SPARK4MIND

Team:: 4

Team Members::

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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 Goal and Objectives

- **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.

  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 videos to different age group
  - ➢ Checking progress of user
  - ➢ Give 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

Registration page

Stress Test page

Increment 2:   Integrating YouTube videos

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

Integrating soothing music

Increment 3:   Integrating simple stress relieving games

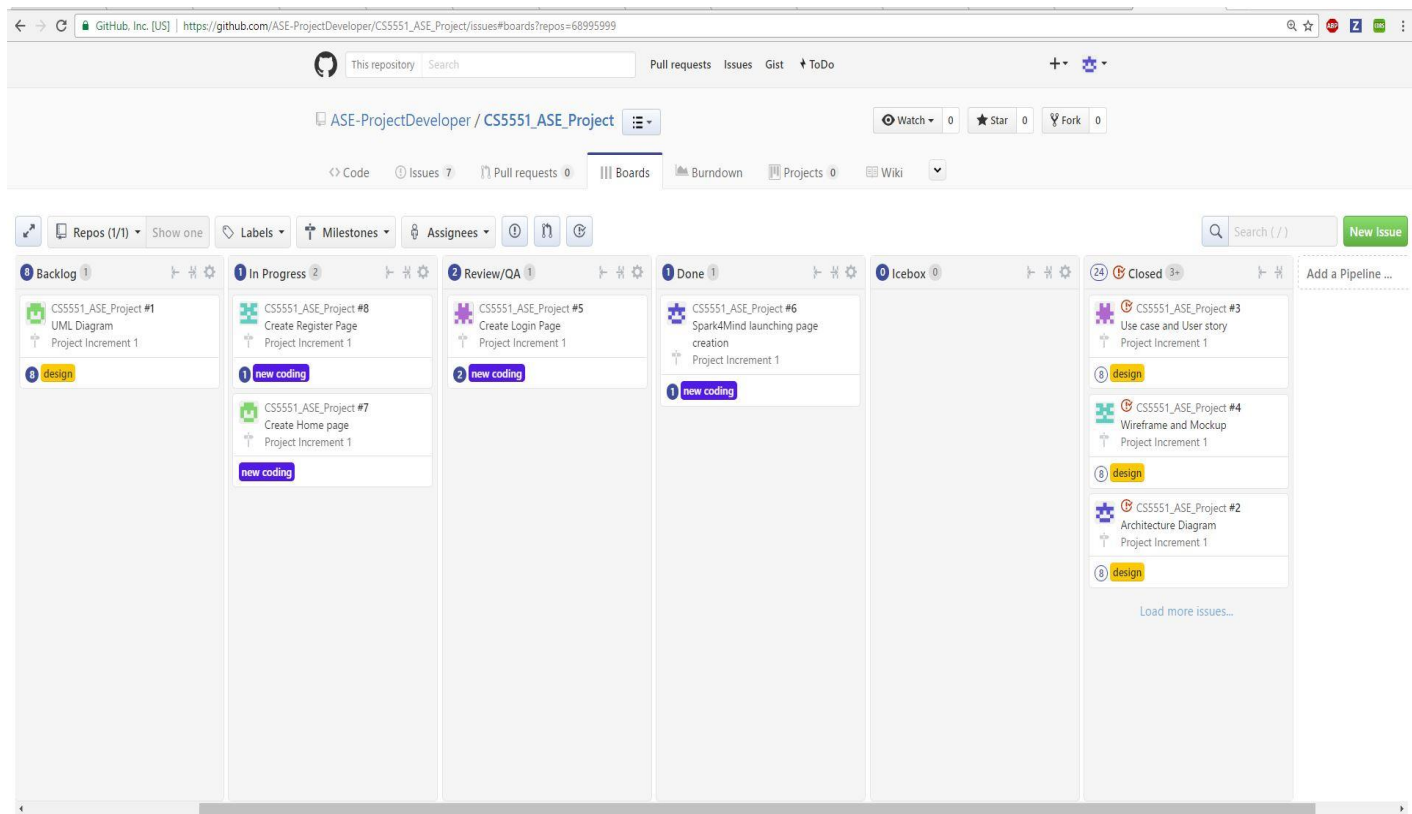Generating Progress report for user

Feedback form

Increment 4:   Deployment

Testing

Stories (Issues): Scenario & Use case specification

➢ The user first logs in to the application or signs up if not registered.
➢ The user will answer various questions and the stress meter will specify the stress level.
➢ Depending on the user's stress level user can select among many stress relieving options like: Games, Music, Videos.
➢ If the user selects videos, user will have various options like yoga exercises, inspirational talks, music video etc.
➢ Once the user is done with it, there will be a graph that shows the improvement in his/her stress level.
➢ Later on, user can provide feedbacks for the application.
➢ User logs out of the application and is stress free!

Project Timelines, Members, Task Responsibility

Open Issues

Closed Issues

Burndown chart

IV.   First Increment Report

Detailed Design of Features

Wireframes

i)   Wireframe for Login page

ii)   Wireframe for Registration page

REGISTRATION

FIRST NAME
LAST NAME
AGE

GENDER: ◎ MALE   ◎ FEMALE

OCCUPATION	⌄

EMAIL ID
USERNAME
PASSWORD
CONFIRM PASSWORD

SIGNUP

iii)   Wireframe for Stress Test page

Class Diagram

```
┌─────────────────────────────┐
│            User             │
├─────────────────────────────┤
│ -firstName : String         │
│ -lastName : String          │
│ -userName : String          │
│ -password : String          │
└─────────────────────────────┘

┌─────────────────────────────┐
│         projectPage         │
├─────────────────────────────┤
│ -sessionID : String         │
├─────────────────────────────┤
│ +clickLogin() : void        │
│ +clickRegister() : void     │
└─────────────────────────────┘

┌─────────────────────────────┐        ┌─────────────────────────────┐
│            Login            │        │          Register           │
├─────────────────────────────┤        ├─────────────────────────────┤
│ -userName : String          │        │ -firstName : String         │
│ -passsword : String         │        │ -lastName : String          │
├─────────────────────────────┤        │ -userName : String          │
│ +validateLogin() : boolean   │       │ -age: String                │
│ +validateSocialLogin() : boolean │   │ -occupation: String         │
└─────────────────────────────┘        │ -gender : String            │
                                        │ -email : String             │
                                        │ -password : String          │
                                        ├─────────────────────────────┤
                                        │ +validateRegister() : boolean│
                                        └─────────────────────────────┘

┌─────────────────────────────────────┐
│             StressTest              │
├─────────────────────────────────────┤
│ -angryElement : Boolean             │
│ -anxiousElement : Boolean           │
│ -sleepElement : Boolean             │
│ -weightElement : Boolean            │
│ -concentrationElement : Boolean     │
│ -negativityElement : Boolean        │
│ -isolationElement : Boolean         │
│ -responsibilityElement : Booleanl   │
│ -overreactionElement : Boolean      │
│ -panicElement : Boolean             │
├─────────────────────────────────────┤
│ +calculateStressLevel() : int       │
└─────────────────────────────────────┘
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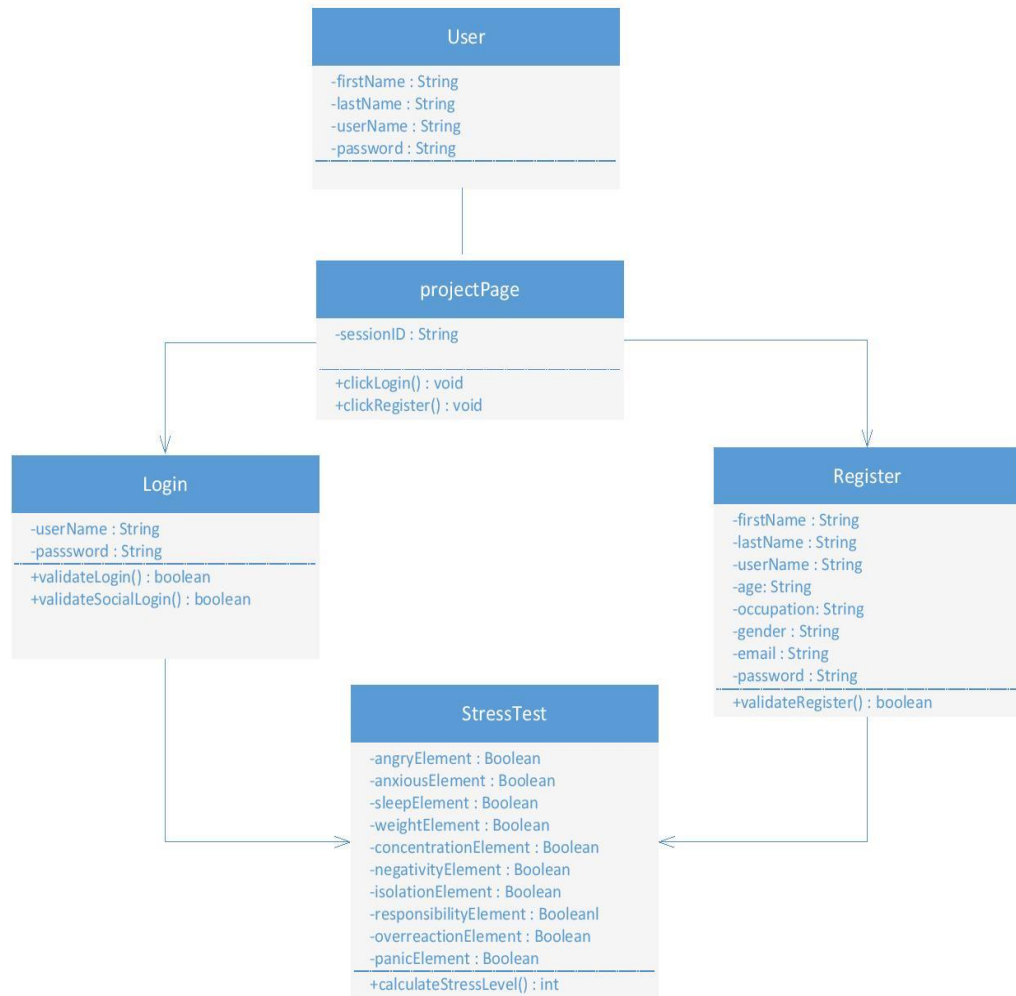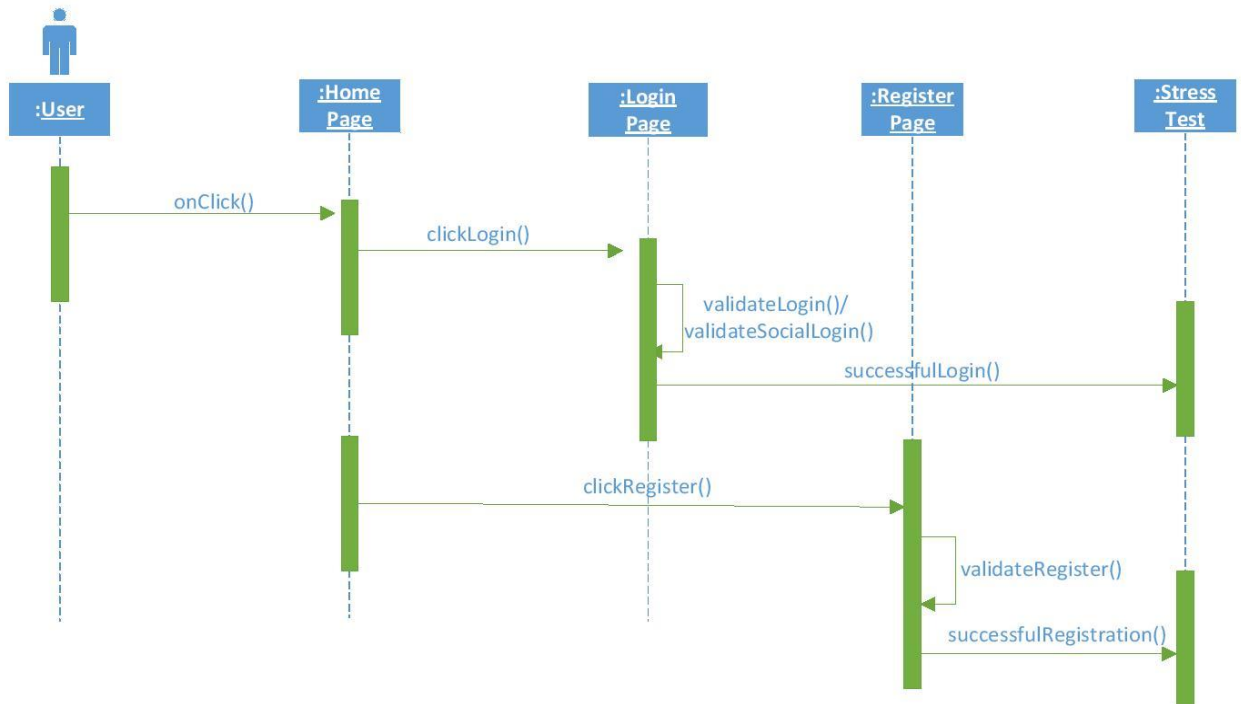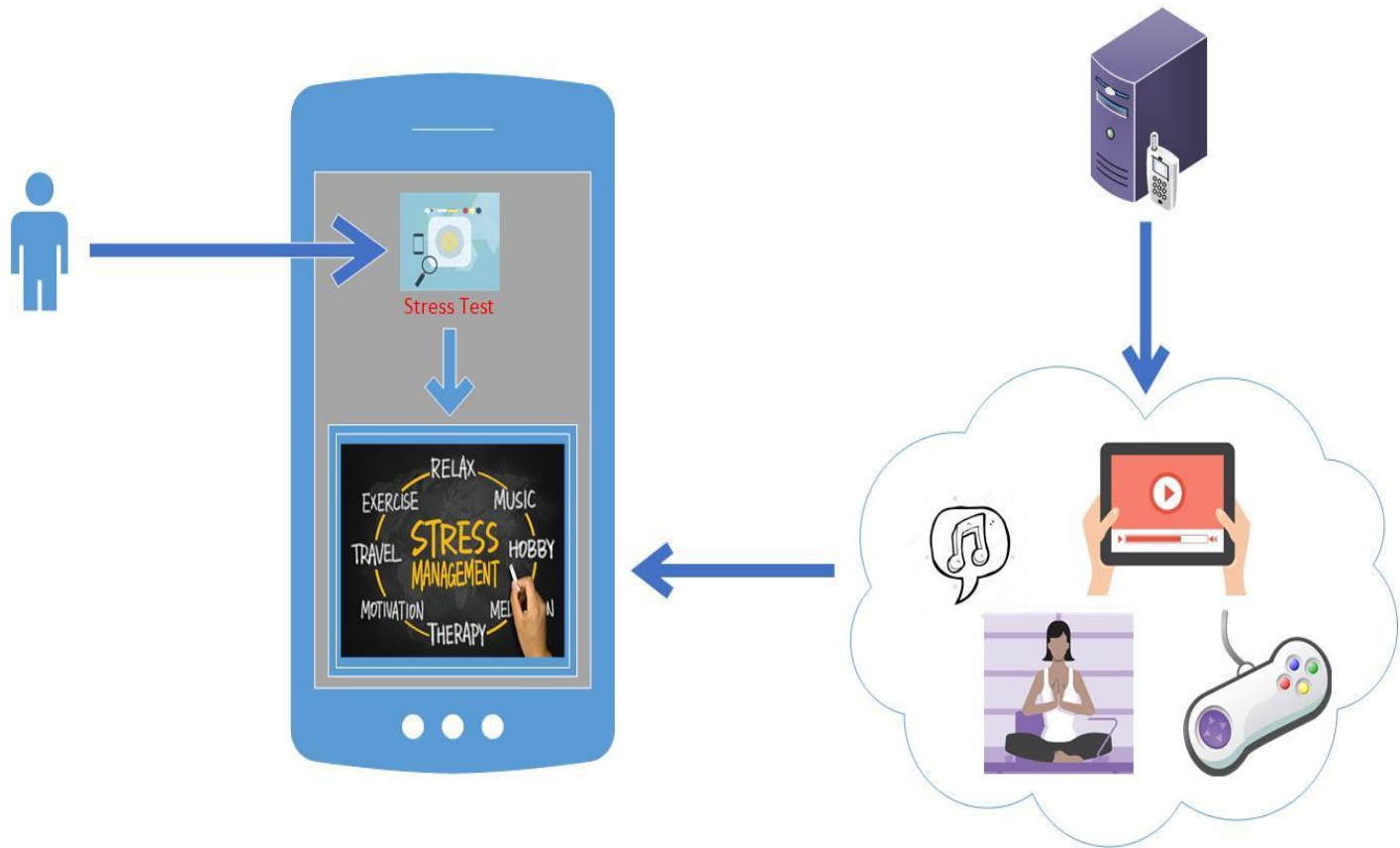
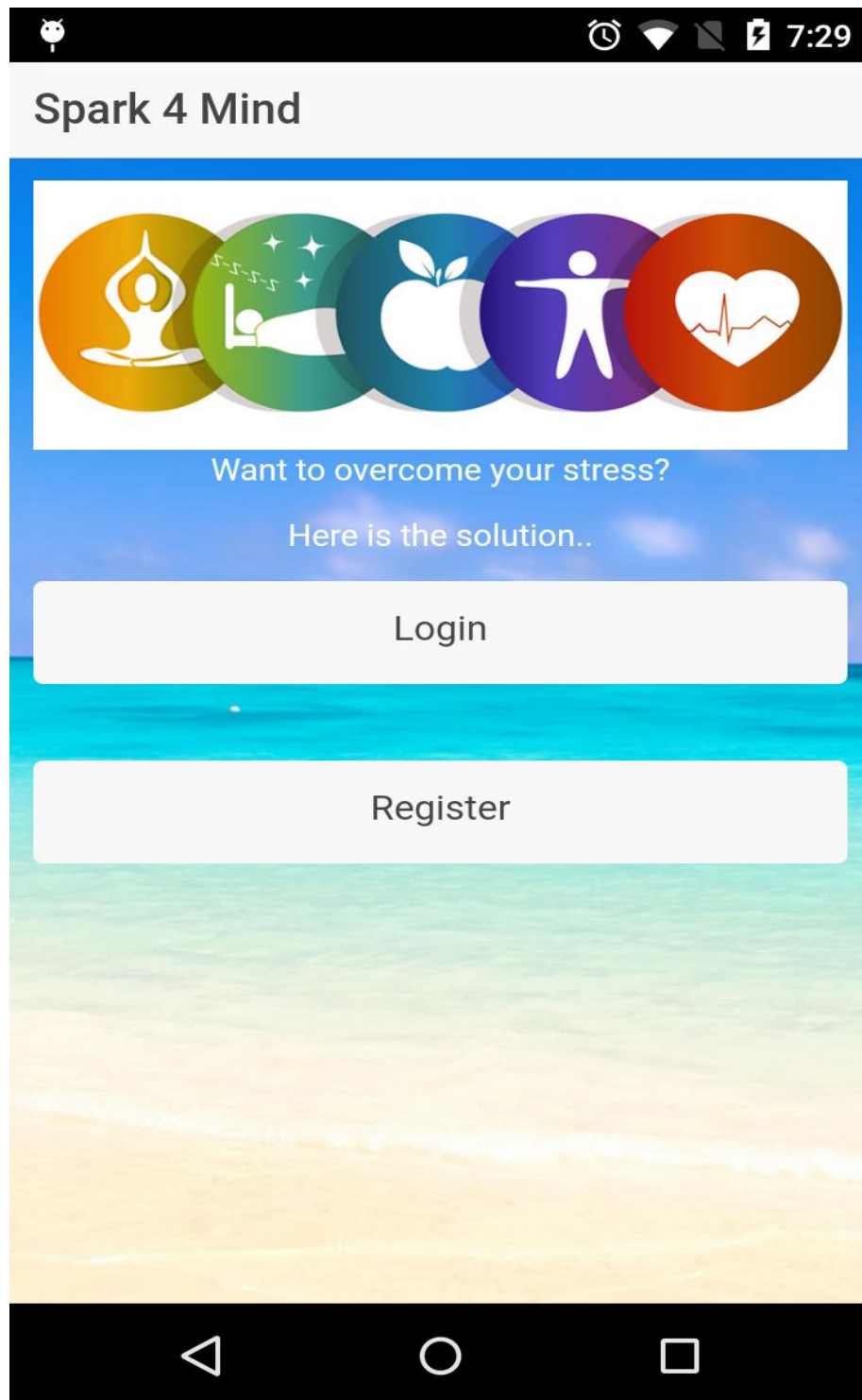## Use Case Diagram
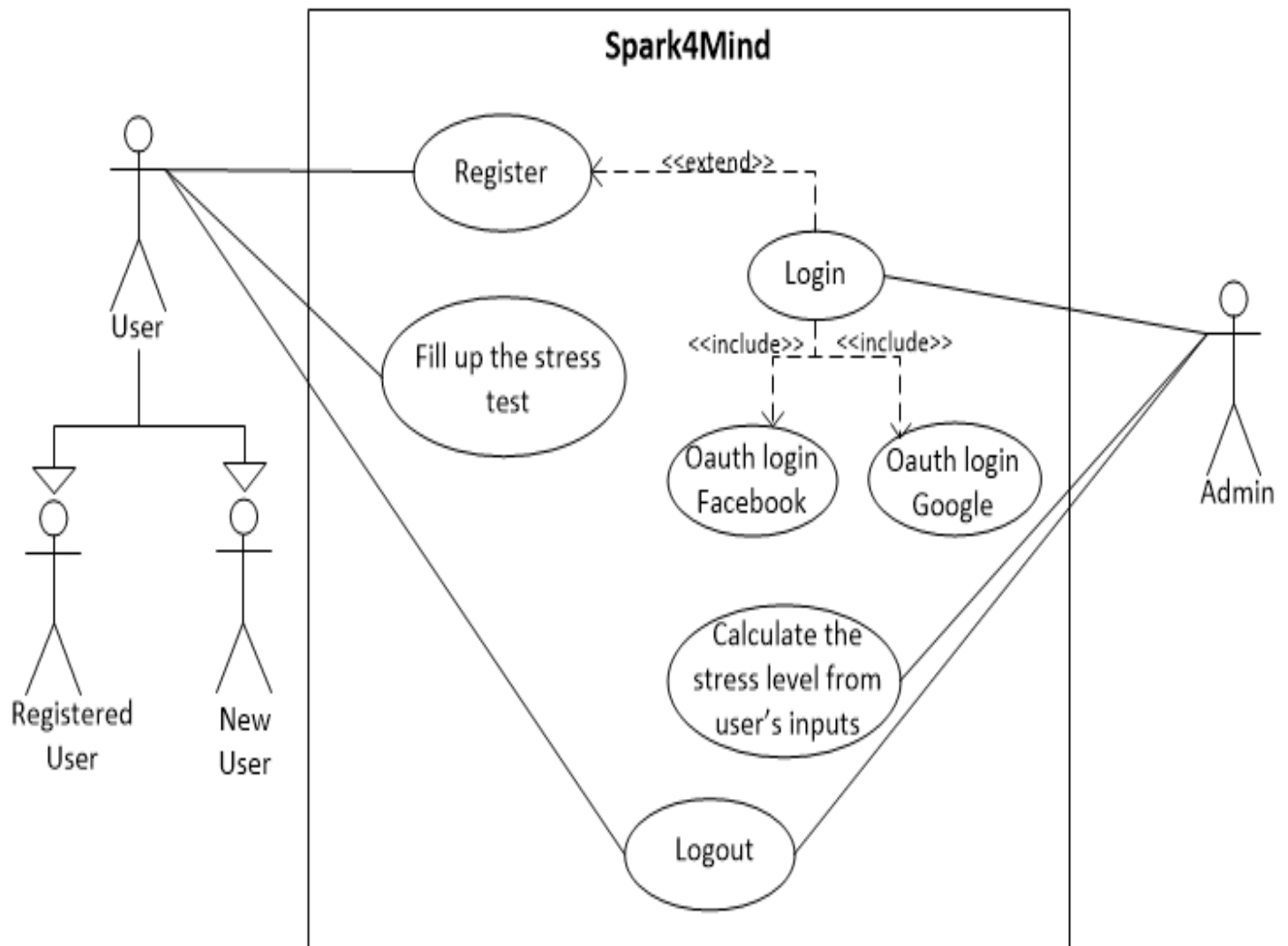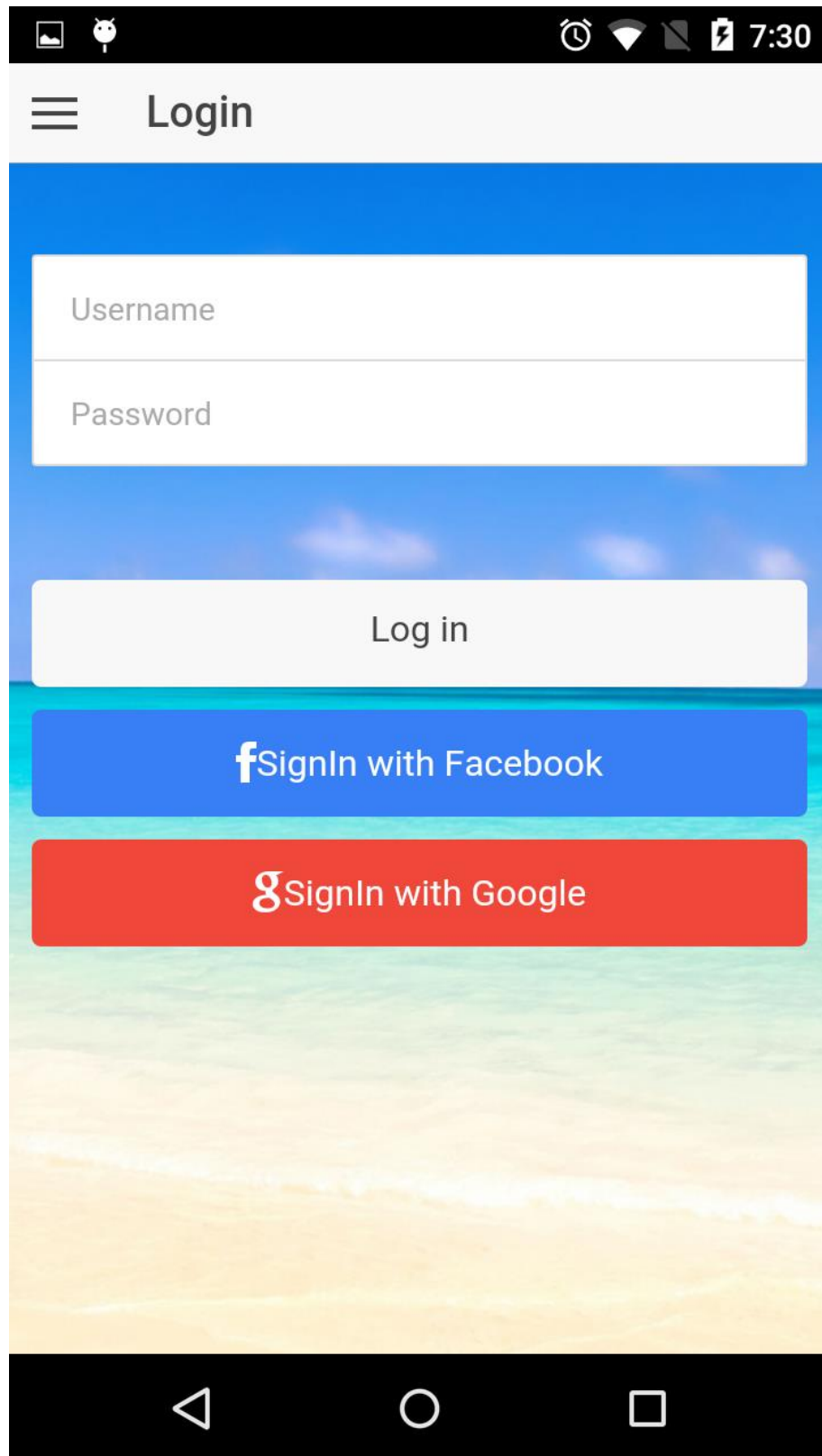
Activity Diagram
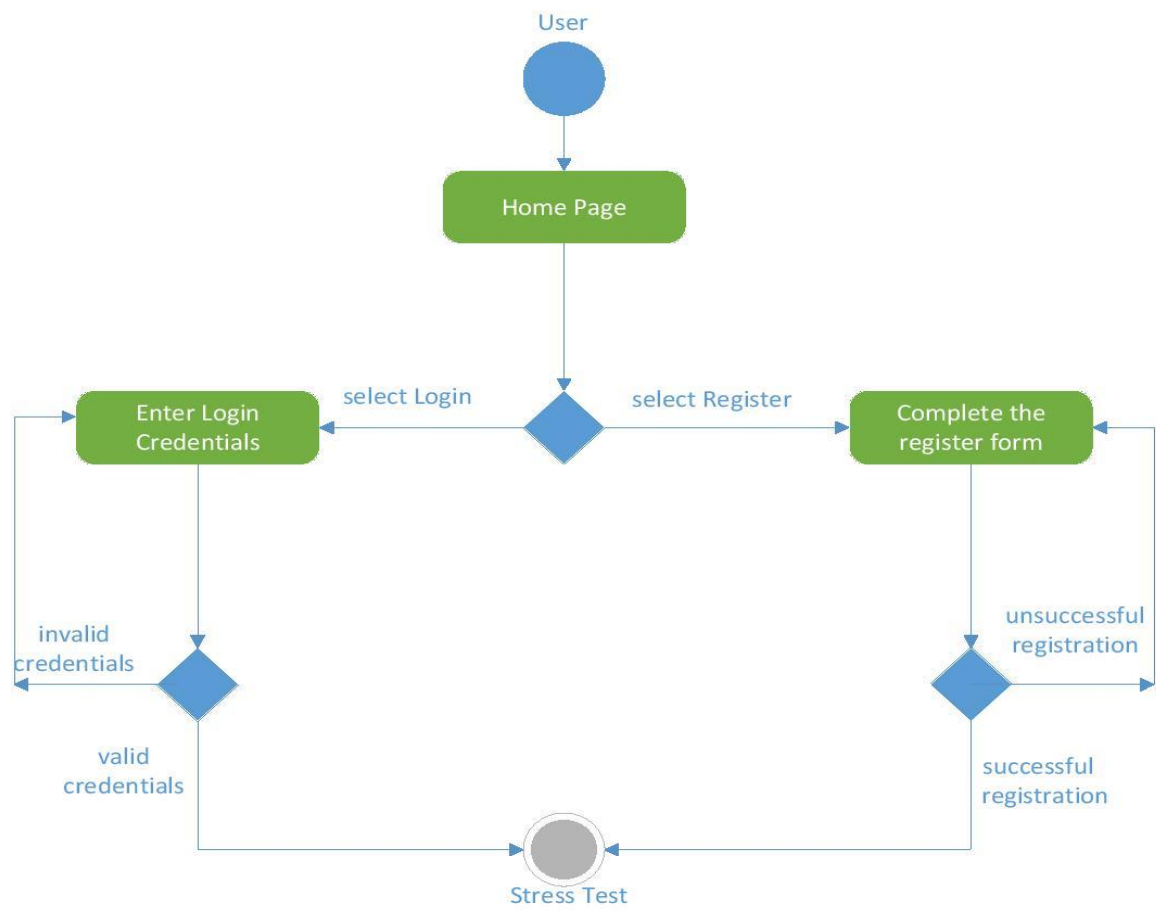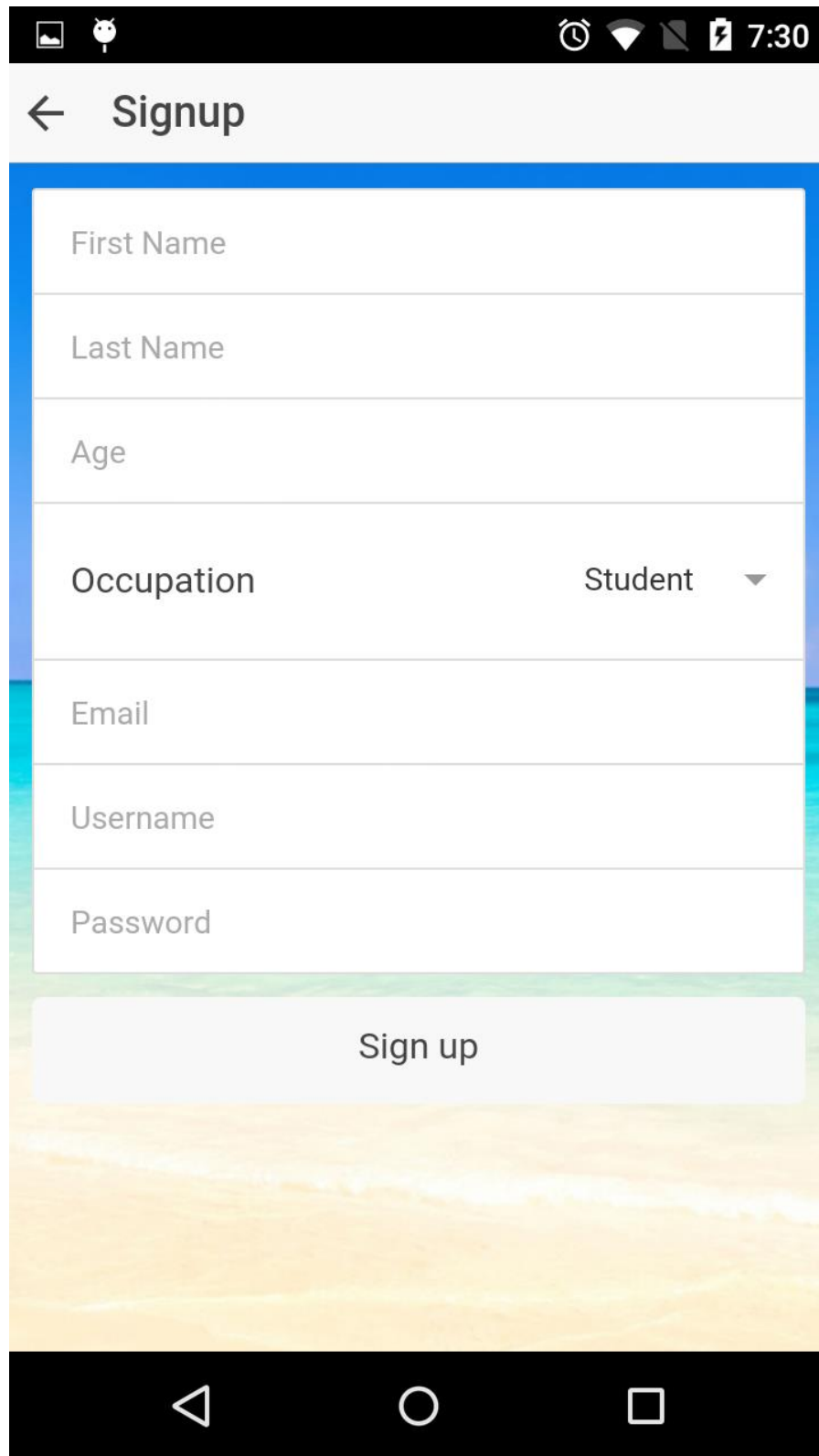
Sequence Diagram

Architecture Diagram

V.   Implementation

Launch Screen in Android

Login Screen in Android

Registration Screen in Android

Settings

Stress Test Form Screen in Android

VI.   <u>Testing</u>

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.   <u>Technology Used</u>

Implementation of Mobile Apps- Technology Used

- Android SDK
- HTML
- CSS
- Ionic
- Javascript

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.

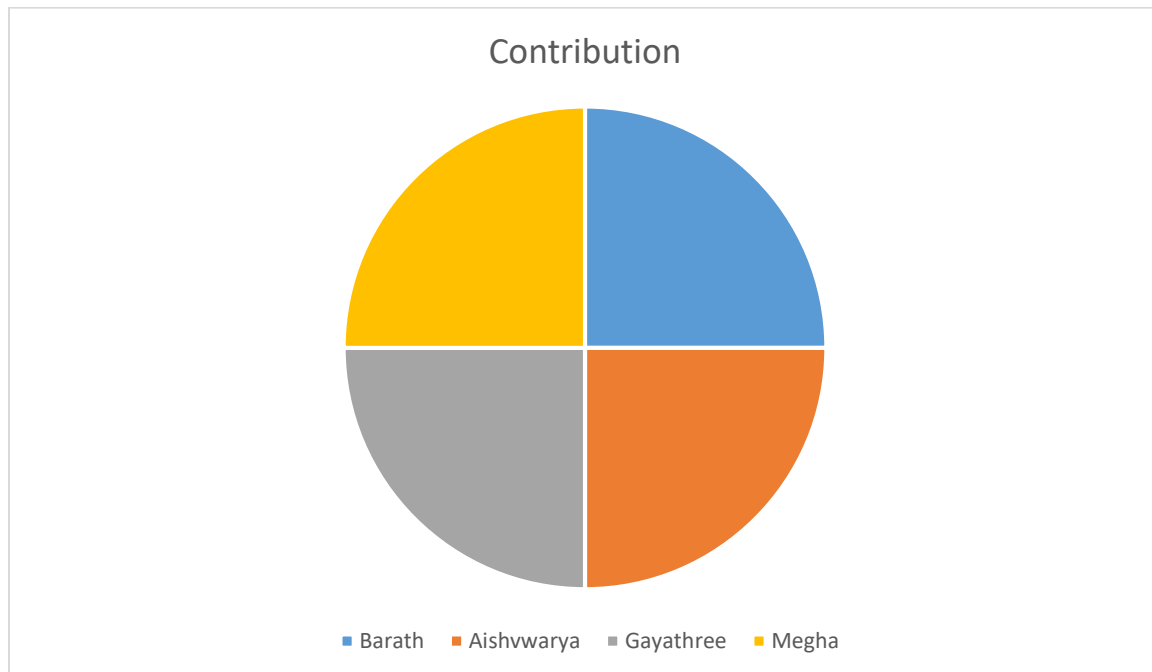Design and implementation of Registration page::

> Registration page will retrieve the basic information from the user like- Name, Age, Occupation, Username and Password. Stress is different for people with different age group and different occupation.

Design and implementation of Stress Test page::

> Stress Tester page will ask users various questions that will test the level of user's stress based upon their input.

Contribution

- ➢ Barath Naravula Loganathan -- 25%
- ➢ Aishvwarya Natarajan Iyer – 25%
- ➢ Gayathree Natarajan Iyer – 25%
- ➢ Megha Nagabhushan – 25%

Contribution

Barath   ■ Aishvwarya   ■ Gayathree   ■ Megha

IX.   Bibliography

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