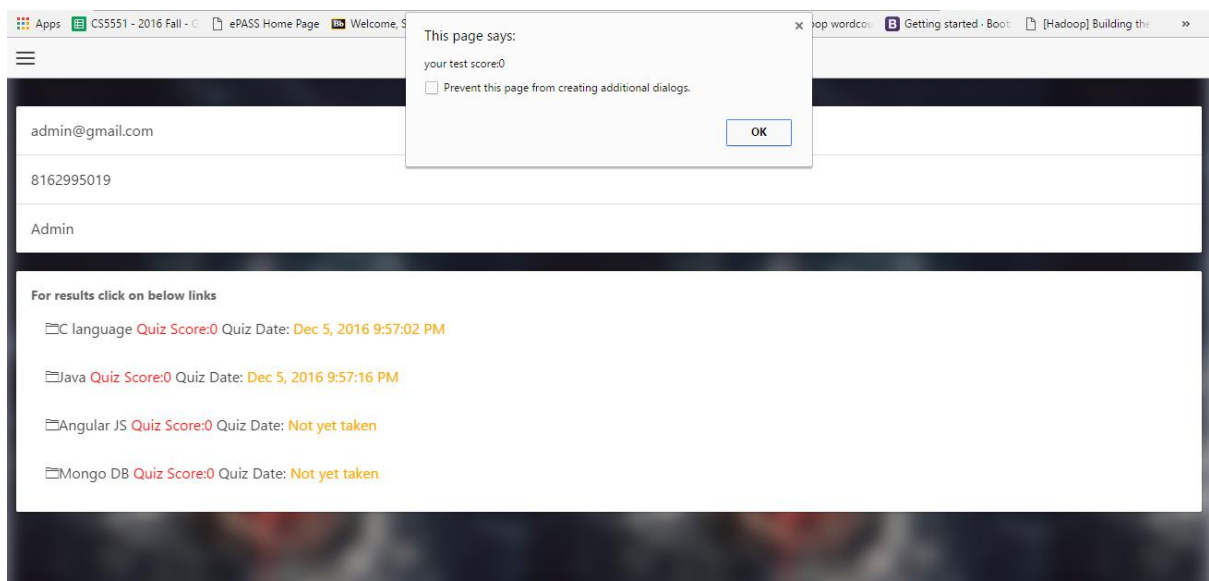
Quiz

2 . C is the successor of programming language?

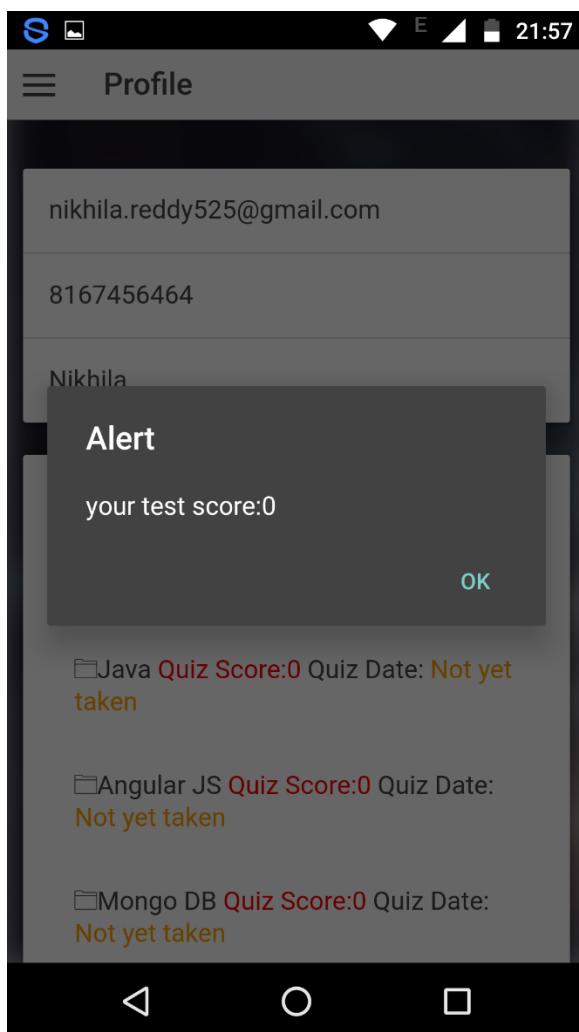
C++	
B++	✓
B	
Mini C	

Next Scribble Submit

Score upon completion of quiz on web:



Score upon completion of quiz on mobile:



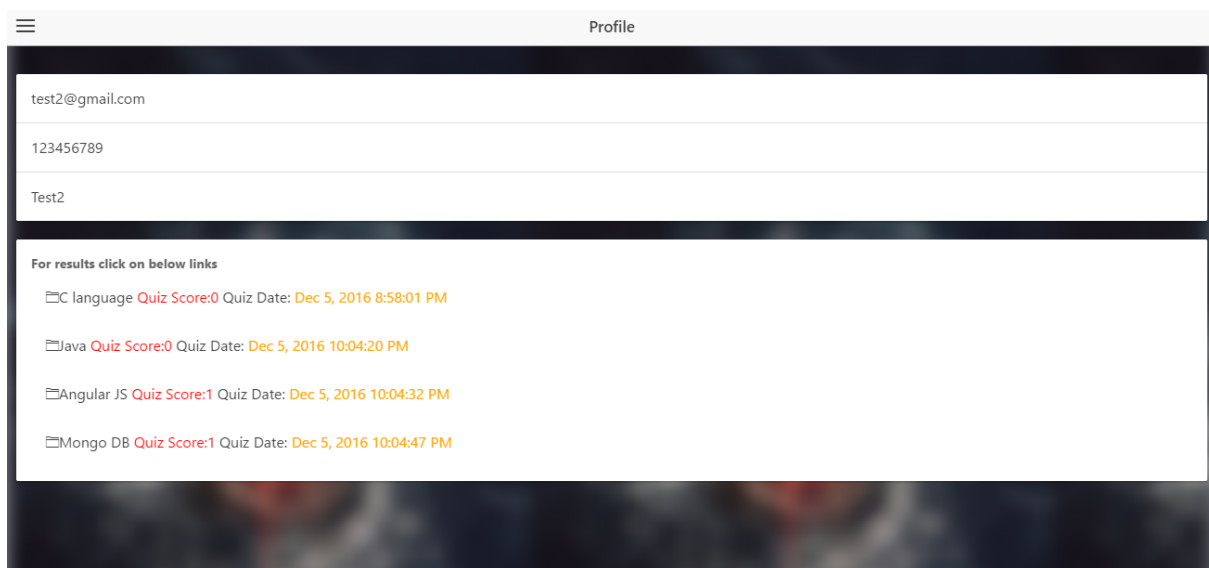
Attempted questions and answers after the test is done on web:

Profile	Results
1. %f access specifier is used for?	
Your Answer: character	
Right Answer: floating	
2. Not attempted.	
Your Answer:	
Right Answer:	
3. Not attempted.	
Your Answer:	
Right Answer:	

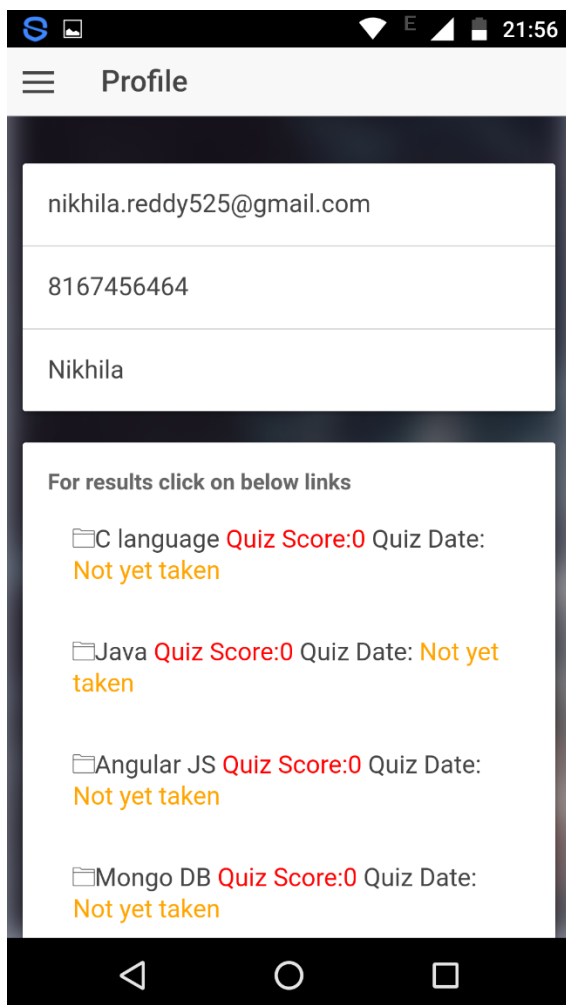
Attempted questions and answers after the test is done on mobile:

S	23:13
← Results	
1. What is (void*)0?	
Your Answer: Symbolize the void pointer	
Right Answer: Symbolize the NULL Pointer	
2. Which of the following is a logical operator?	
Your Answer: !	
Right Answer: All of the above	
3. int x=~1; What is the value of 'x'?	
Your Answer: 2	
Right Answer: -2	

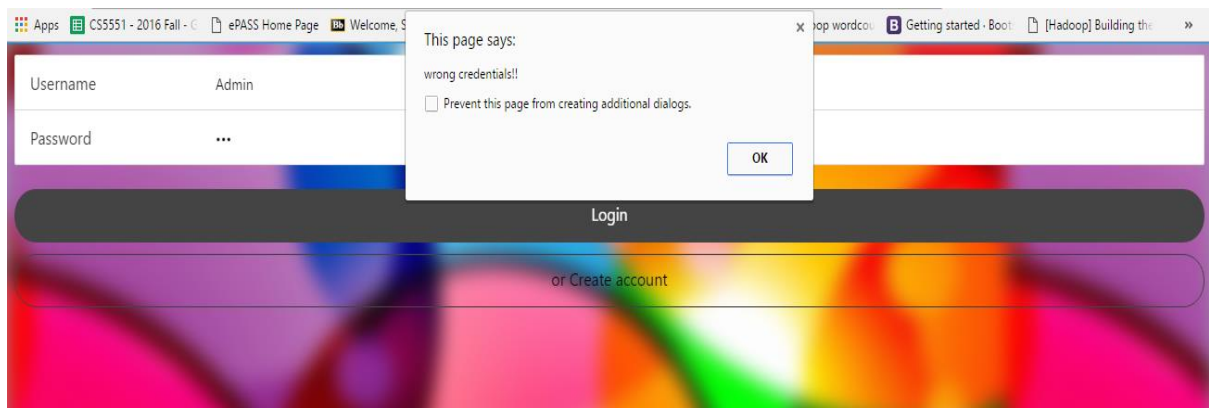
Profile page on web:



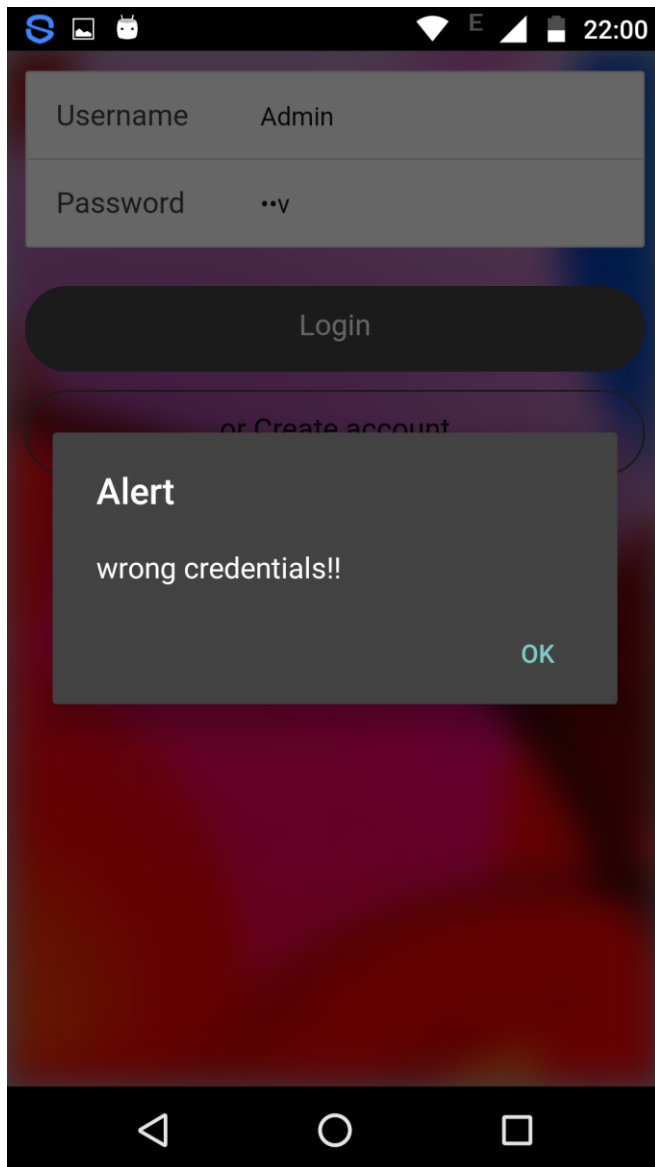
Profile page on mobile:



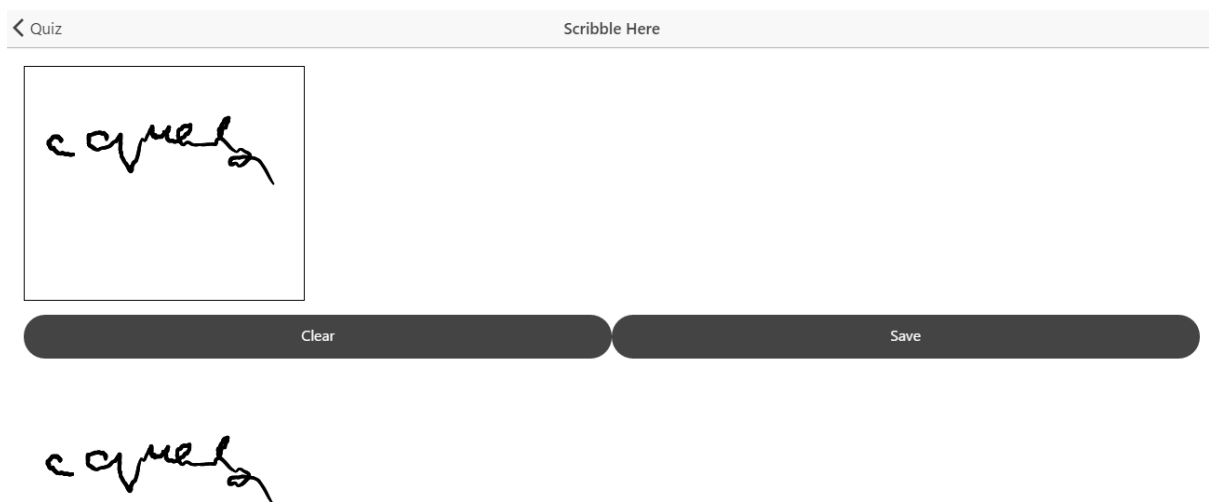
Invalid credentials on web:



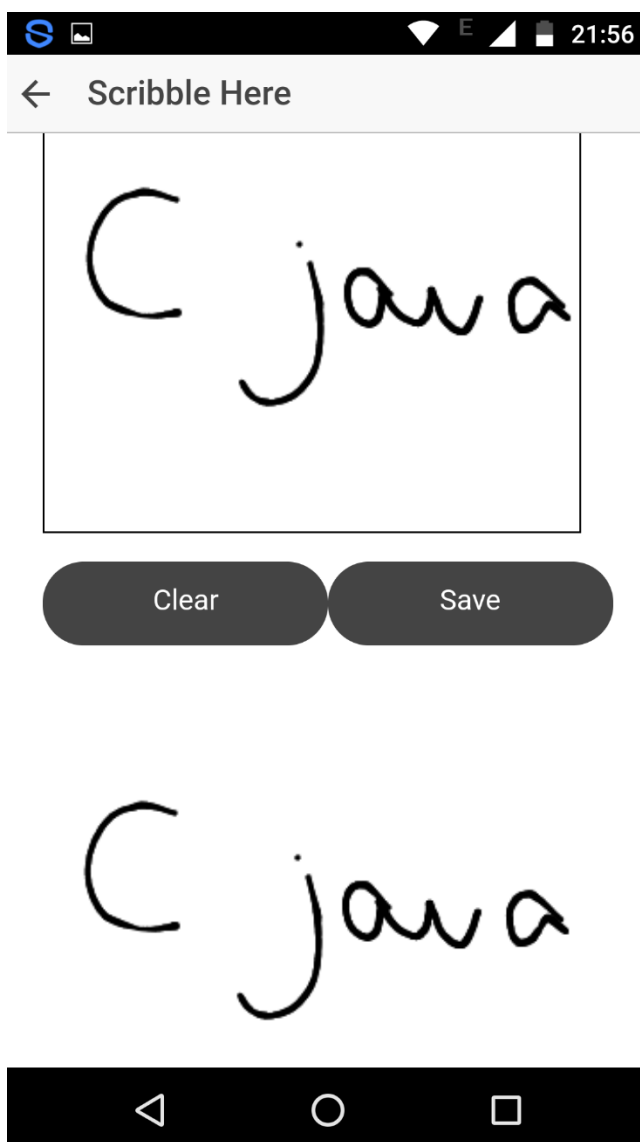
Invalid credentials on mobile:



Scribbling pad on web:



Scribbling pad on mobile:



Project Management:

Work completed:

S.No	Description	Responsibility	Time taken	Contributions
1	Saving user's quiz data once user submits the test, Tabs arrangement	Nikhila	10	100%
2	Collection of questions to make quiz repository, Displaying latest test details	Divya	10	100%
3	Display previous quiz taken, Display result upon completion of the quiz	SaiTeja	10	100%
4	Quiz repository, Background images	Arun	0	100%
5	Documentation	Nikhila, Divya, SaiTeja	5	100%

Burn down chart:

GitHub's burn down chart of the project is as follows:



Issues:

GitHub's issues for the project are as follows:

<input type="checkbox"/>	8 Open ✓ 28 Closed	Author ▾	Labels ▾	Milestones ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	Display previous quizzes taken #36 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Display results after quiz completion #35 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Quiz submission #34 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Collection of quiz questions to make repository #33 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Tabs arrangement #32 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Back ground images #31 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Making quiz repository #30 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					
<input type="checkbox"/>	Displaying latest test details #29 opened 6 days ago by NikhilaChinthakindhi ASE Project Incre...					

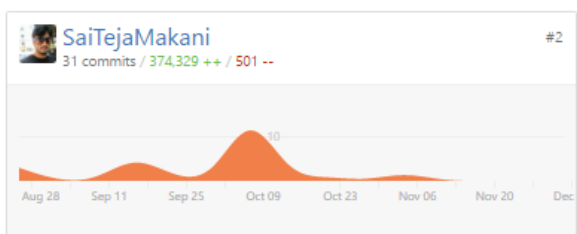
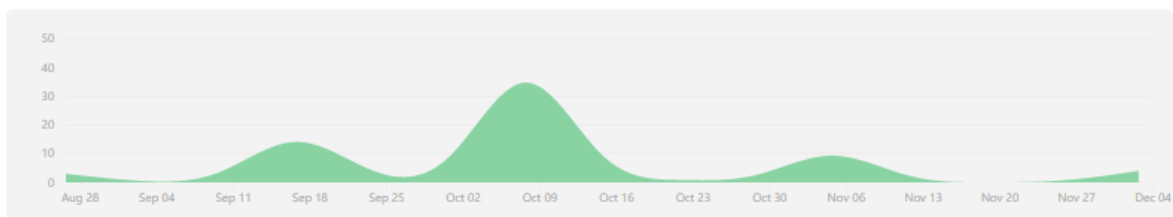
Contributors graph:

GitHub's contributors graph for the project is as follows:

Aug 28, 2016 – Dec 5, 2016

Contributions to master, excluding merge commits

Contributions: Commits ▾



Source code link:

<https://github.com/SaiTejaMakani/ASE-Project/tree/master/SourceCode/ASE%20Project%20Increment4/ASEproject>

PPT link:

<https://docs.google.com/presentation/d/1poOdZl33yAU6gTEe9iGmeX3ikI2nIgQiameKURHFDWE/edit#slide=id.p3>

Youtube vedio link:

<https://www.youtube.com/watch?v=PGmo4uR5Y-0&feature=youtu.be>

Bibliography:

<https://developer.mozilla.org/en-US/docs/Web/API/SpeechSynthesisUtterance>

<http://www.w3schools.com/angular/>

<http://www.w3schools.com/bootstrap/default.asp>