CS 5551 - Advanced Software Engineering

Project Final Report

Spring 2017

LIFE

Team – 5

- Saidu Babu Dosapati - 20
- Vasireddy Alaap – 89
- Cherukuri Venkatesh - 14
- Nooka Nithin - 62

# Table of Contents

1.Introduction

Life:

Users who are using smartphones do not know how they are spending time with their smart phones. Our aim is to collect all the user's information and present that data in an organized way to users by the end of the day. So, he can get good idea on how he is using his Smartphone. Our goal is to increase the productivity of users by this application.

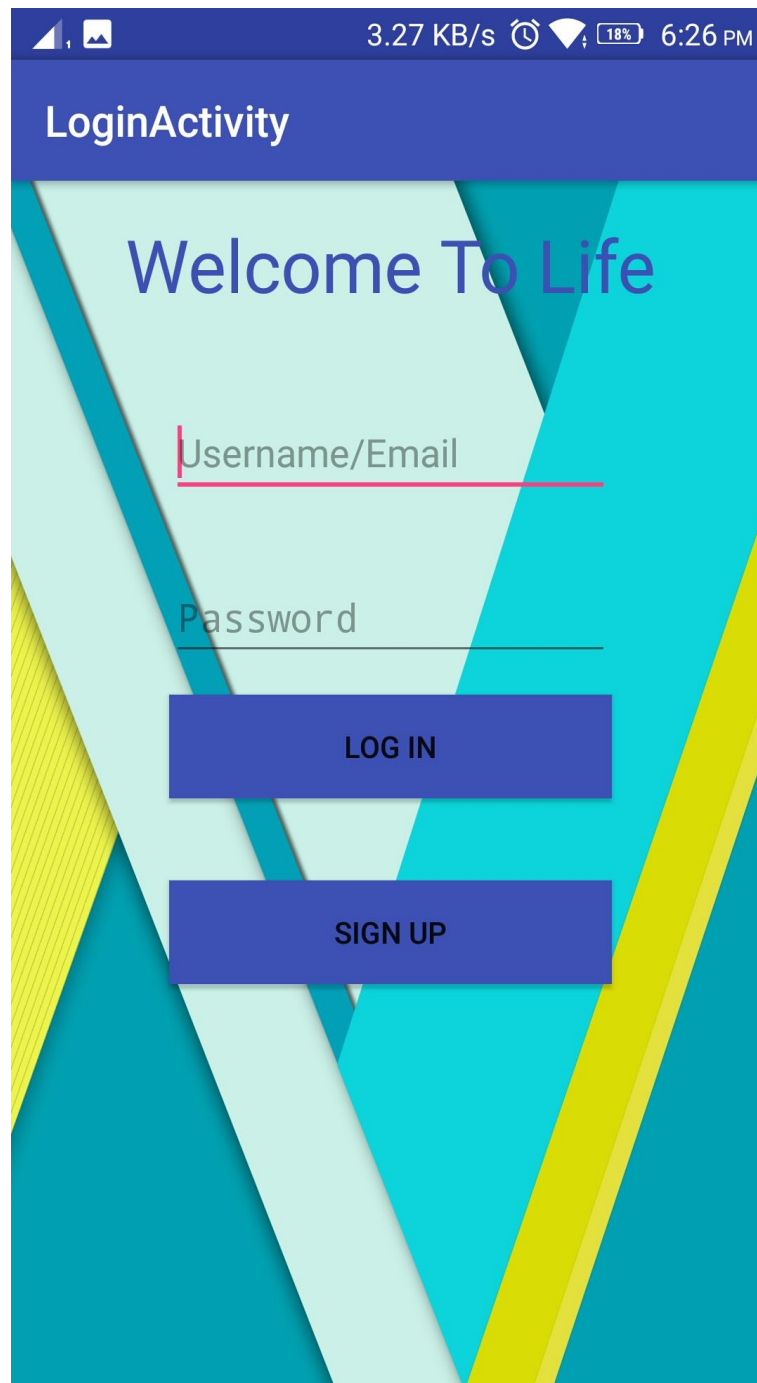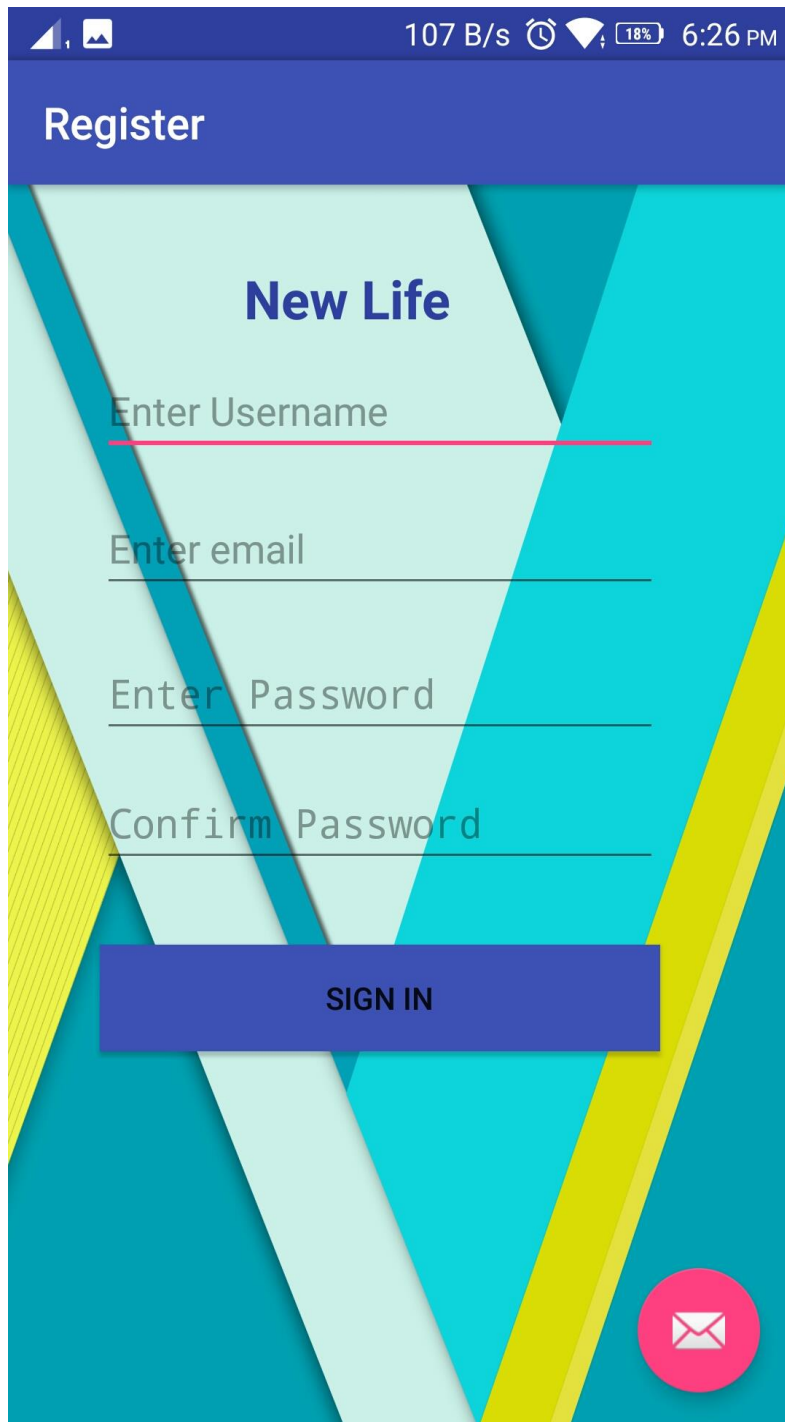## 2. Project Deployment & Project Management Application:

2.1 Welcome page for the application "Life"
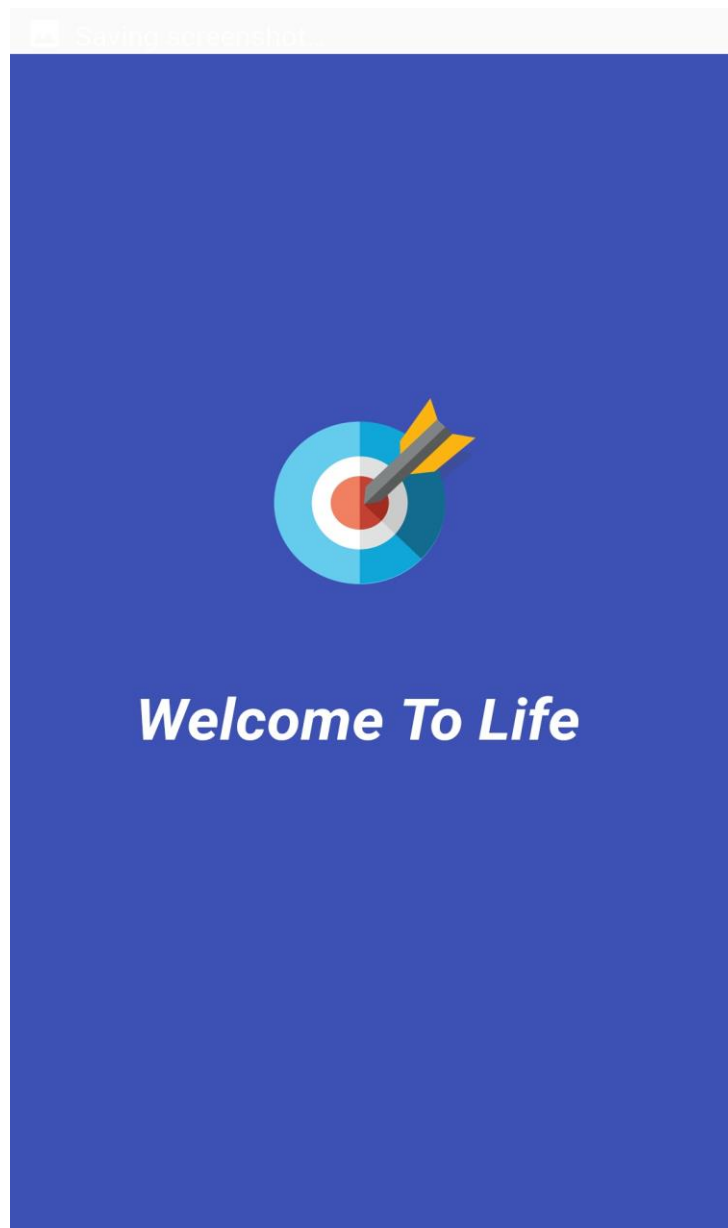
2.2 Login page for the application "Life"

2.3 Registration page for the application "Life"

2.4 Dashboard page for the application "Life"

2.5 Home page for the application "Life"

Total Time Used		143Min

Top 10 Time used Apps

	Chrome	52min
	Clock	30min
	Google App	13min
	hike	12min
	WhatsApp	11min
	YouTube	8min
	Gmail	4min
	Appy Geek	3min
	Cricbuzz	2min
	InCallUI	2min
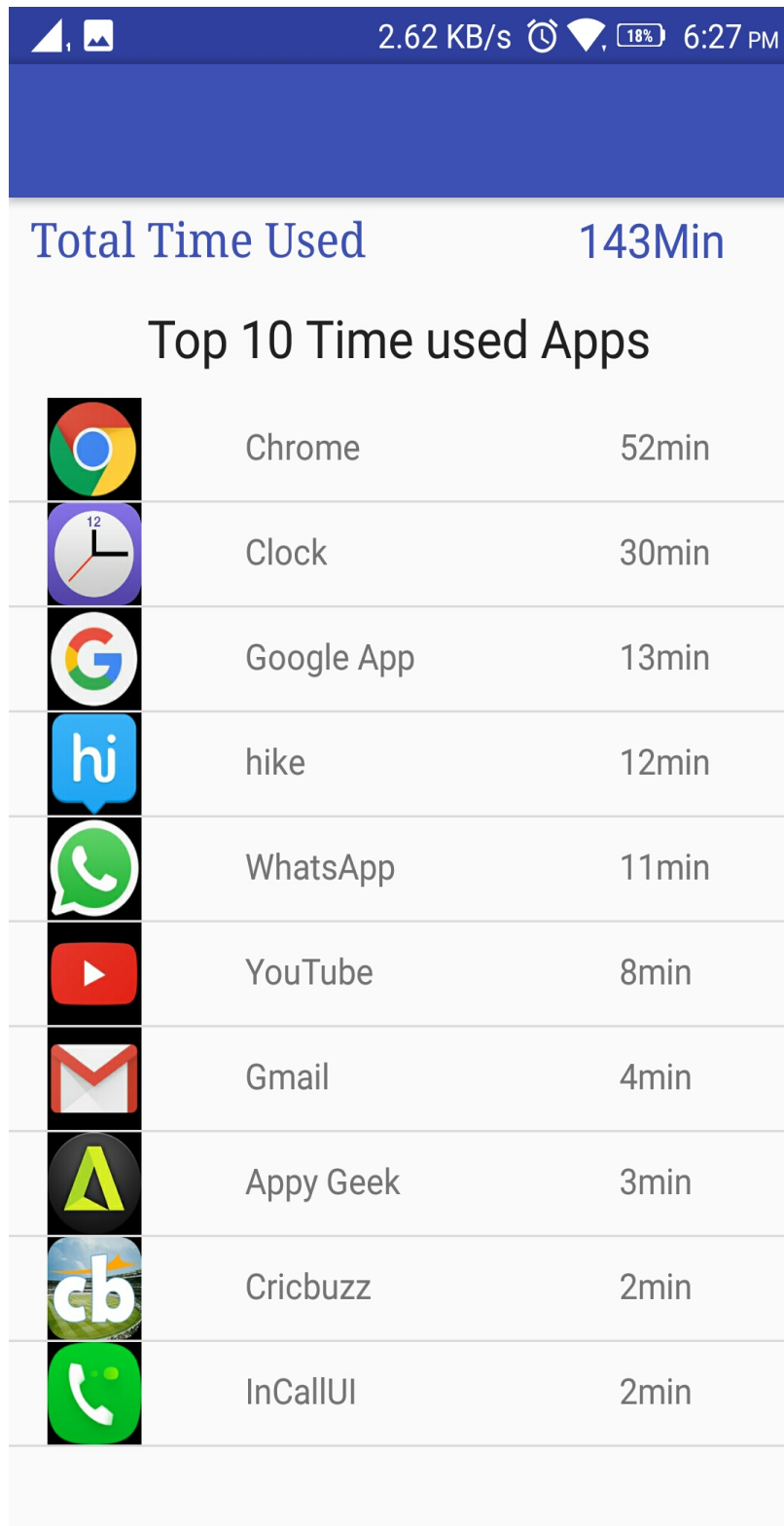
2.6 Usage page for the application "Life"

2.6.1 Usage Page – Overview
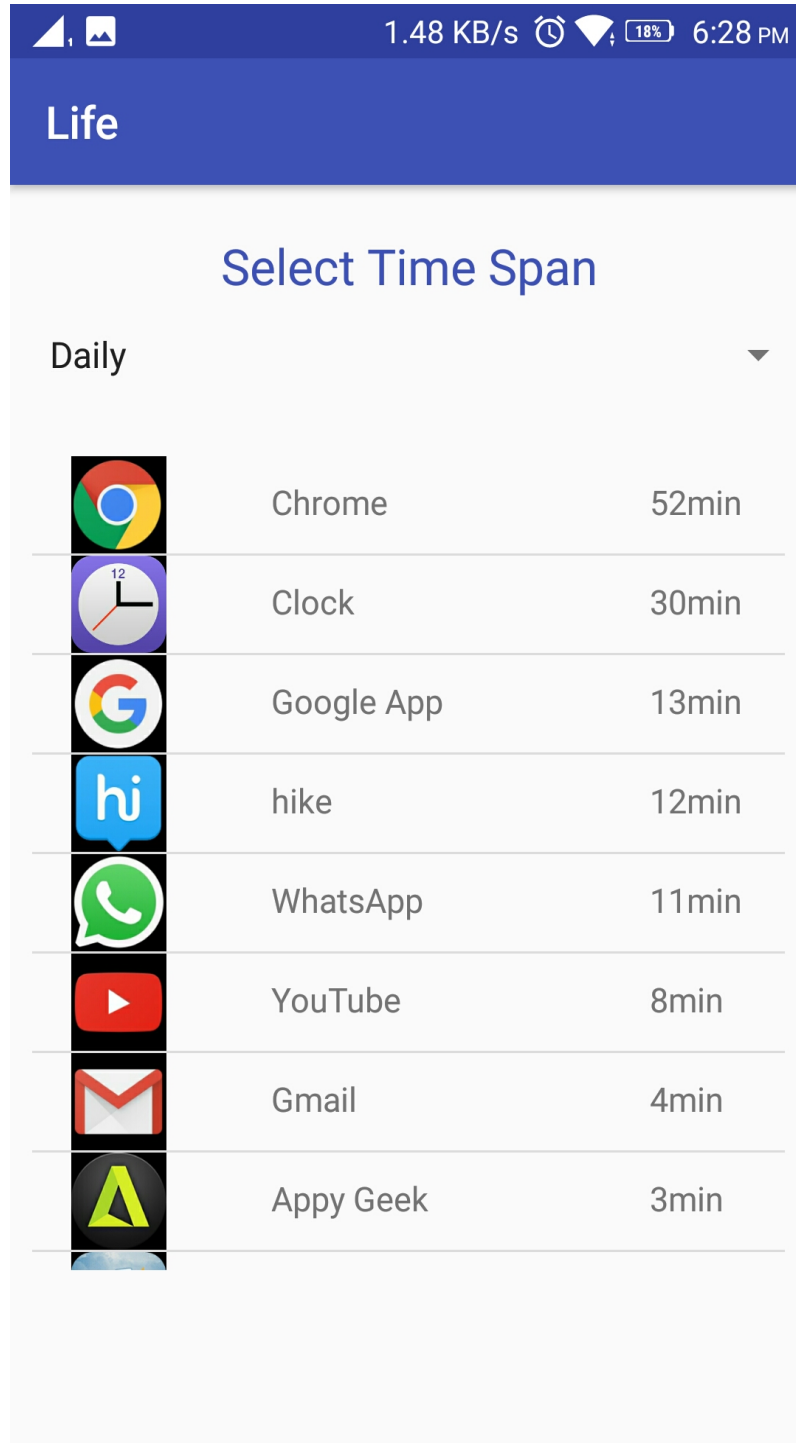
2.6.2 Usage Page – Spinner

2.7 Graphs page for the application "Life"

2.7.1 Daily View
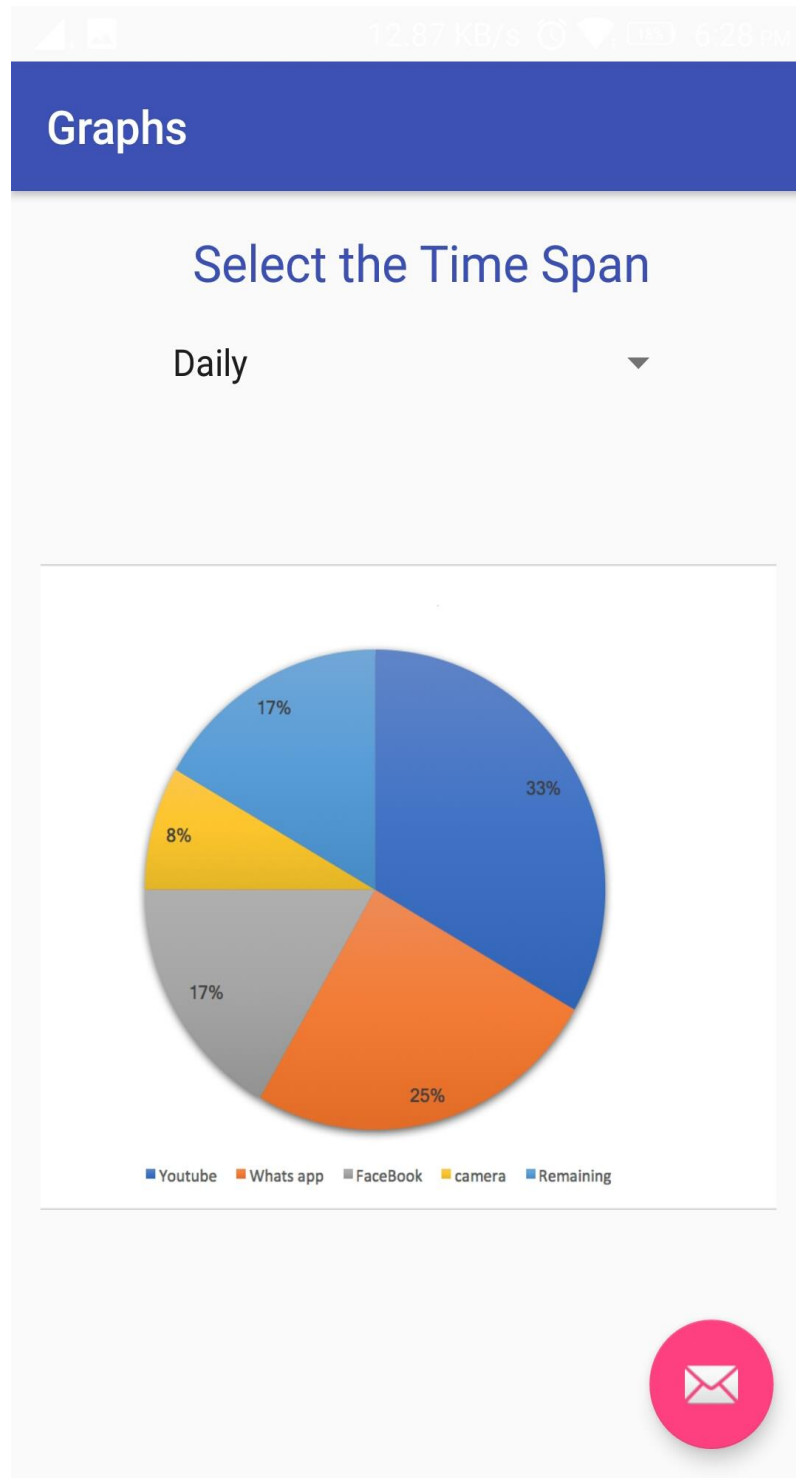
2.7.2 Weekly View
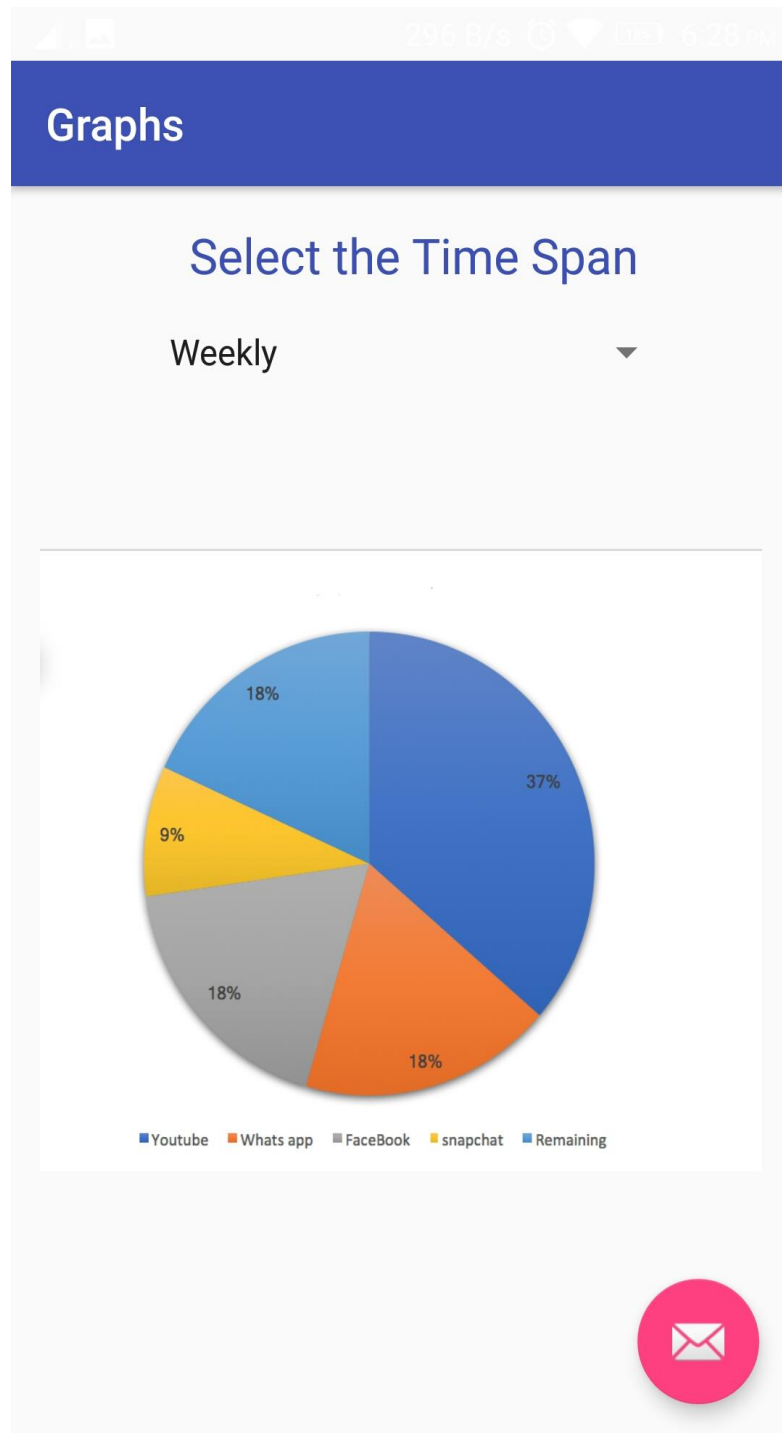
2.7.3 Monthly View

3. Project Proposal
Project Goal:

      Users who are using smartphones do not know how they are spending time with their smart phones. Our aim is to collect all the user's information and present that data in an organized way to users by the end of the day. So, he can get good idea on how he is using his Smartphone. Our goal is to increase the productivity of users by this application.

Specific Objectives:

- First, we need to find a way to collect the activity's in the background. Then we need to store all the data collected in a data base.
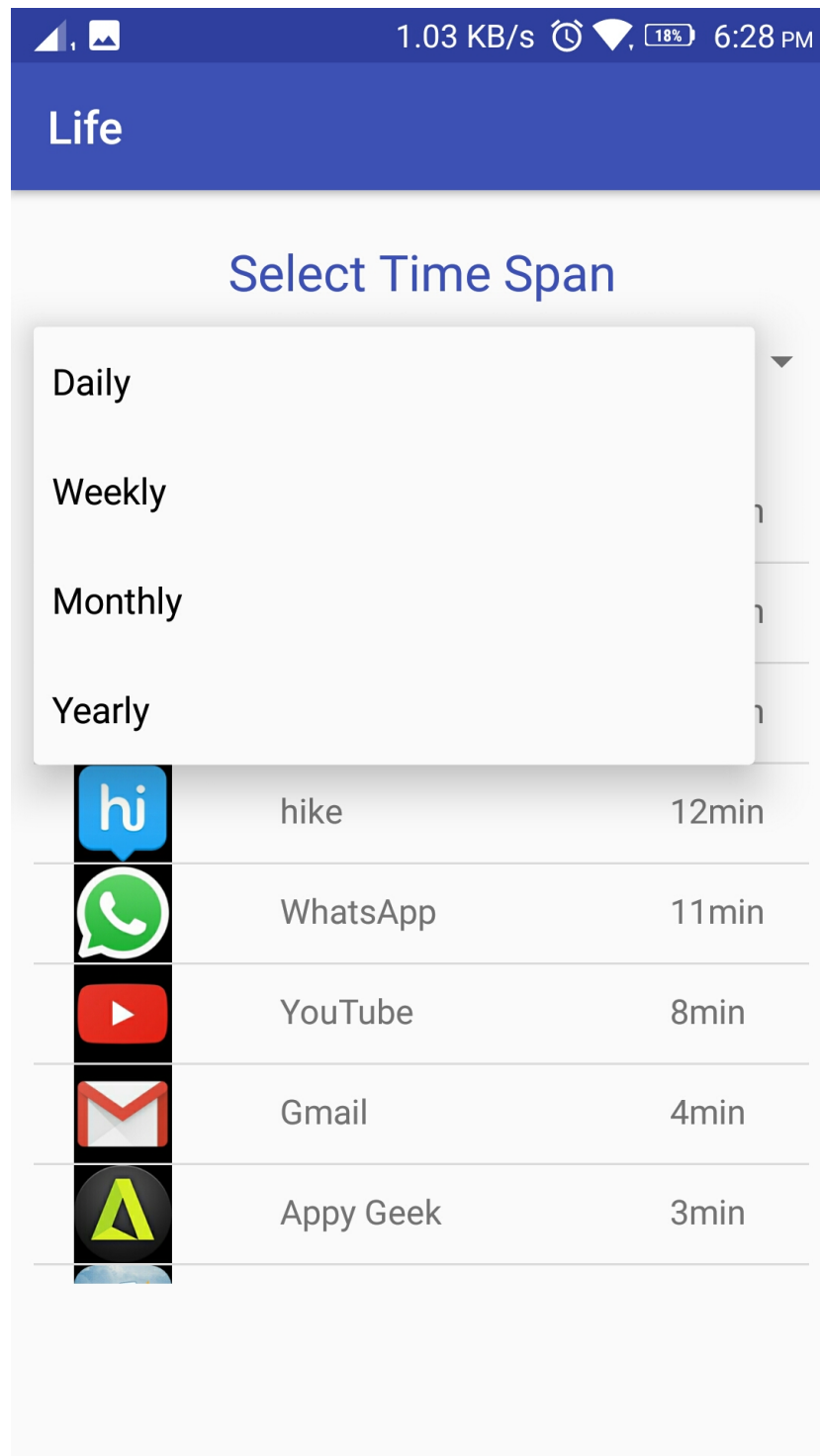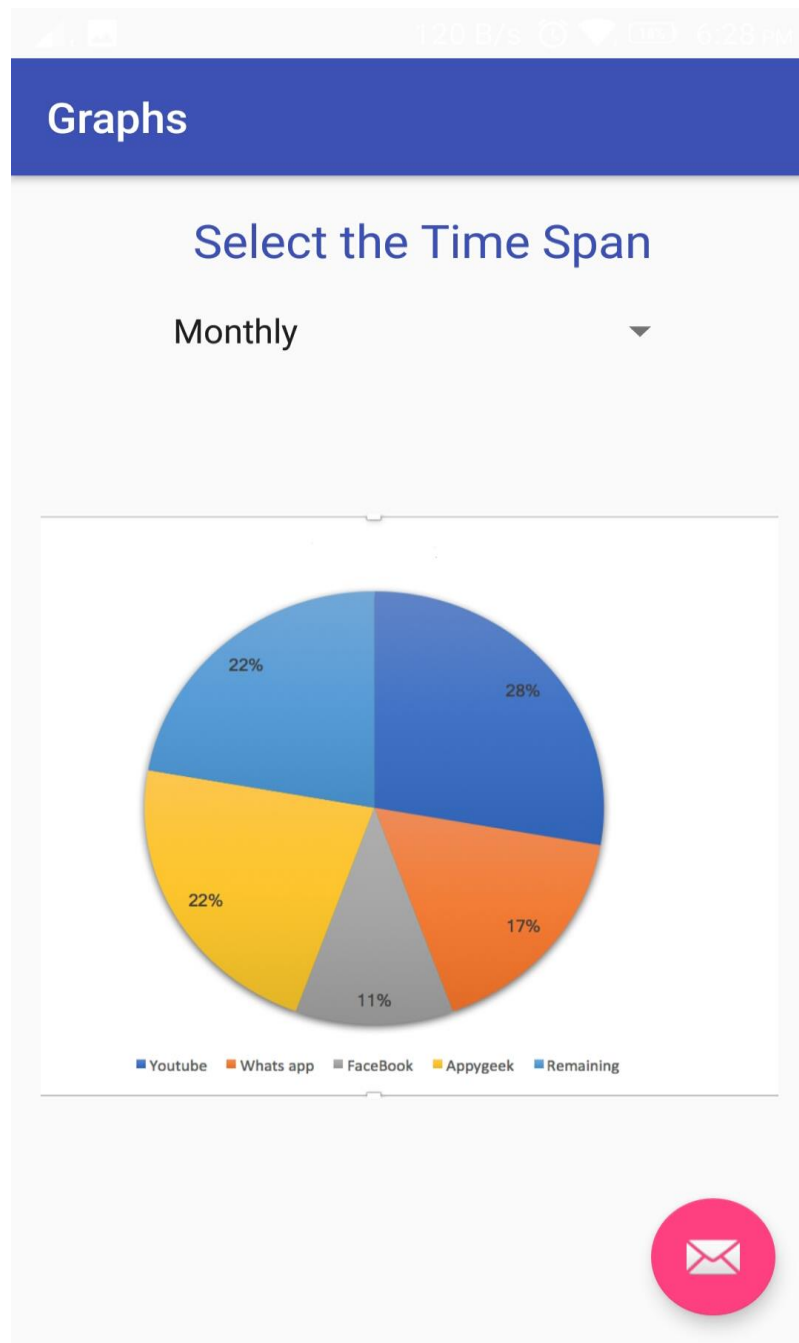- Then we need to organize the data to show it to user in different formats. For example, apps with highest time used or most clicks or percentage.
- Then use Pie charts and histograms to represent the data.

Specific features:

- User can see all his smart phone activities whenever he wants
- User can sort the time used by specific applications by day, week, month, year.
- User can see the data in pie charts and histograms
- User can request alerts based on specific activity time.
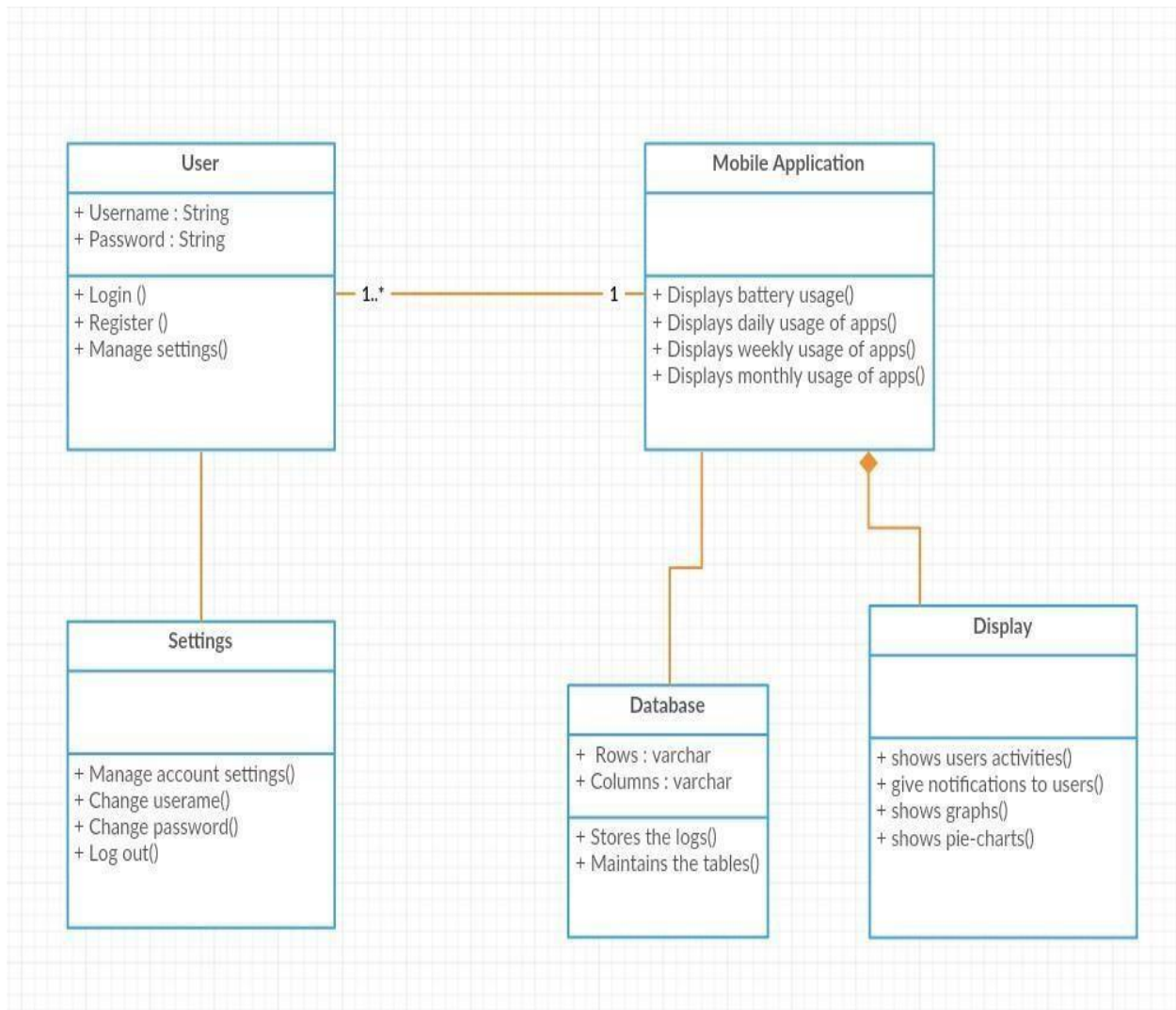
Significance:

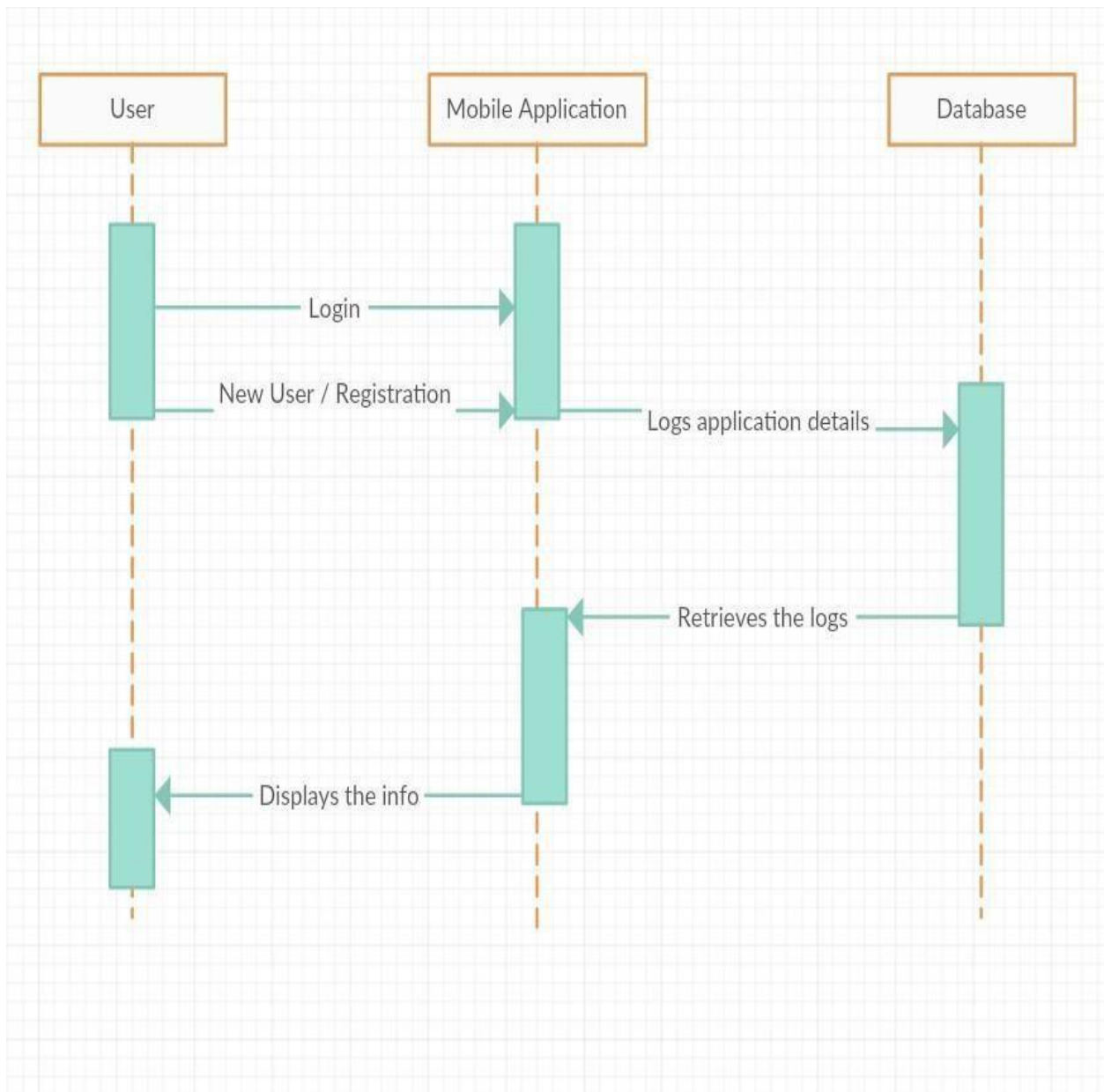- This application can help people to better understand their digital life.

It Helps them to focus on the thinks which are more important to them and avoid huge amount of time spending on whatever which is not useful.

4. Project Plan

4.1 Class Diagram

4.2 Sequence Diagram

4.3 Architecture Diagram

Software Architecture Diagram for our Mobile Application
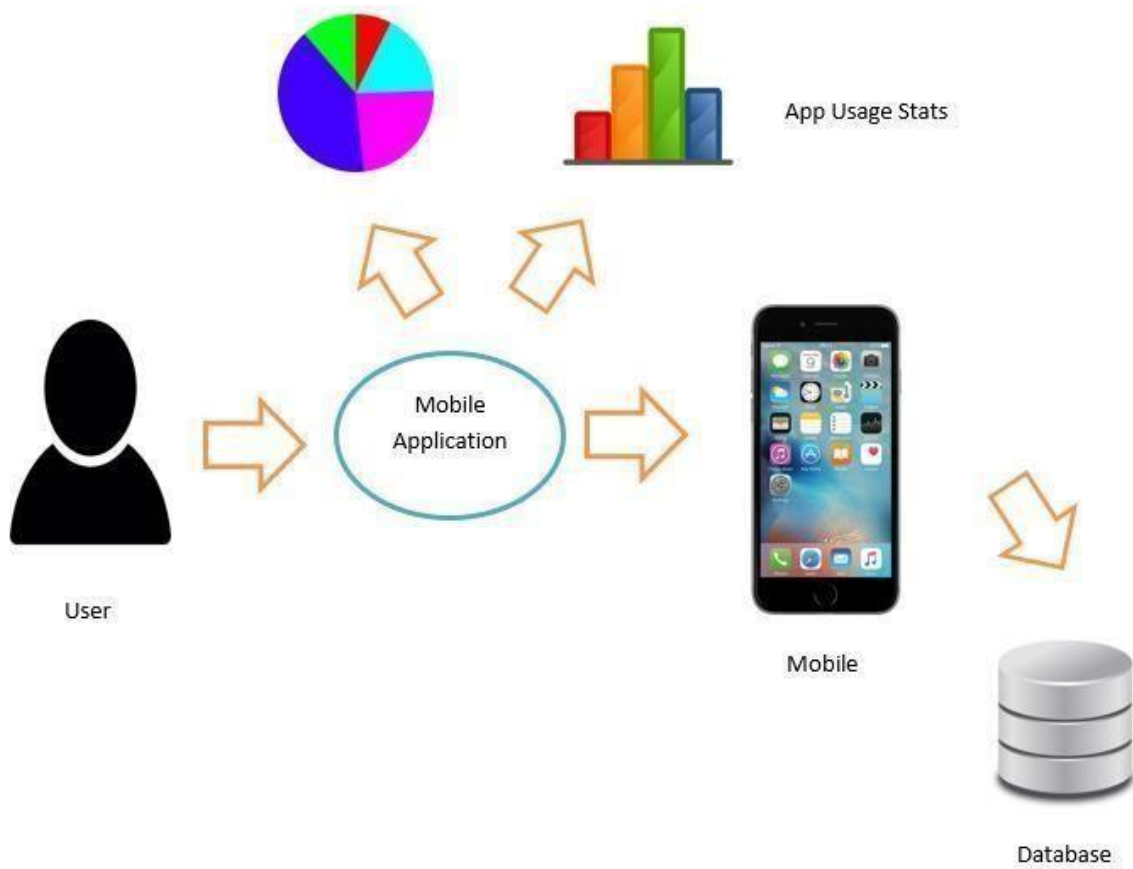
5. First increment Report

Implementation:

In the first increment, we had implemented the following features.

- We had developed the login and registration page.
- If he/she is a new user, he/she have to sign up by entering the details.
- Once the user is registered, he can use the login page to access the application.
- We made use of Android Studio for the implementation.

6. Second Increment Report

Implementation:

In the second increment, we had implemented the following features.

- We had developed the dashboard page which acts as an interface for the user to access the various app usage details.
- It consists of 3 categories of app usage references like, home page, usage page and graphs page.
- We had created the home page which shows the user the total time he had used the mobile on that particular day.
- It also displays the top 10 mobile applications used by the user on that particular day.

7. Third Increment Report

Implementation:

In the third increment, we had implemented the following features.

- We had developed the usage page which helps the user to view the applications used by the user in the form of a list view.
- We made use of SQLite database for storing the logs and displayed it on the list view with the help of array adapter.
- We had implemented a spinner, which enables user to view the applications used by him on a daily basis, weekly basis and monthly basis.

8. Fourth Increment Report

Implementation:

In the fourth increment, we had implemented the following features.

- We had developed the graphs page.
- The graphs page helps the user to view his mobile usage graphically.
- Here also, user will have a spinner so that he can view his activities on a daily basis, weekly basis and monthly basis.
- The graphs are displayed on the screen by making use of the Android Graph Libraries.

9. Test cases:

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

10. Project Management:

Implementation status report:

Technologies Used: Android Studio, XML, JAVA, Android Graph Libraries, SQLite Databse.

Work Completed

- Design and Architecture of the Application.
- Login and Registration using SQLite.
- Implemented Dashboard Page.
- Implemented Home Page.
- Implemented Usage Page.
- Implemented Graphs Page.

11. Presentation Slides URL.

https://docs.google.com/presentation/d/1d6Zcr4FTlRO3ZwvTHipVLxFizOL665jYZrM4Zg-6F7k/edit#slide=id.g21787a44d4_0_13

12. Github URL.

https://github.com/Nithin543/Team_5_Project

13. Youtube URL.

https://www.youtube.com/watch?v=s4Z3e31rqMc

14. Future Work.

- We can extend the application by prompting the user to select only those applications which he want to see by providing the customize options.
- Also we will ask him to select the applications which comes under different categories like entertainment, education and various fields.
- This helps us to use this information for keeping track of user activities and alert him regarding his productivity in using the application.

15. Bibliography.

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