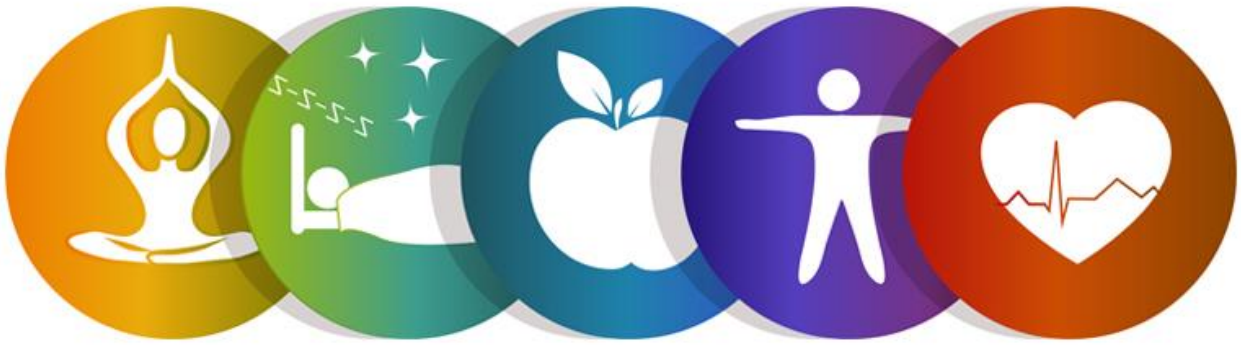
SPARK4MIND



Team:: 4

Team Members::

- Barath Naravula Loganathan - 35
- Aishvwarya Natarajan Iyer - 19
- Gayathree Natarajan Iyer - 20
- Megha Nagabhushan - 32

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I. Introduction

Stress within your comfort zone can help you perform under pressure, motivate you to do your best, even keep you safe when danger looms. But when stress becomes overwhelming, it can damage your mood and relationships, and lead to a host of serious mental and physical health problems. The trouble is that modern life is so full of frustrations, deadlines, and demands that many of us don't even realize how stressed we are. By recognizing the symptoms and causes of stress, you can take the first steps to reducing its harmful effects and improving your quality of life.

This application will help users cope up the stress with spending 10-15 minutes with this stress buster application. This application will provide user the refreshing 10-15 minutes which would help them better concentrate on their job or studies.

This application will take a stress test of the user and based on the inputs provided by the user, it will calculate the level of stress. User can further play games, watch funny videos, yoga exercises, watch motivational videos, listen to some soothing music to get rid of the stress. Based on multiple usage, user will be able to view their own progress graph and give feedback based on it.

II. Project Objectives and Features

- **Overall goal**

  Makes the mind and soul of the application user peaceful and stress free.

- **Specific objectives**

  When user is under lot of pressure, frustration, workload, personal or professional issues the objective of this application is to relieve the stress of users within 10-15 minutes. This application will help users to know the stress level and help users cope up the stress with some videos, songs, games, yoga exercises, classes, news, articles, books.
  Idea Inspired by TED talk, idea worth Spreading, "All it takes is 10 mindful minutes" by Andy Puddicombe.

- **Specific features**
  - Stress level tester
  - Interactive stress-reliever games
  - Structured and Proven weekly course work for stress-free and more-success life
  - Medical brain wave music according to user focus improvement
  - Motivation video tailored specific to user
  - Yoga or Mediation training classes
  - Books
  - News and Articles
  - Feedback

- **Significance**

  Being human being in this busy world is a little difficult one but being a successful human being in this world is more difficult than climbing the Mount Everest. To be successful, we need to be stress-free, worry-less, focus-more and train-more. This is where our App idea comes into play so that a human being can climb the ladder of success and become a good human being.

III. Project Plan

Schedule for the four different increments

Increment 1: Launch page

Login page

Increment 2: Integrating YouTube videos

- Motivational videos
- Funny videos
- Yoga videos
- Stress relieving exercise videos

Integrating soothing music

Increment 3: Music Player

NYTimes API

Articles API

Feedback form

Increment 4:

Books API

Game

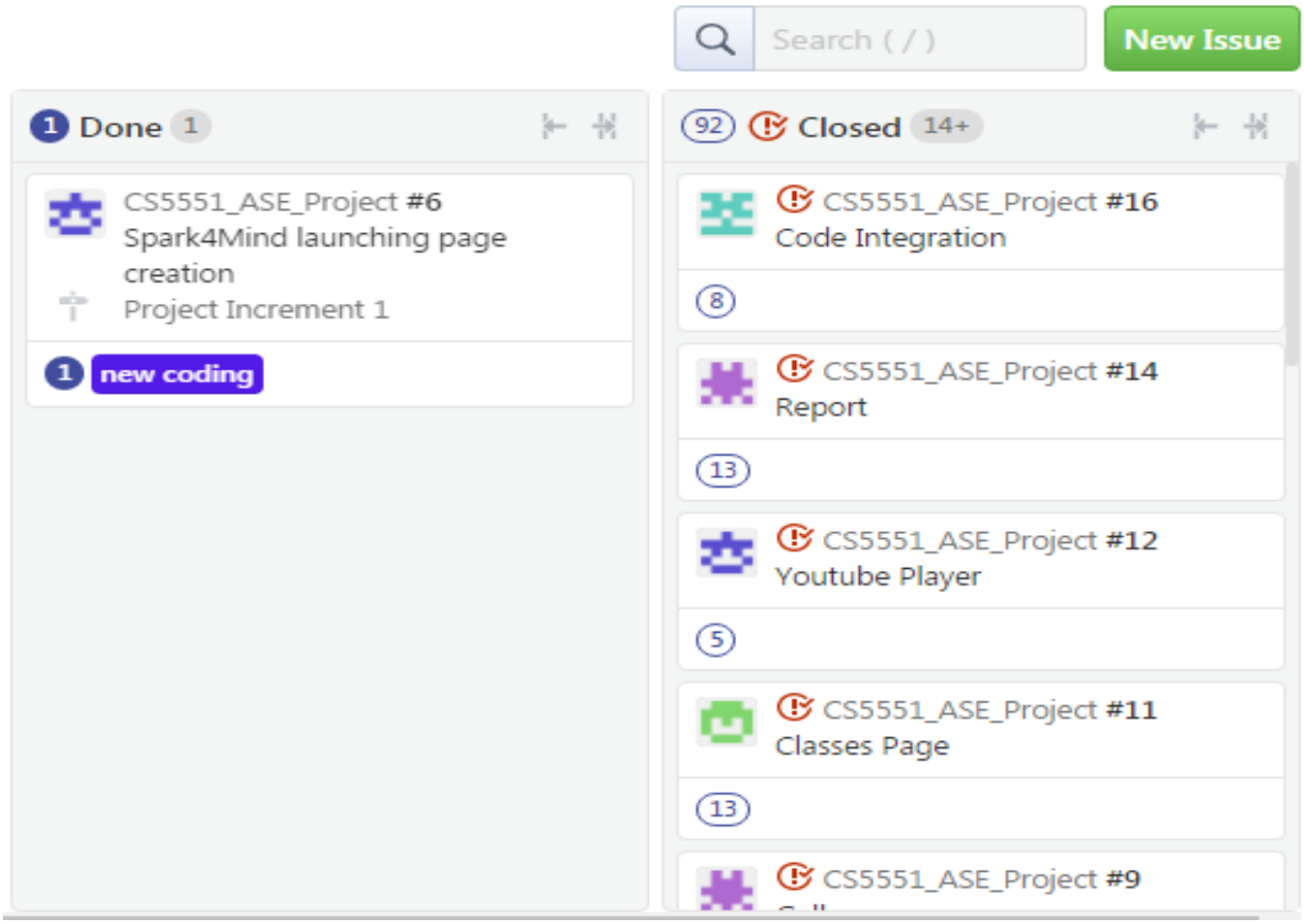
Deployment

Testing

Stories (Issues): Scenario & Use case specification

- The user first logs in to the application or signs up if not registered.
- Depending on the user's stress level user can select among many stress relieving options like: Games, Music, Videos, Books, Articles, News, Classes to join.
- If the user selects videos, user will have various options like yoga exercises, inspirational talks, music video etc.
- Later on, user can provide feedbacks for the application.
- User logs out of the application and is stress free!

Project Timelines, Members, Task Responsibility



Burndown chart

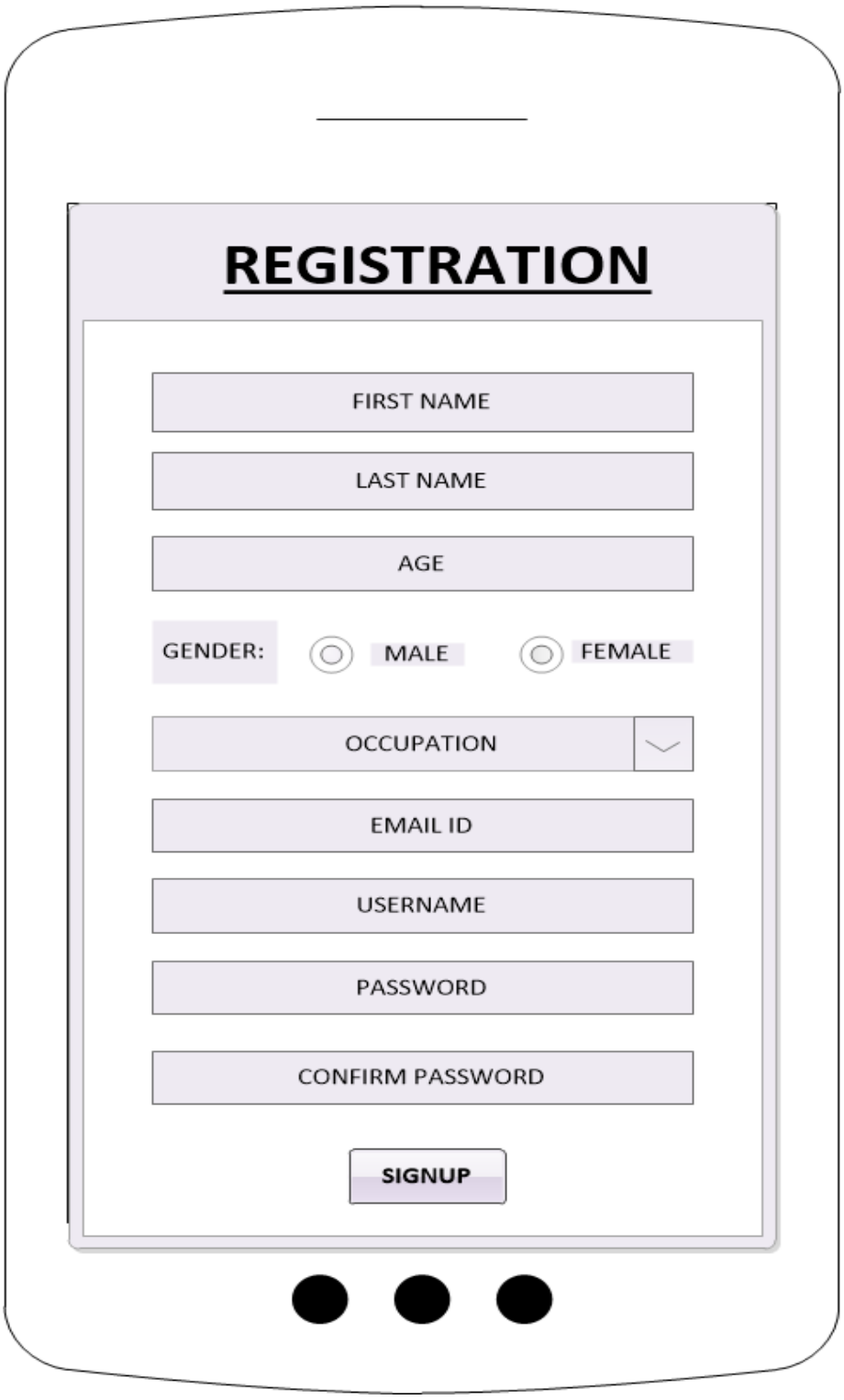
IV. Increment Report

Detailed Design of Features

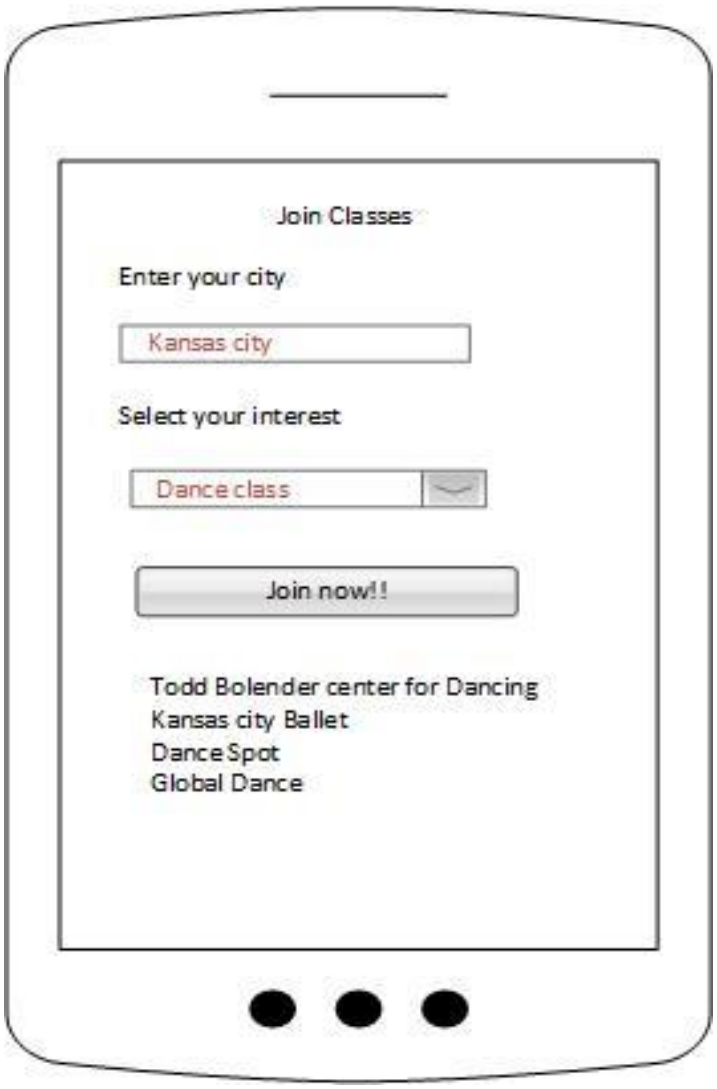
Wireframes

i) Wireframe for Login page

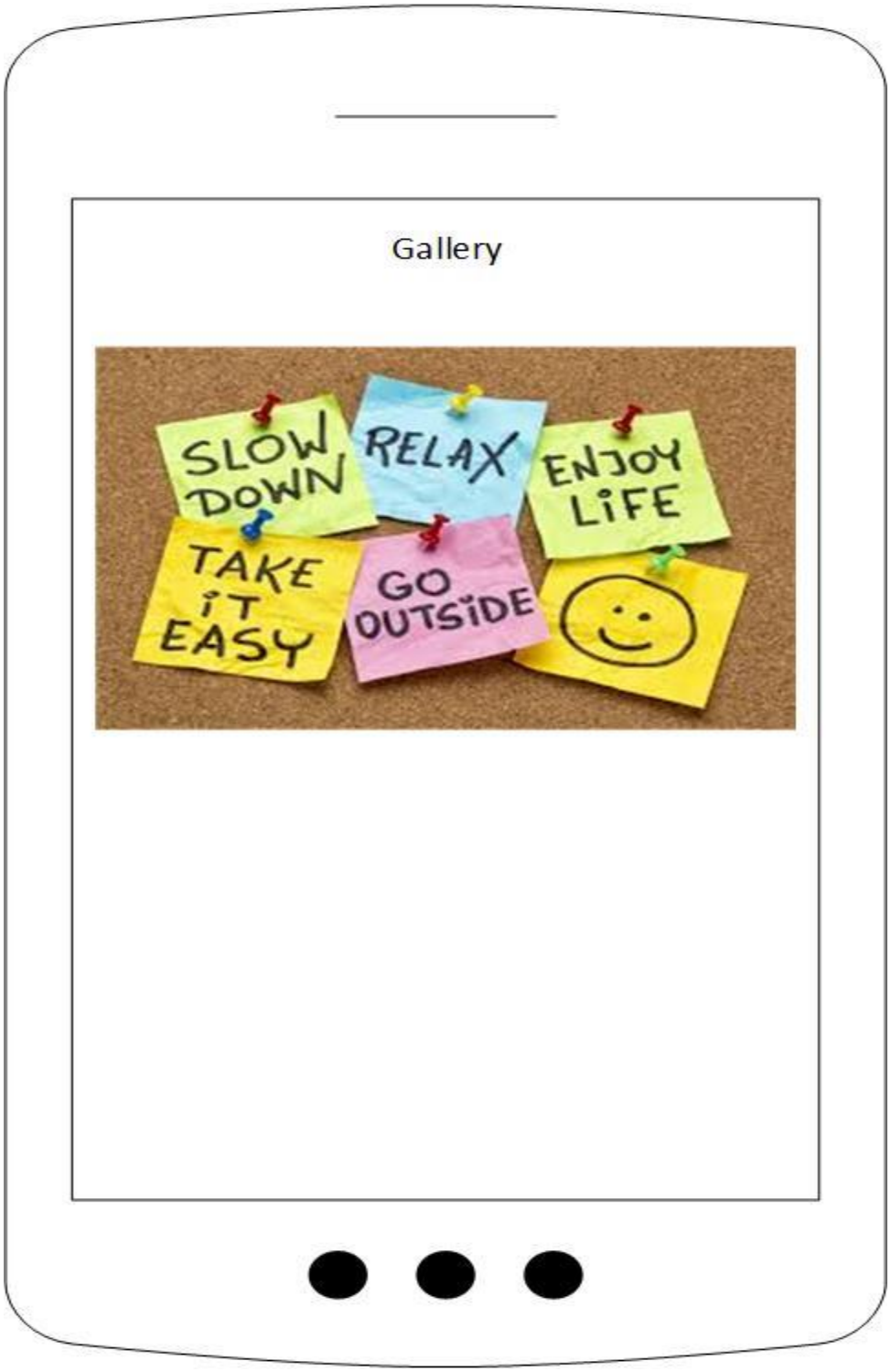
ii) Wireframe for Registration page



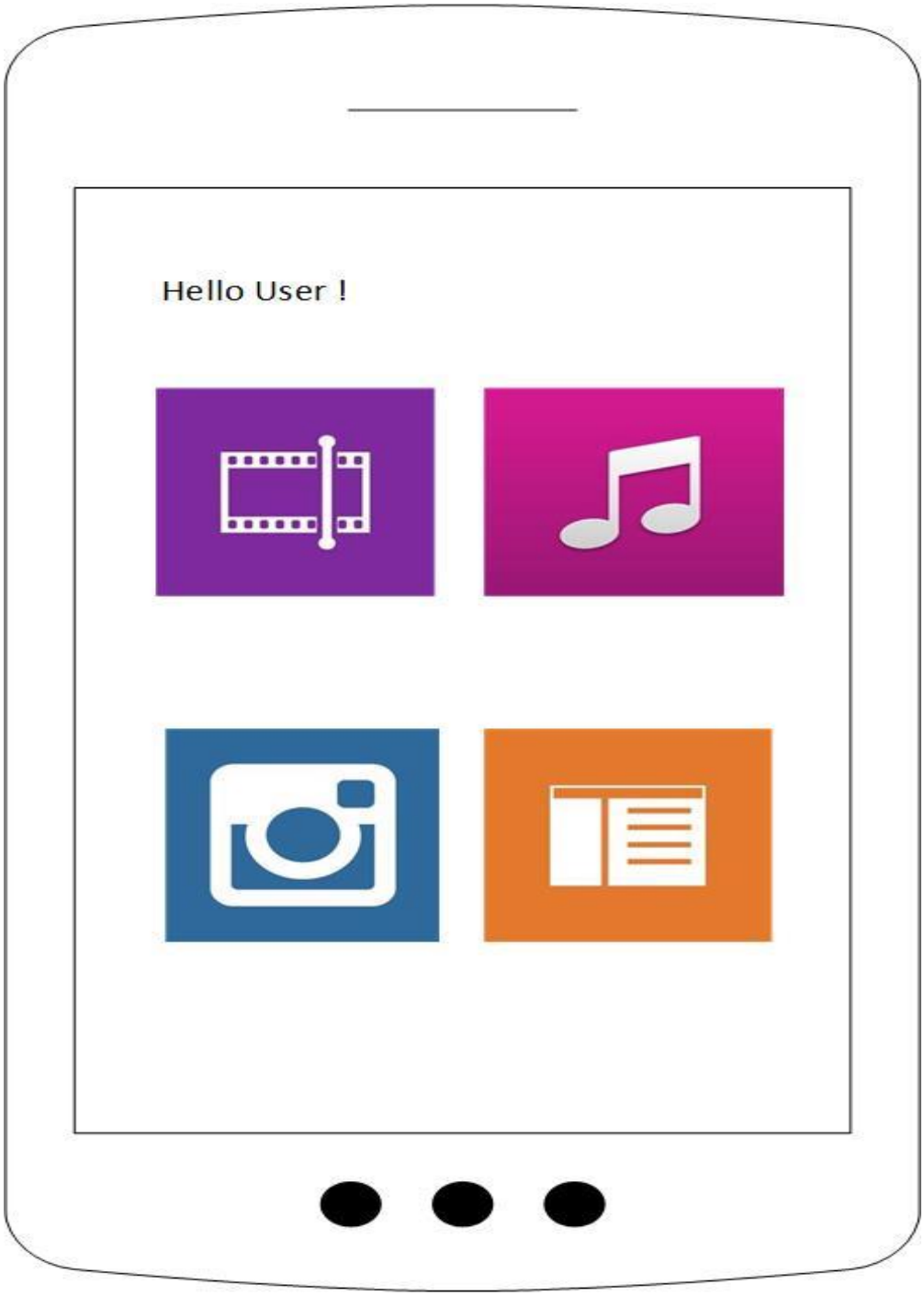
iii) Wireframe for Class page



iv) Wireframe for Gallery page

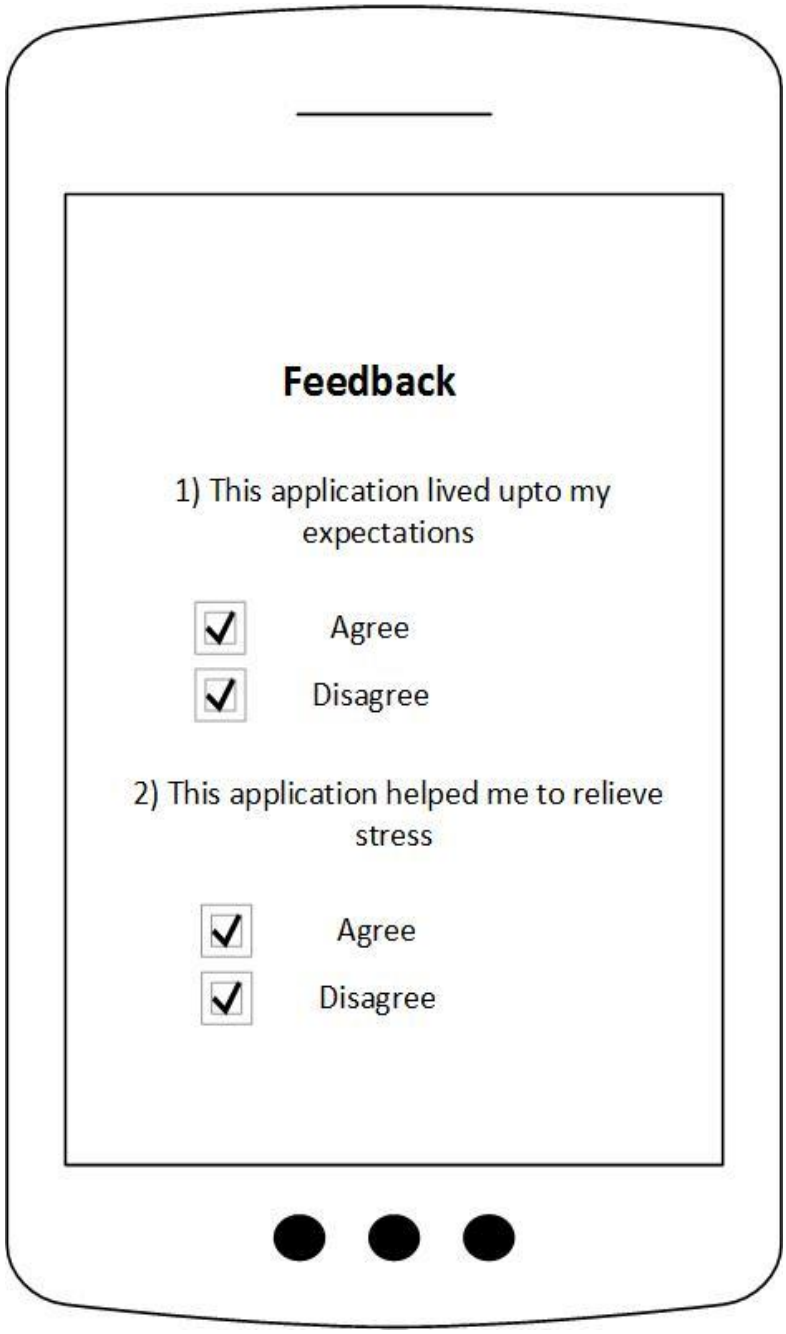


vii) Wireframe for Home page

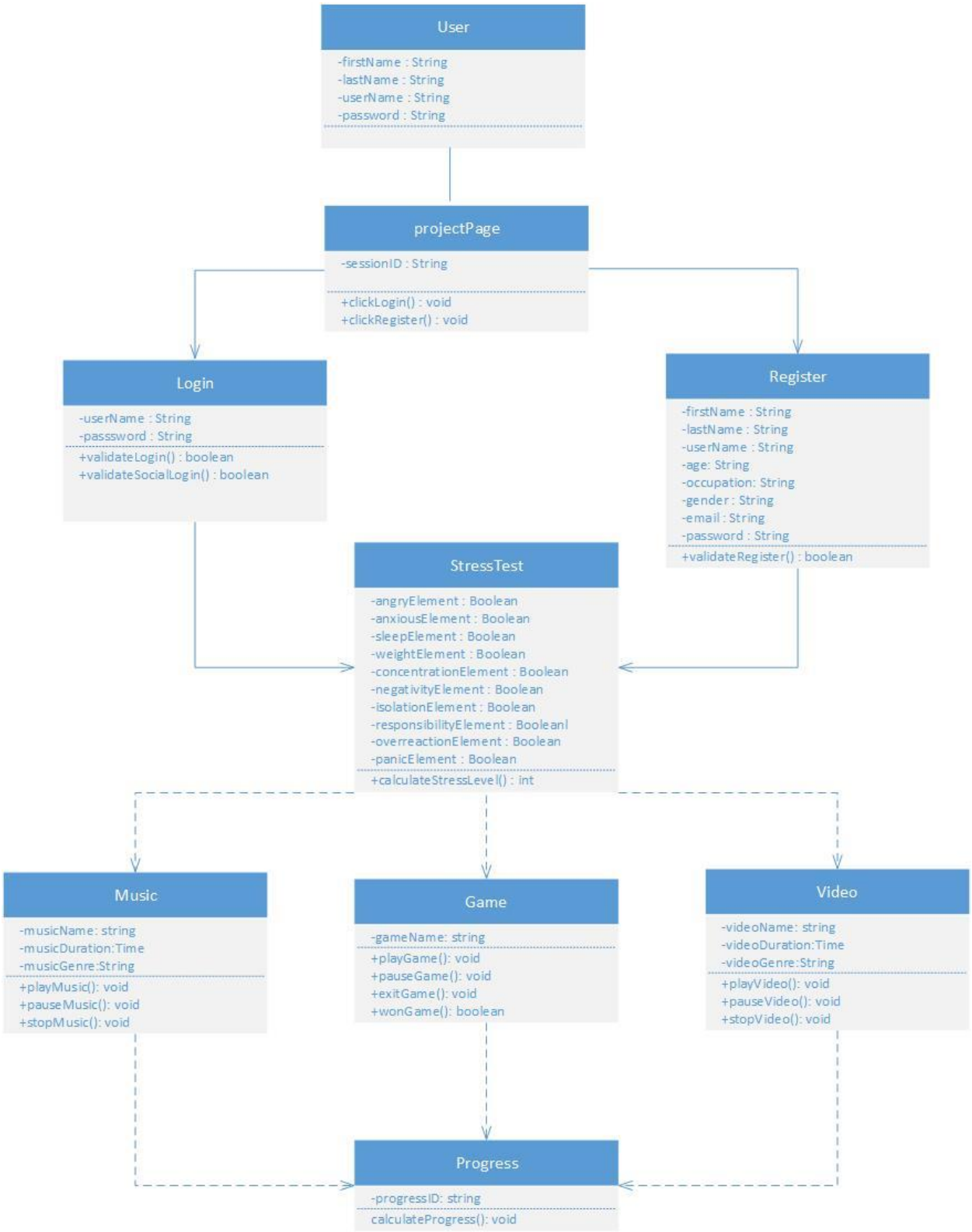


viii) Wireframe for Music Player

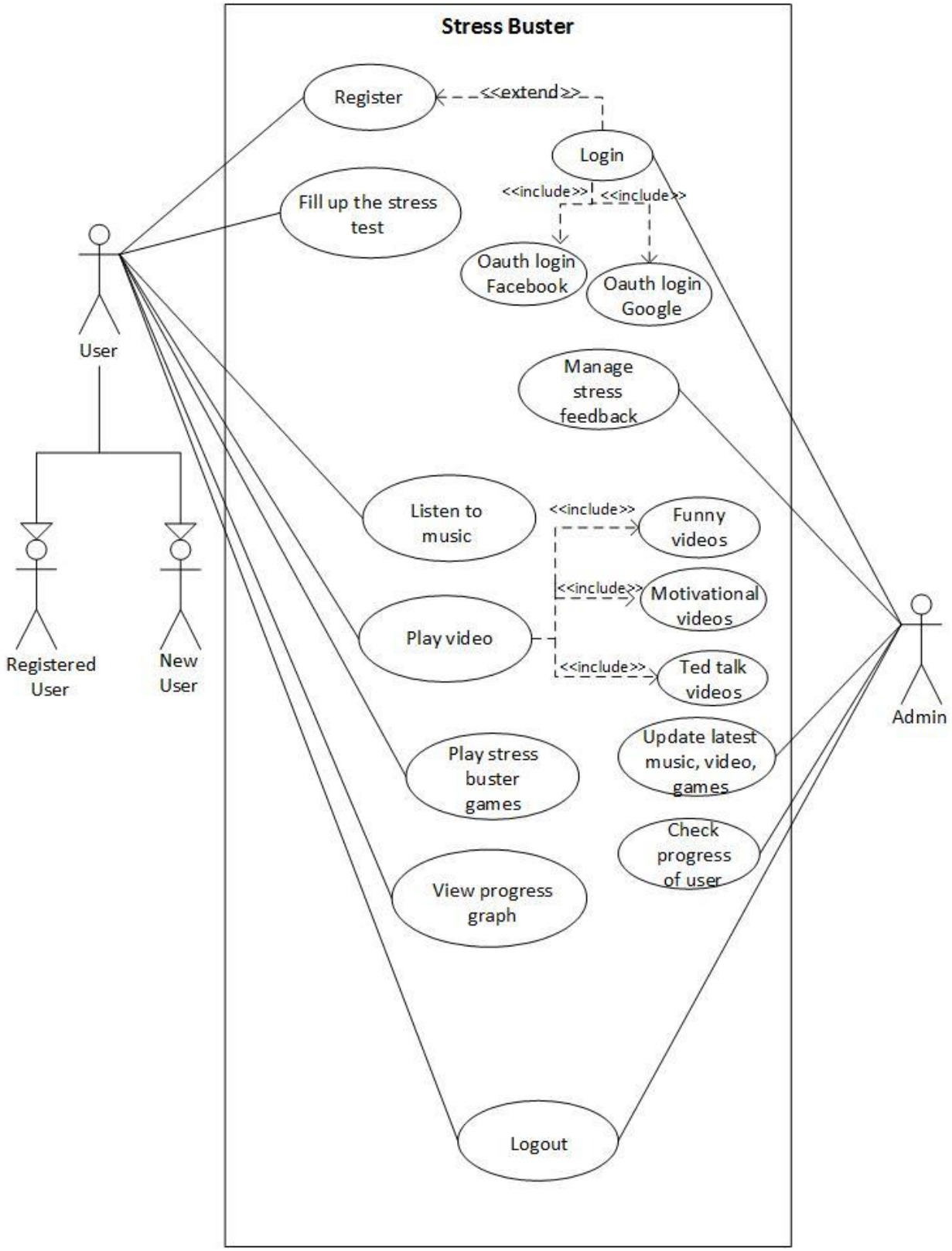
ix) Wireframe for Feedback



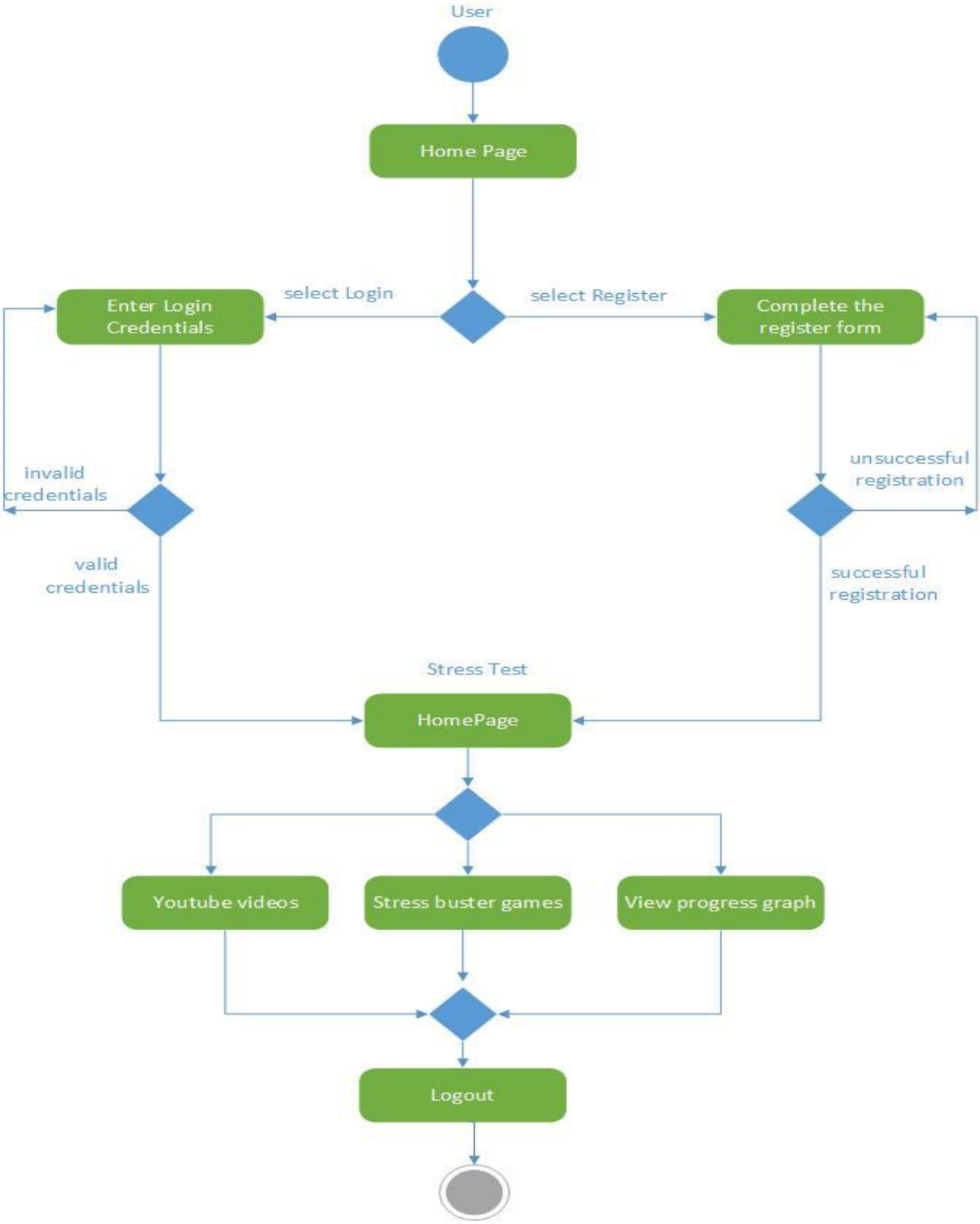
Class Diagram



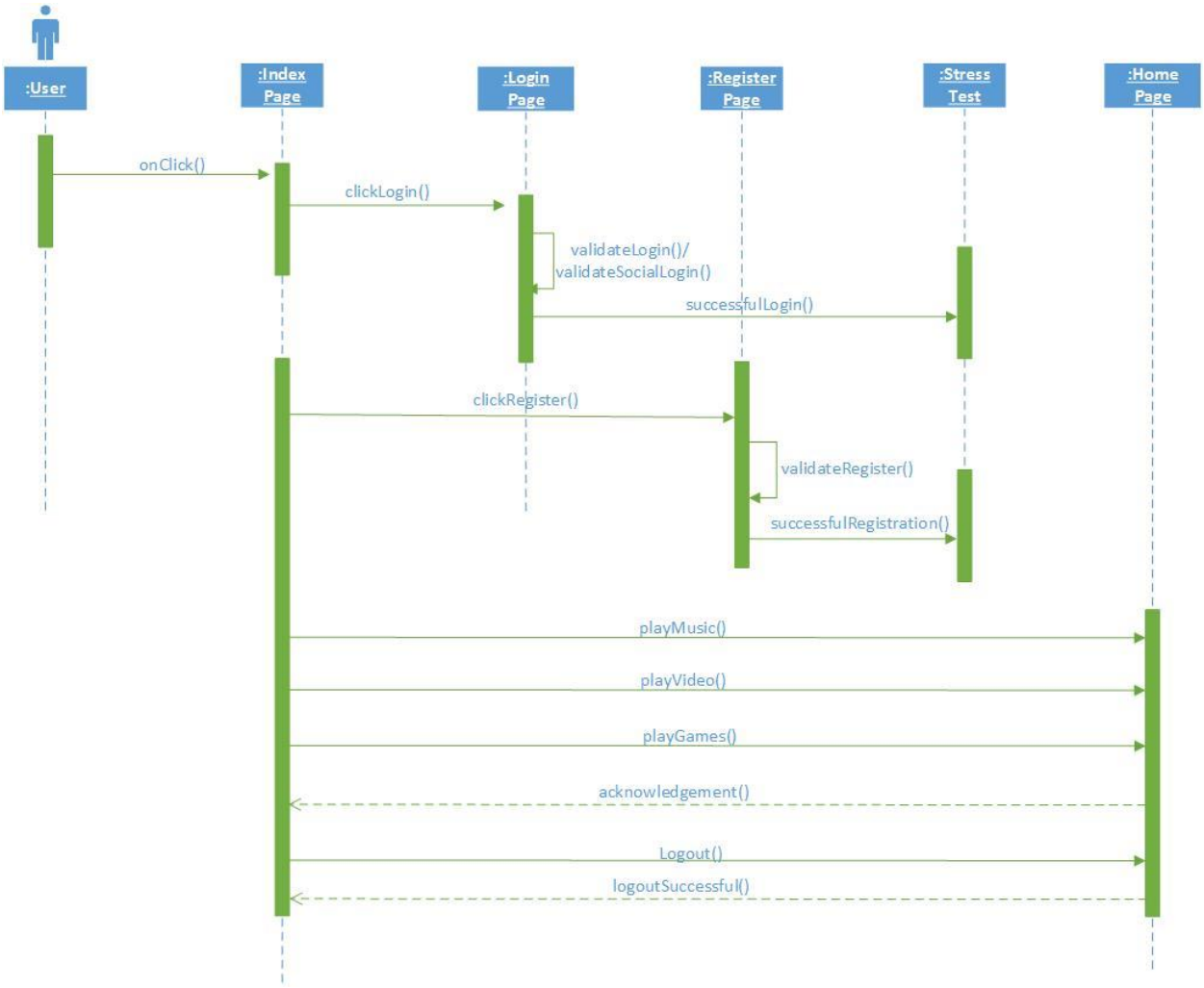
Use Case Diagram



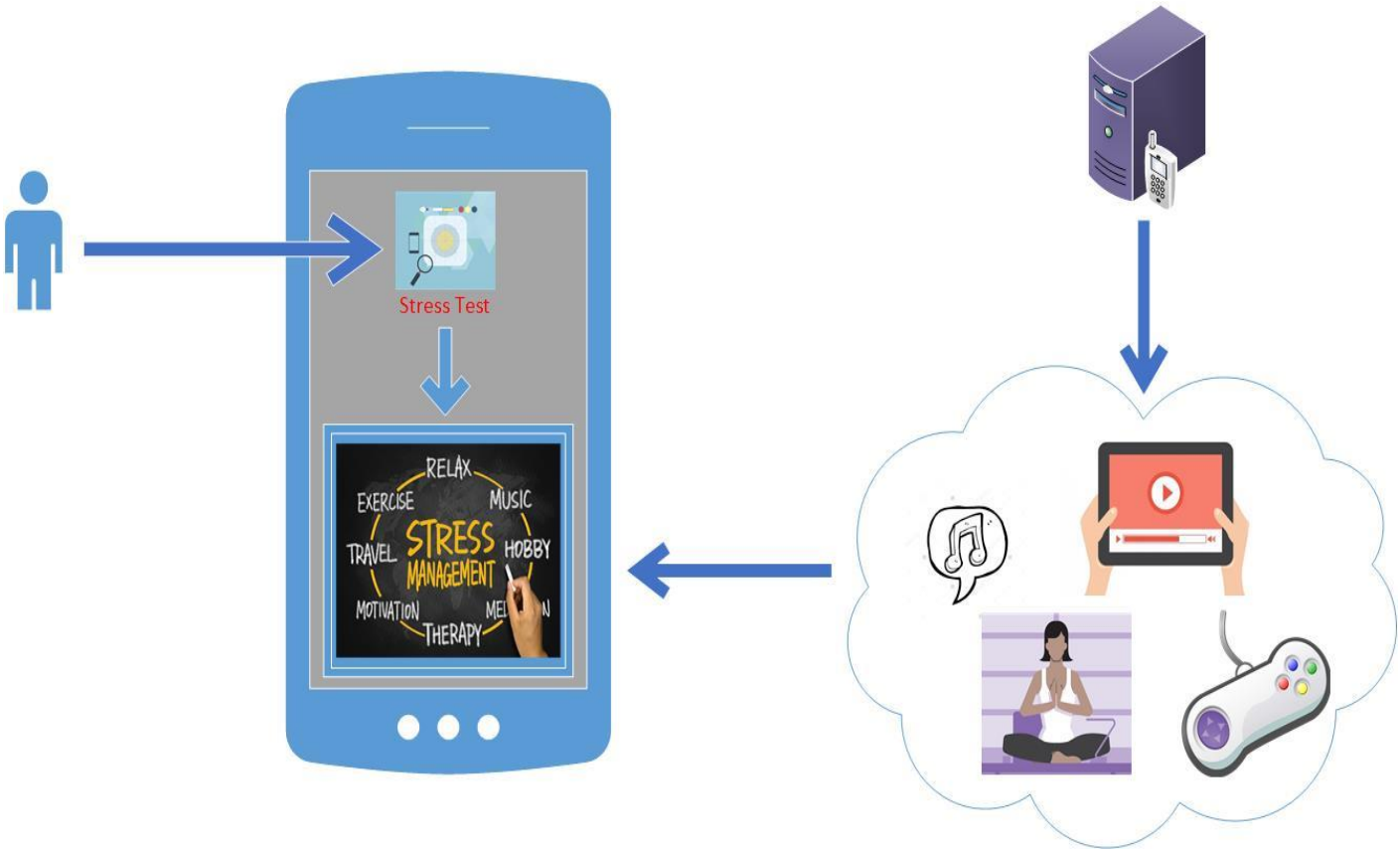
Activity Diagram



Sequence Diagram

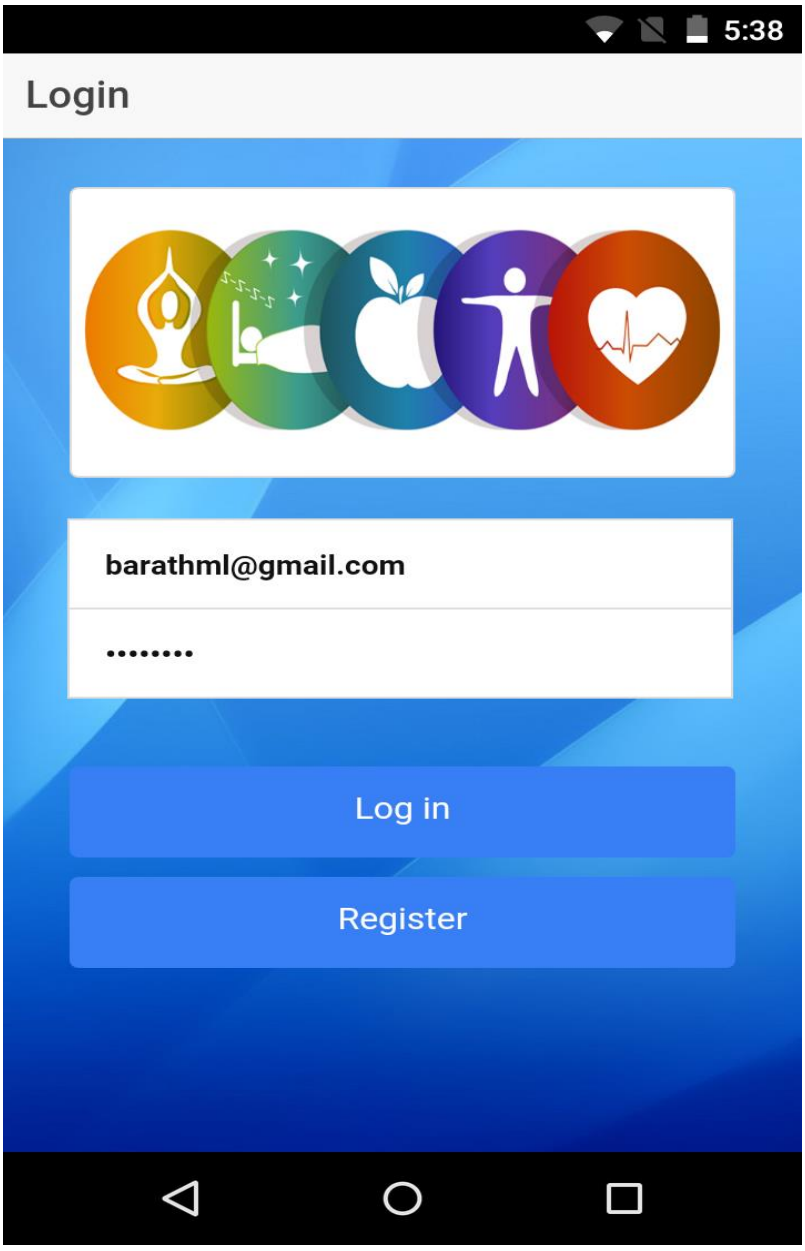


Architecture Diagram



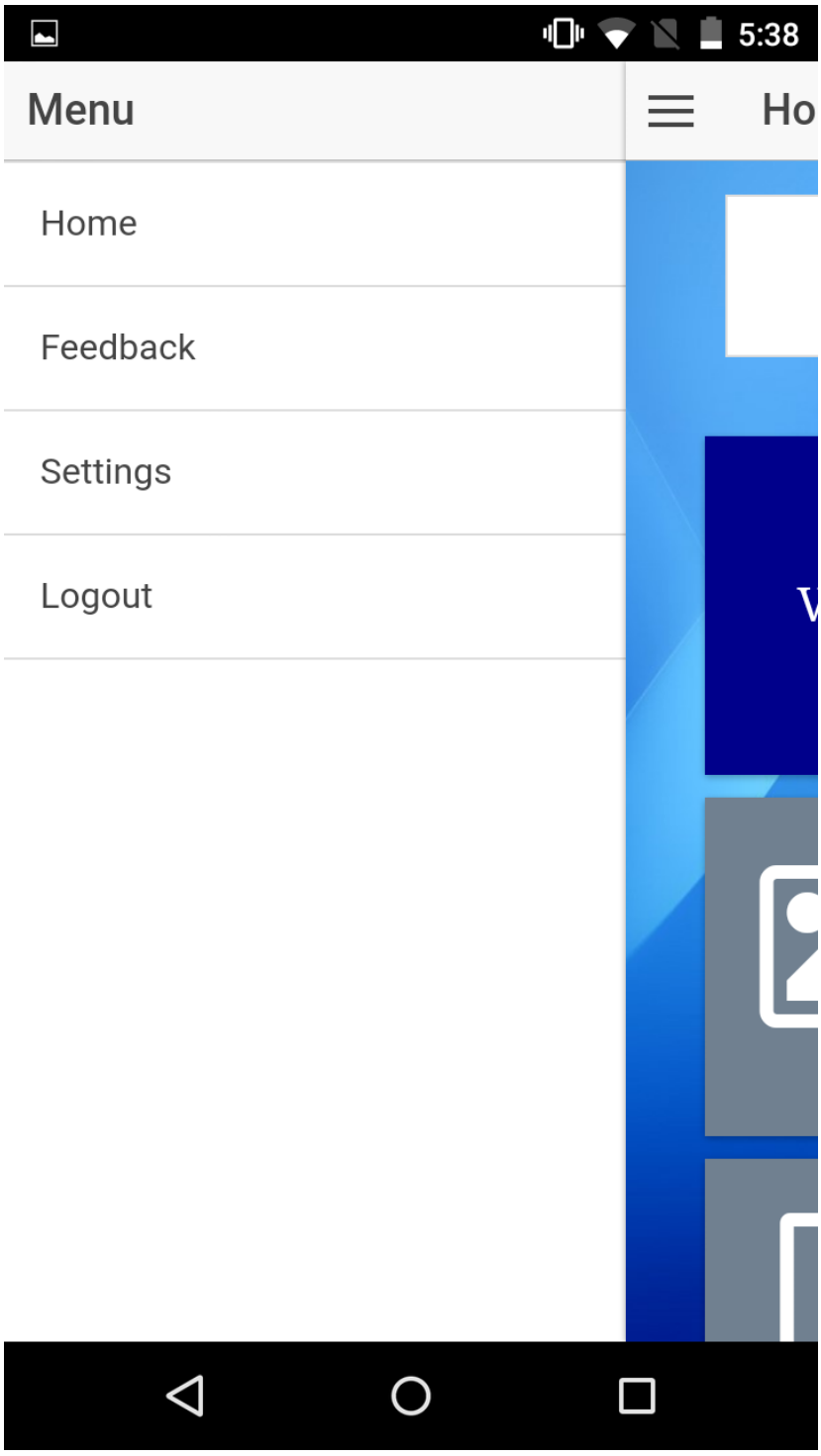
V. Implementation

Login Screen in Android



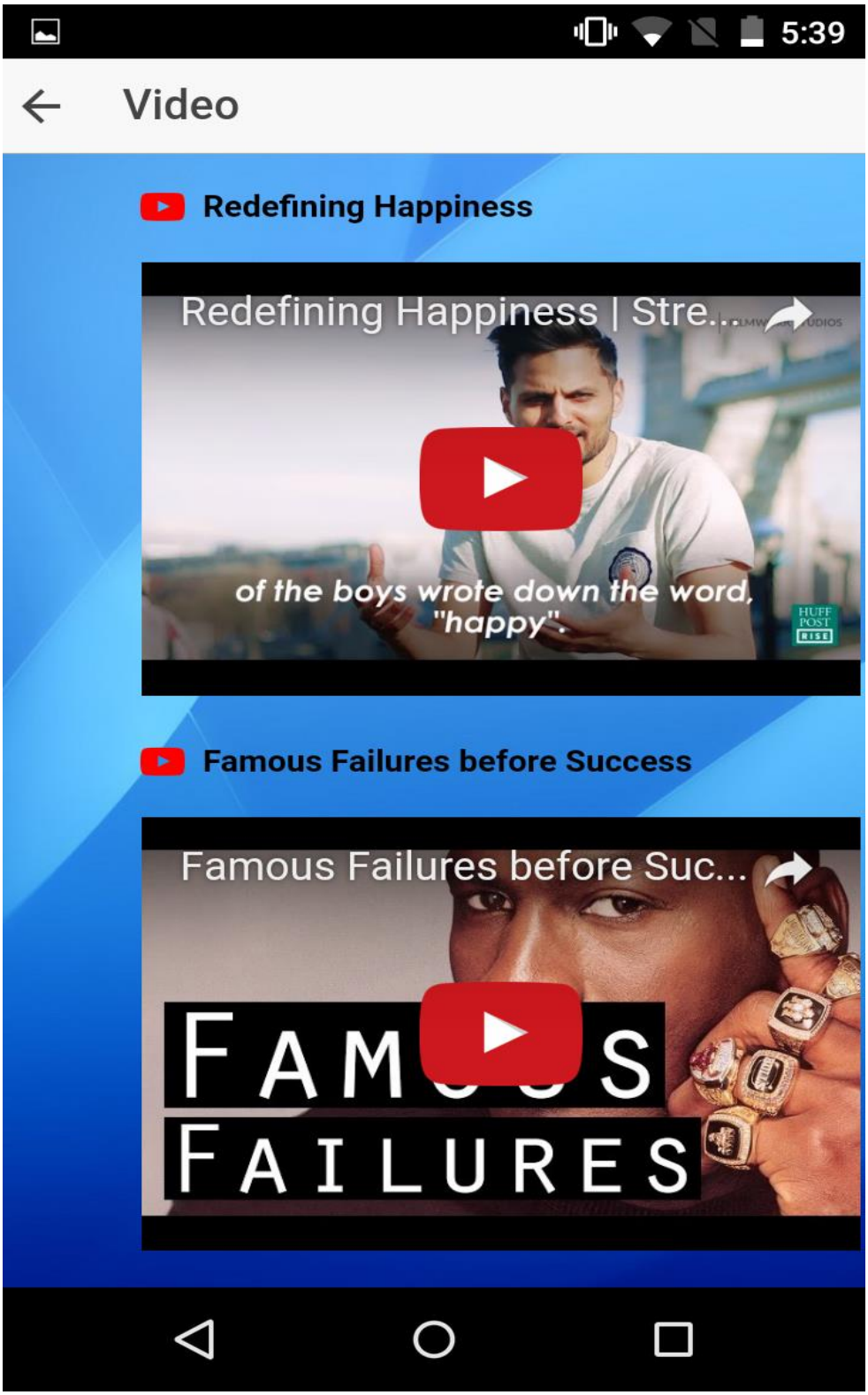
HomePage in Android

Side Menu



Home Page

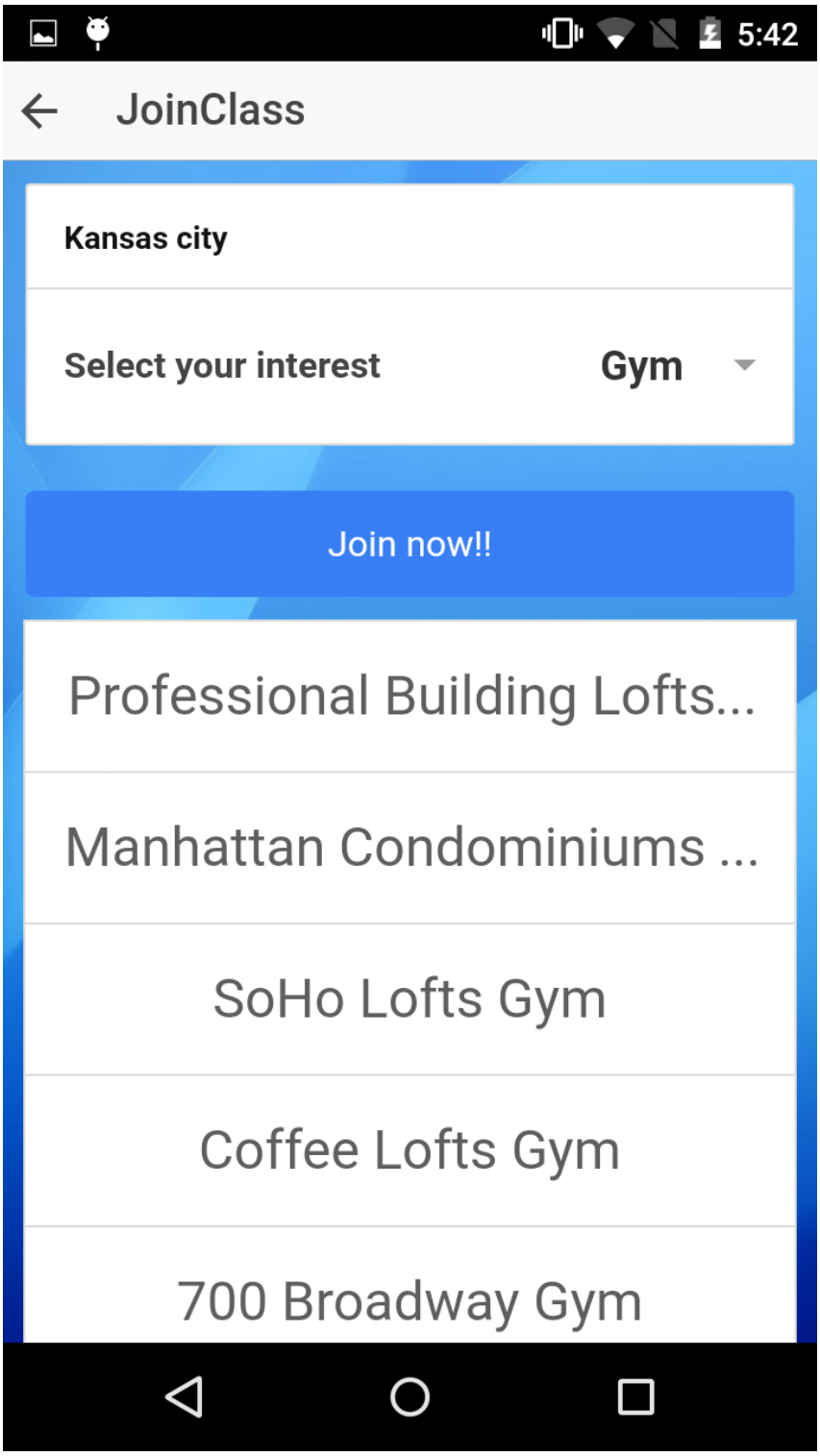
Youtube Player



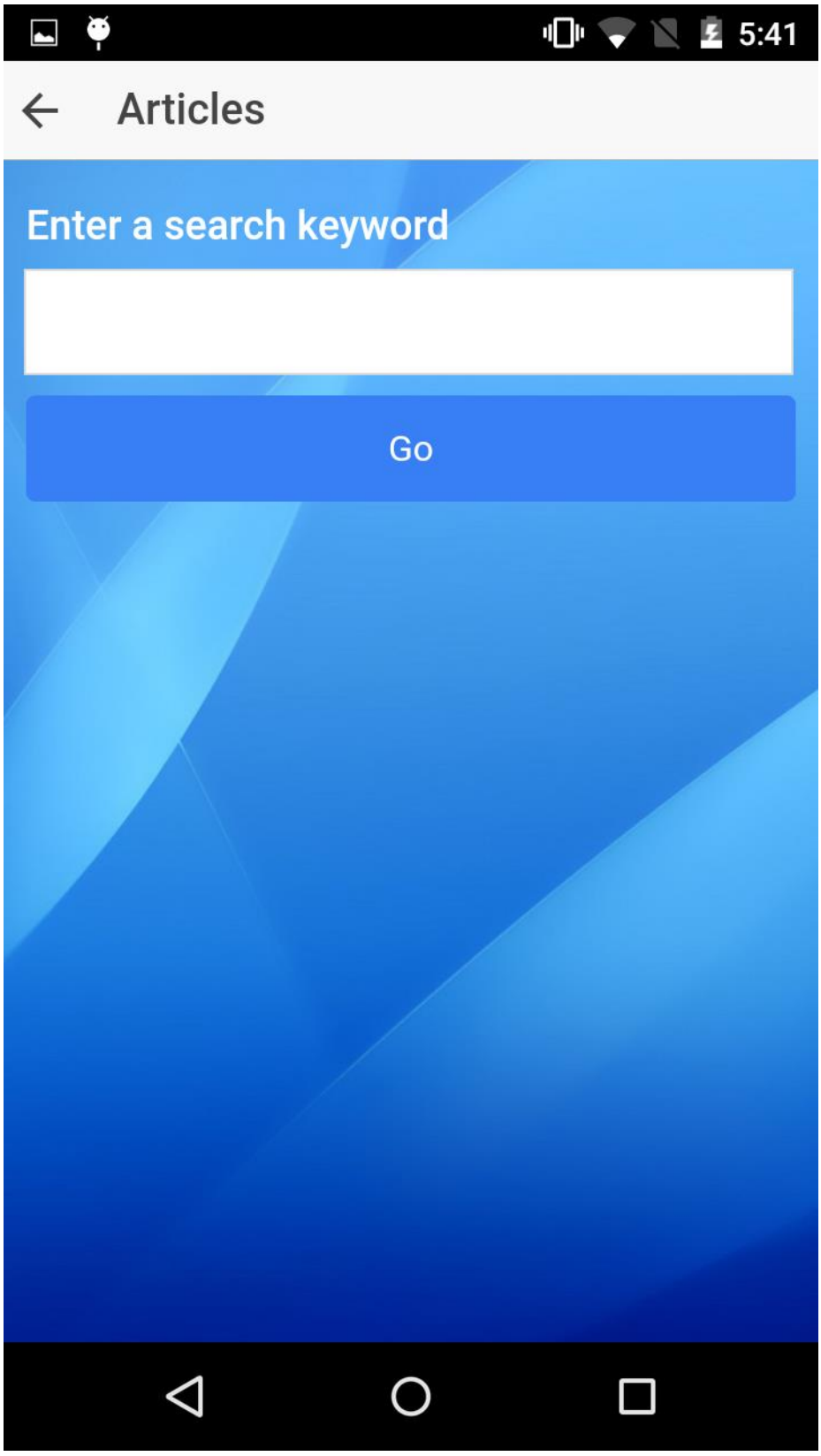
Gallery

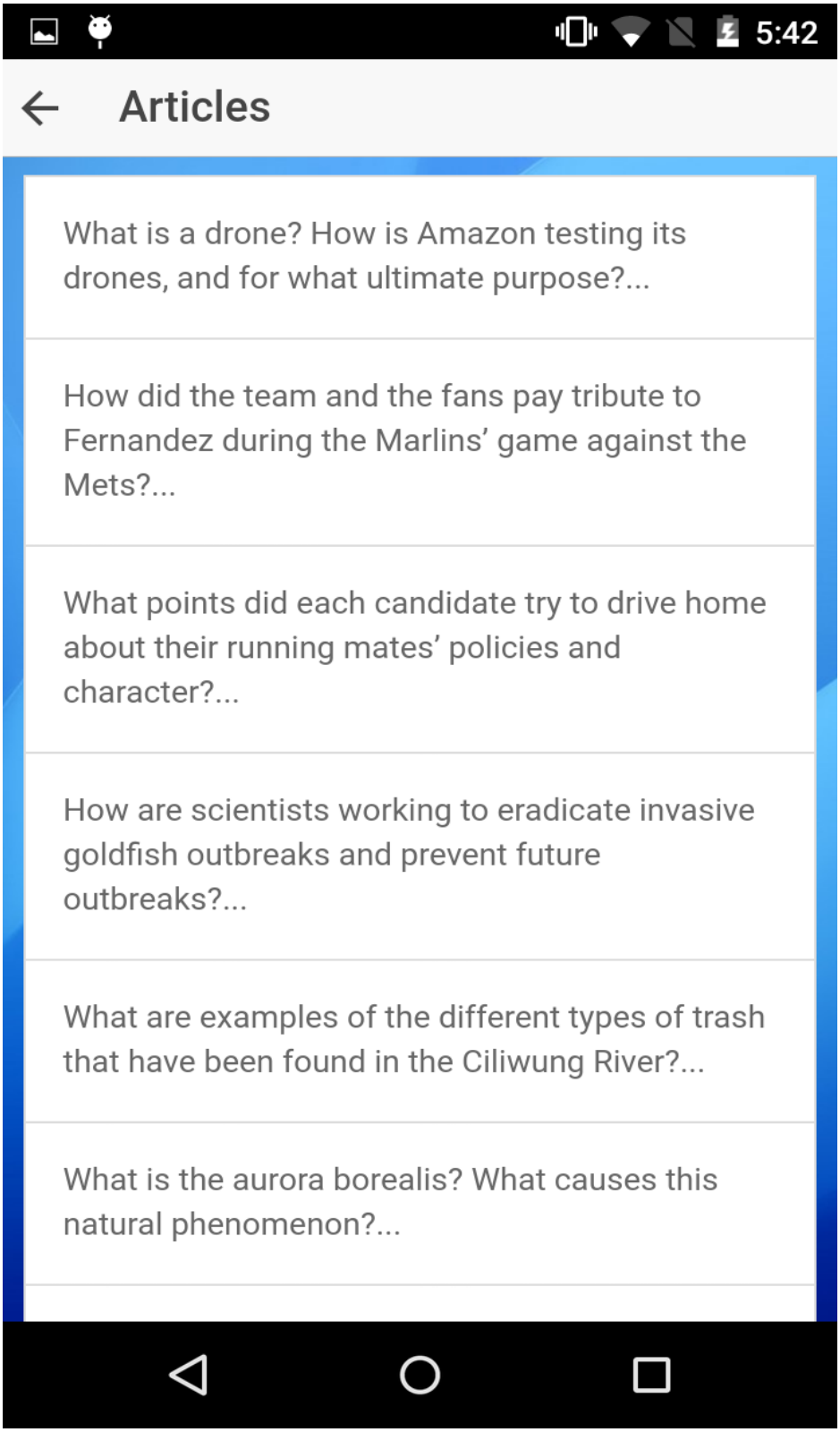
5:39
Gallery
Therapy
Music
Spa
Time Management
Exercise
Stress Management
Nature
Hobby
Yoga
Meditation
Tips on Managing Stress
• Positive Attitude
• Support System
• Exercise

Join Class Page

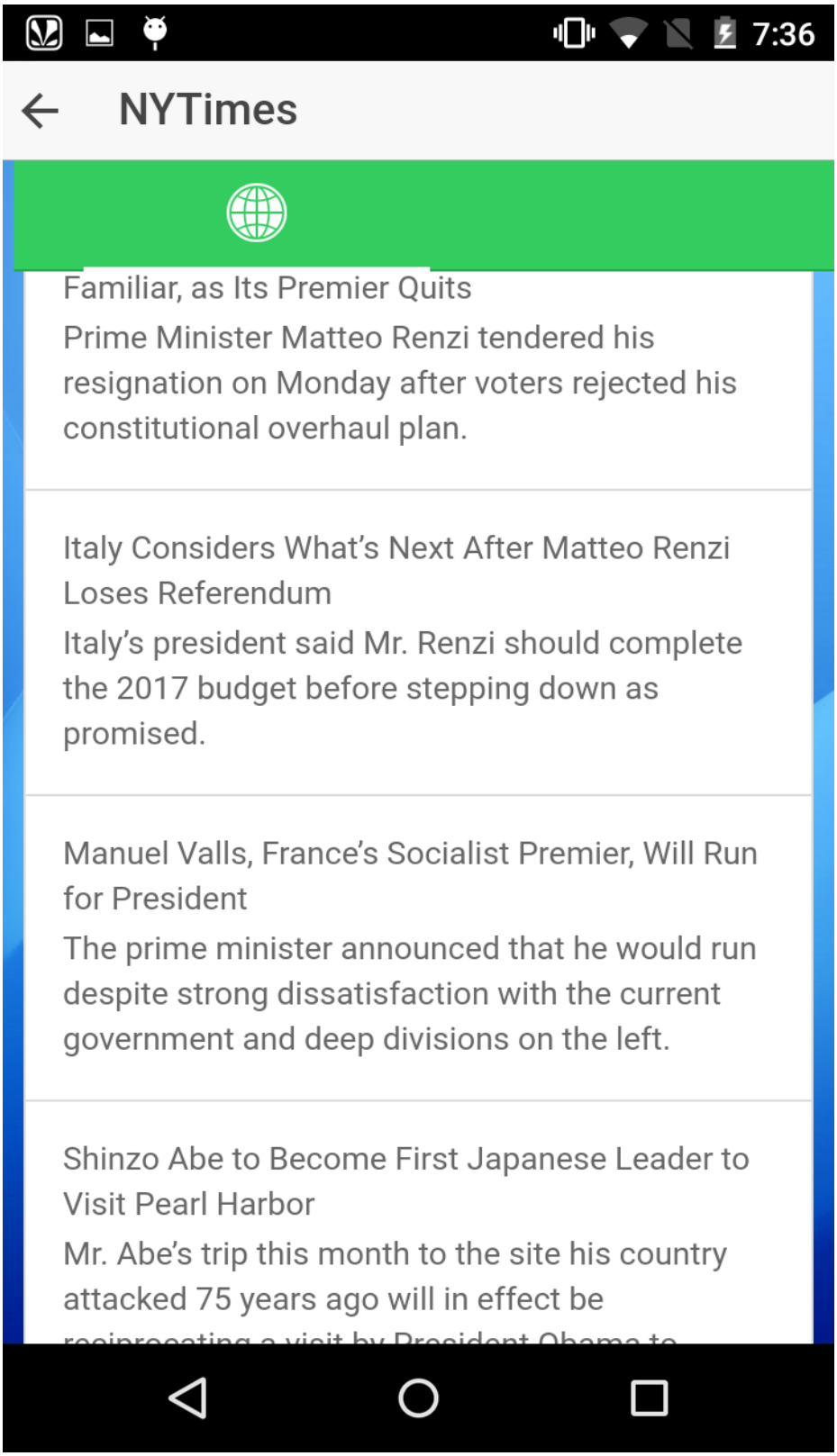


Articles API

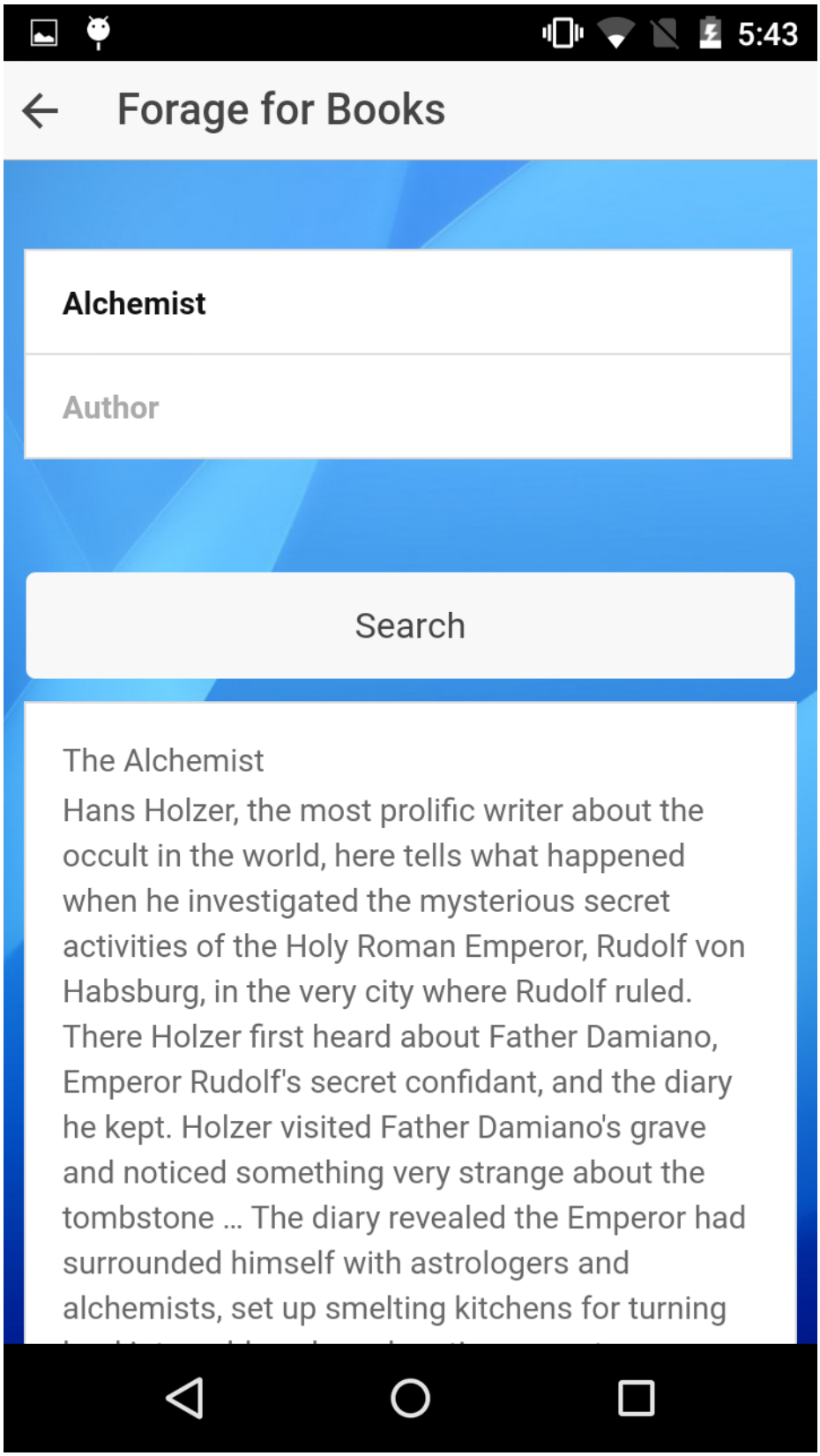



5:42
Articles
What is a drone? How is Amazon testing its drones, and for what ultimate purpose?...
How did the team and the fans pay tribute to Fernandez during the Marlins' game against the Mets?...
What points did each candidate try to drive home about their running mates' policies and character?...
How are scientists working to eradicate invasive goldfish outbreaks and prevent future outbreaks?...
What are examples of the different types of trash that have been found in the Ciliwung River?...
What is the aurora borealis? What causes this natural phenomenon?...

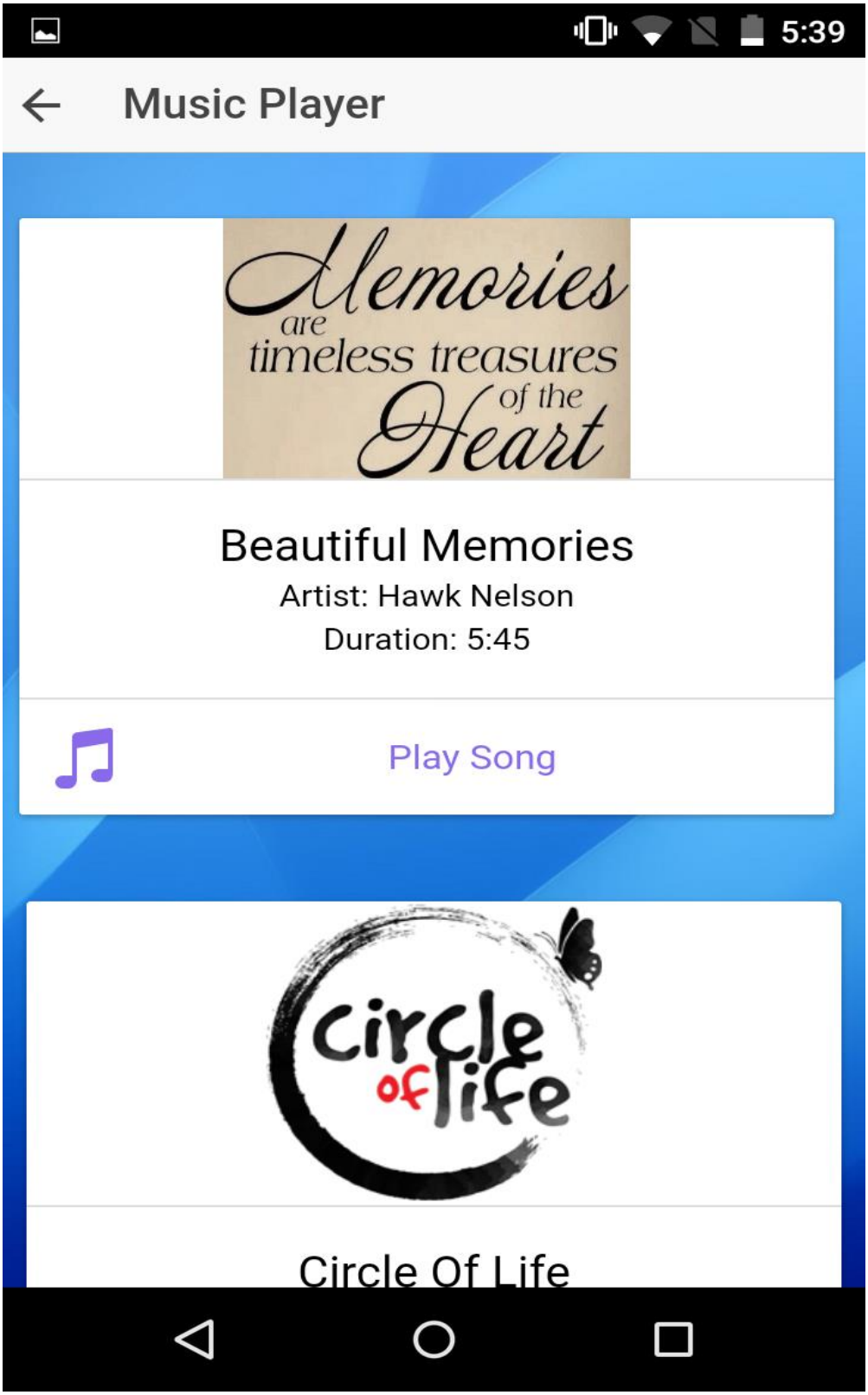
NYTimes Technology


7:36
NYTimes
Familiar, as Its Premier Quits
Prime Minister Matteo Renzi tendered his resignation on Monday after voters rejected his constitutional overhaul plan.
Italy Considers What's Next After Matteo Renzi Loses Referendum
Italy's president said Mr. Renzi should complete the 2017 budget before stepping down as promised.
Manuel Valls, France's Socialist Premier, Will Run for President
The prime minister announced that he would run despite strong dissatisfaction with the current government and deep divisions on the left.
Shinzo Abe to Become First Japanese Leader to Visit Pearl Harbor
Mr. Abe's trip this month to the site his country attacked 75 years ago will in effect be

Books


5:43
Forage for Books
Alchemist
Author
Search
The Alchemist
Hans Holzer, the most prolific writer about the occult in the world, here tells what happened when he investigated the mysterious secret activities of the Holy Roman Emperor, Rudolf von Habsburg, in the very city where Rudolf ruled. There Holzer first heard about Father Damiano, Emperor Rudolf's secret confidant, and the diary he kept. Holzer visited Father Damiano's grave and noticed something very strange about the tombstone ... The diary revealed the Emperor had surrounded himself with astrologers and alchemists, set up smelting kitchens for turning

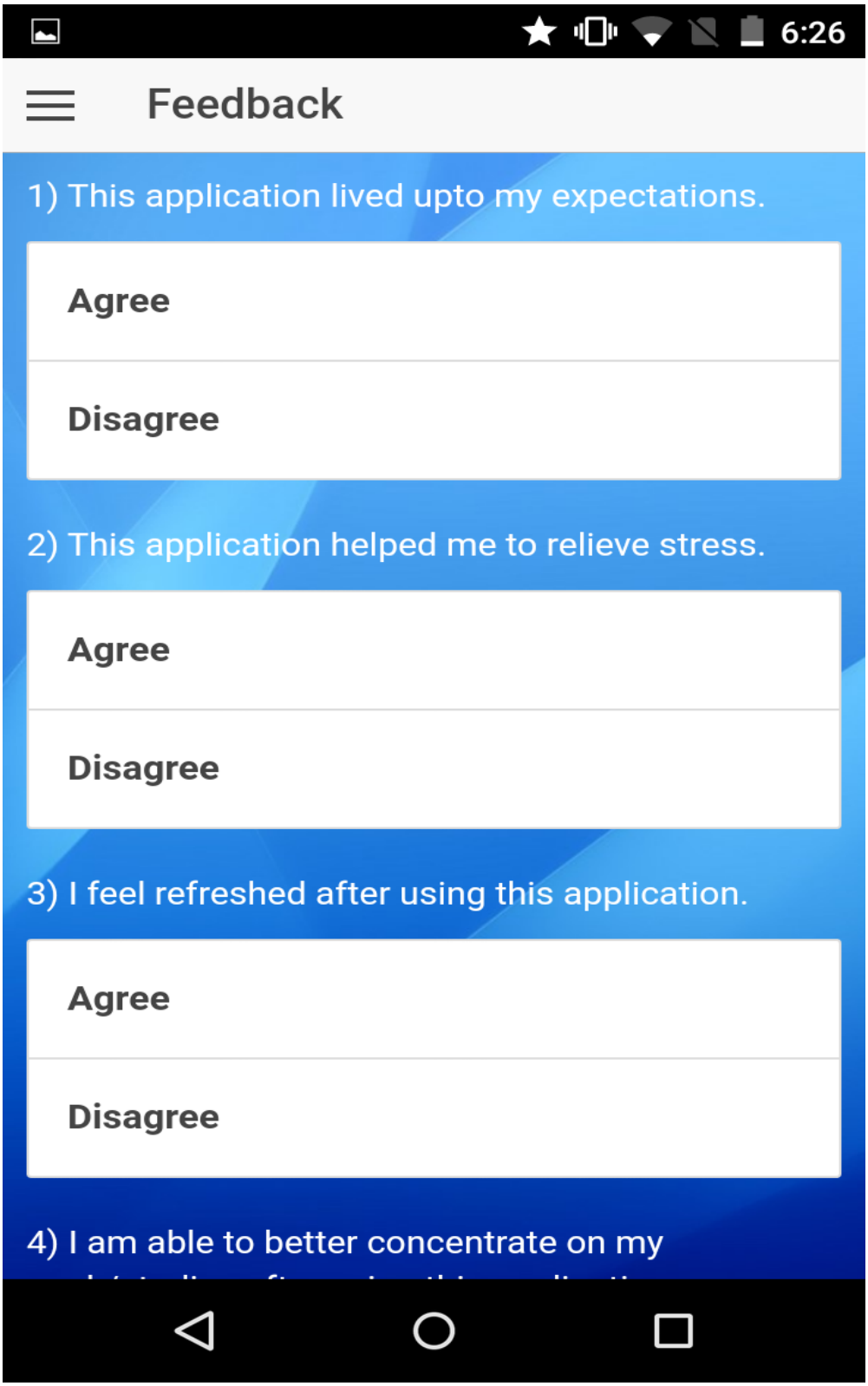
Music Player



Game

8:56
Games
Click the board to fire at a ship. Try to sink every battleship!

Feedback


6:26
Feedback
1) This application lived upto my expectations.
Agree
Disagree
2) This application helped me to relieve stress.
Agree
Disagree
3) I feel refreshed after using this application.
Agree
Disagree
4) I am able to better concentrate on my

VI. Testing

Unit Testing

Sr. No.	Test Case	Description	Expected Outcome	Result
1.	Successful User Authentication	The user should login with username and password.	Successful Login	Pass
2.	Unsuccessful User Authentication	The user logs in with wrong username or password.	Login unsuccessful with error- Invalid username or password	Pass
3.	Successful user Oauth Login	The user enters correct credentials in Google or Facebook.	Successful login and transition to Home page	Pass
4.	Invalid Email ID	Admin accepts registration details from the user.	Successful registration and transition to Login page	Pass
5.	Registration by new user	Invalid Email Id alert.	Error- Enter valid email address	Pass

VII. Technology Used

Implementation of Mobile Apps- Technology Used

- Android SDK
- HTML
- CSS
- Ionic
- Javascript
- Firebase Oauth

VIII. Project Management

Work completed

Design and implementation of Launch page::

Launch page consists of basic information about the application with two buttons- Login and Register.

Design and implementation of Login page::

Login page will login into the application and also has Oauth 2.0 social login with Facebook and Google.

Design and implementation of Youtube Player::

Users can view various funny videos, motivational videos to overcome their stress.

Design and implementation of Gallery page::

Gallery will include an automatic slideshow of images representing various quick fix for stress reliving.

Design and implementation of Join Classes page::

Users can join various classes like music, dance, yoga, exercise based on the user's location and vicinity to that class.

Design and implementation of Music Player::

Users can listen to many stress relieving soothing music.

Design and implementation of Books::

Users can read books to have a break from their work and get refreshed.

Design and implementation of News & Articles page::

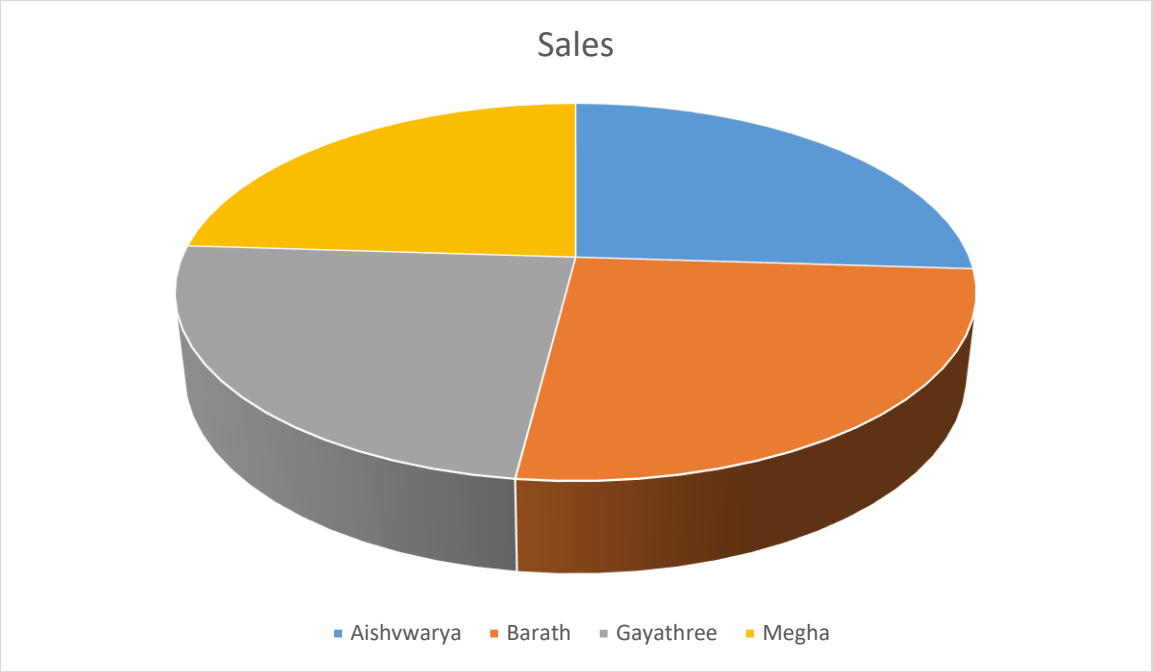
Users can read news and articles to overcome stress.

Design and implementation of Game::

Users can play game to free themselves from stress.

Contribution

- Barath Naravula Loganathan -- 26%
- Aishvwarya Natarajan Iyer – 26%
- Gayathree Natarajan Iyer – 24%
- Megha Nagabhushan – 24%



IX. Bibliography

https://www.ted.com/talks/andy_puddicombe_all_it_takes_is_10_mindful_minutes

http://www.techtimes.com/articles/57571/20150605/12-mobile-apps-that-help-relieve-stressand-anxiety.html

http://www.mindbodygreen.com/0-2557/Why-Stress-Management-Is-So-Important-for-Your-Health.html

https://www.verywell.com/tips-to-reduce-stress-3145195

http://www.webmd.com/balance/guide/blissing-out-10-relaxation-techniques-reduce-stress-spot