

**Institute of Engineering & Technology**  
**Devi Ahilya Vishwavidyalaya, Indore (M.P)**  
**Department of Computer Science & Engineering**



**Hands-on Android Programming (CER4L2)**

**Android Assignments**

**Submitted To:**

Er. Shyam Maheshwari Sir  
CS-Dept  
IET-DAVV

**Submitted By:**

Tanishq Chauhan(21C4184)  
CS "B" 2<sup>nd</sup> Year

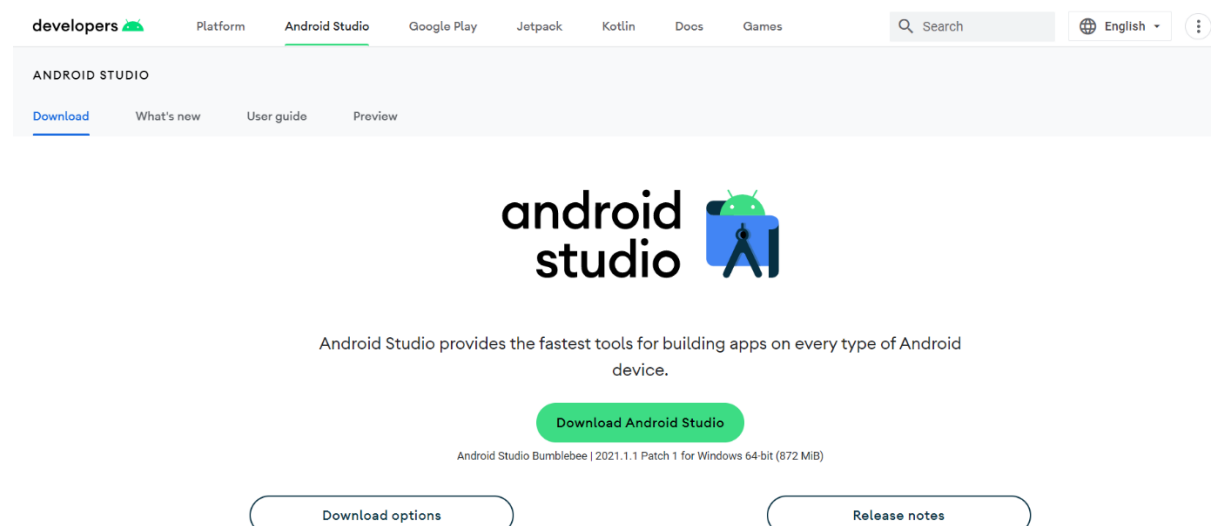
# Assignment-1

**a)Familiarity with ANDROID SDK (Installation and Configuration) and write a hello world program and display on simulator and mobile.**

- 1. You have to search “Download Android Studio” on Google**
- 2. Or you can also go on this URL to download Android Studio**

**URL:- <https://developer.android.com/studio>**

**3. When you search this... You will see this below page**

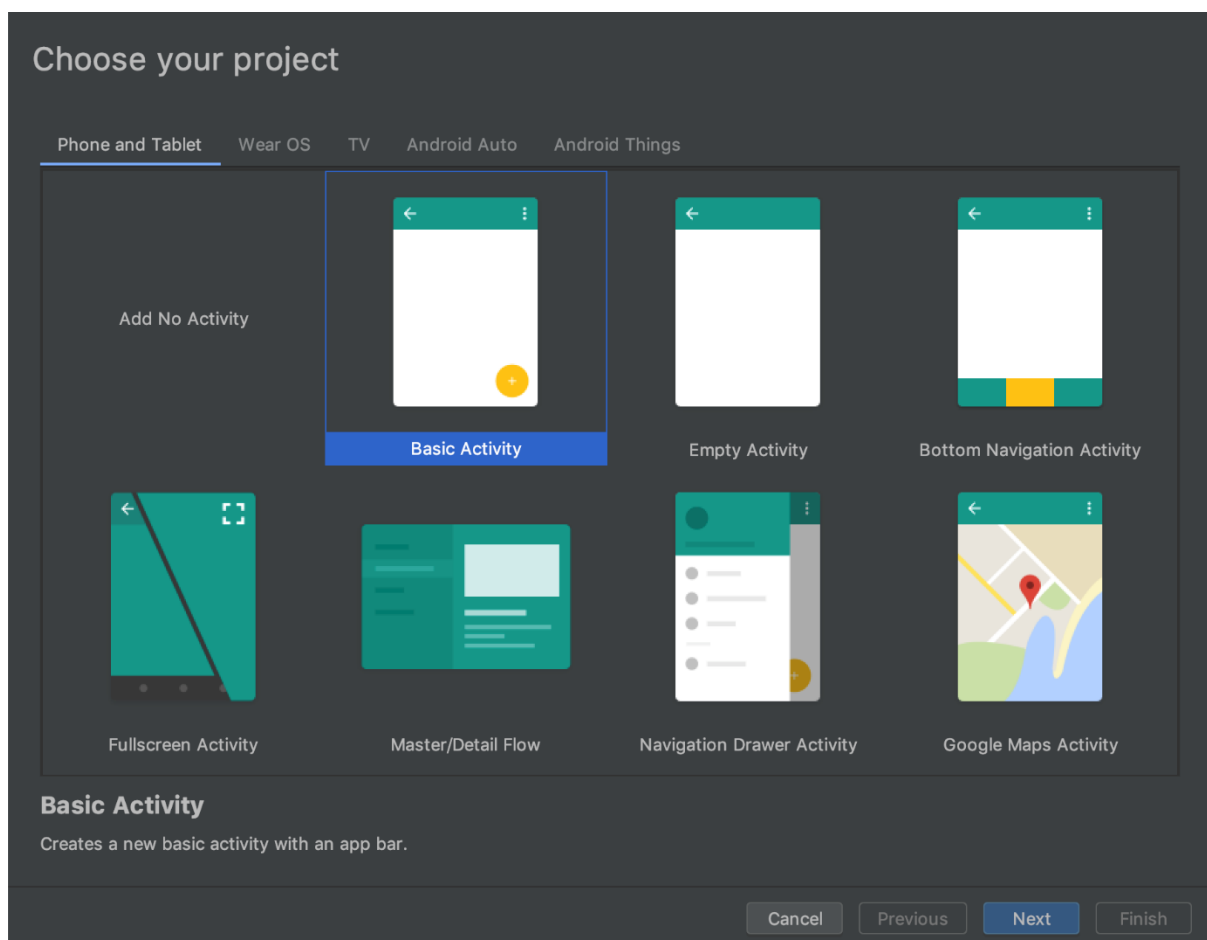


**4. From here you can download the “Android Studio” according to your system.**


**5. After the installation and some configuration and update.**

**6. Create a New Project**

**7. Choose the Basic Activity of the Project (if you want)**



## 8. Configure Your Project according to your need.



Configure your project

**Basic Activity**

Creates a new basic activity with an app bar.

Name: My Application

Package name: com.example.myapplication

Save location: /Users/adarshf/AndroidStudioProjects/MyApp

Language: Kotlin

Minimum API level: API 21: Android 5.0 (Lollipop)

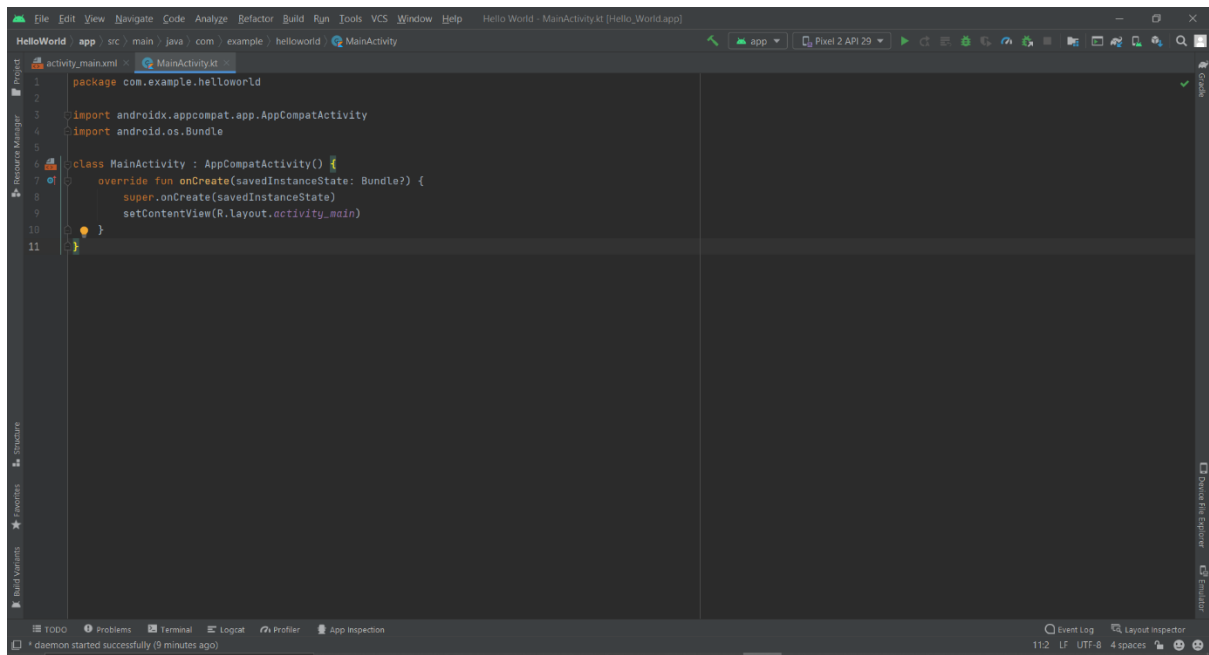
**Help** Your app will run on approximately **85.0%** of devices.  
[Help me choose](#)

☒ This project will support instant apps

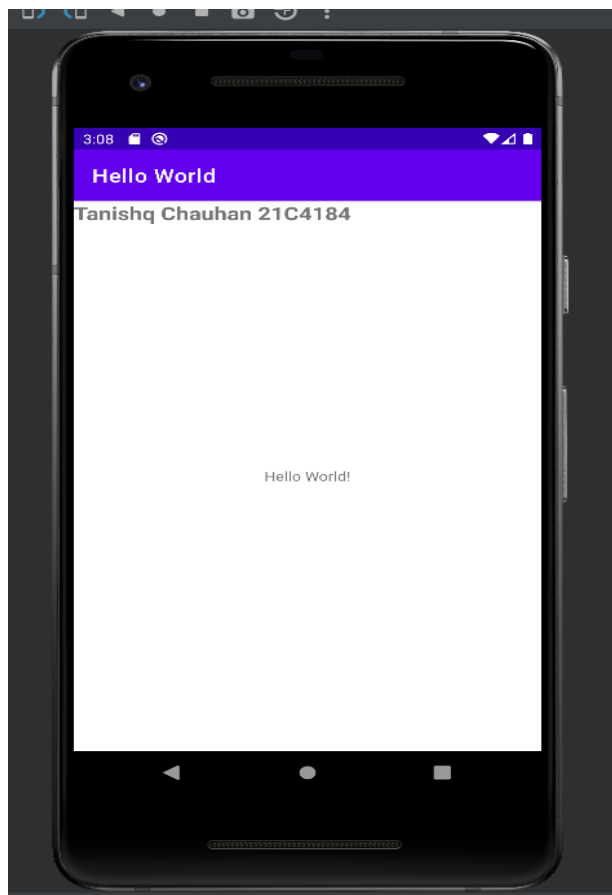
☒ Use AndroidX artifacts

Cancel Previous Next **Finish**

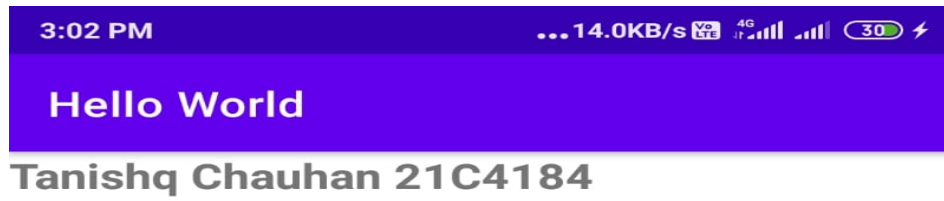
## 9. After all this setup, You will see the big screen of Android Studio.



**10. I created my first project as “Hello World” lets run it on Emulator. (It is running on Pixel 2)**



## 11. Installed in Mobile via USB

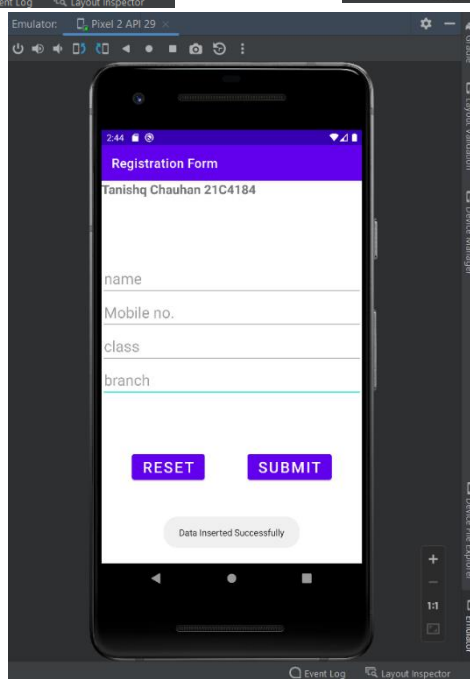
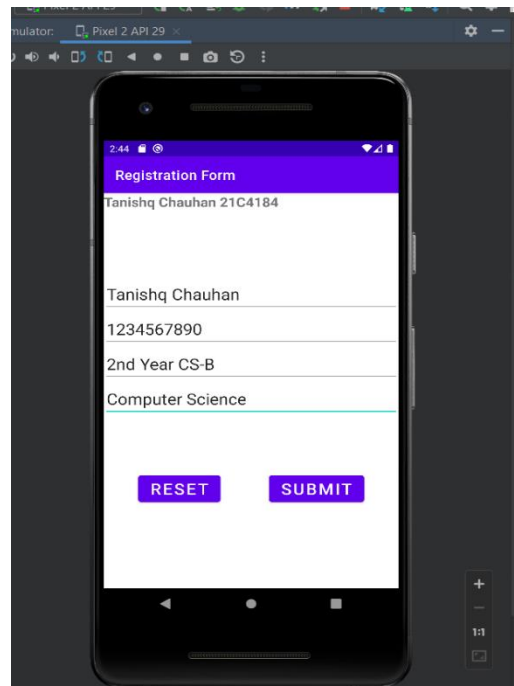
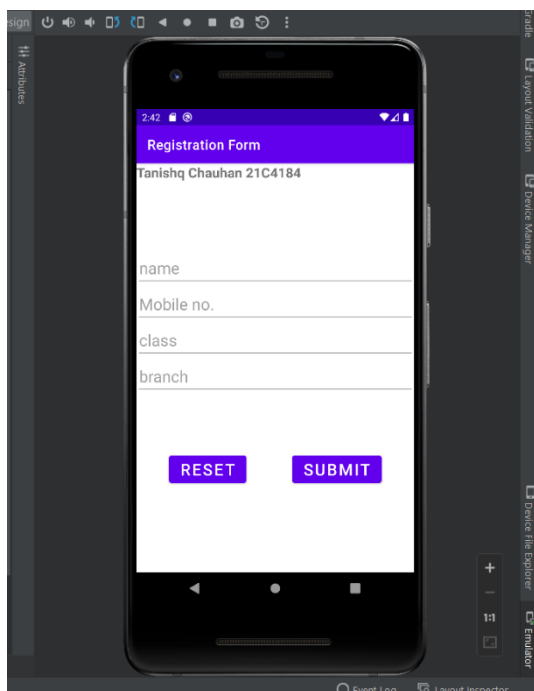


Hello World!



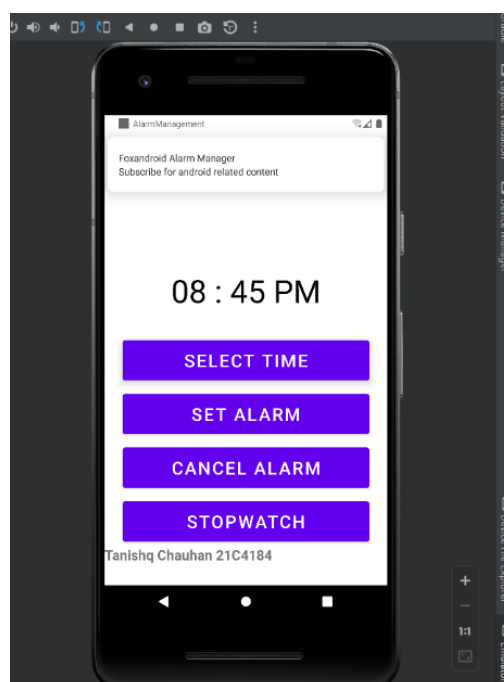
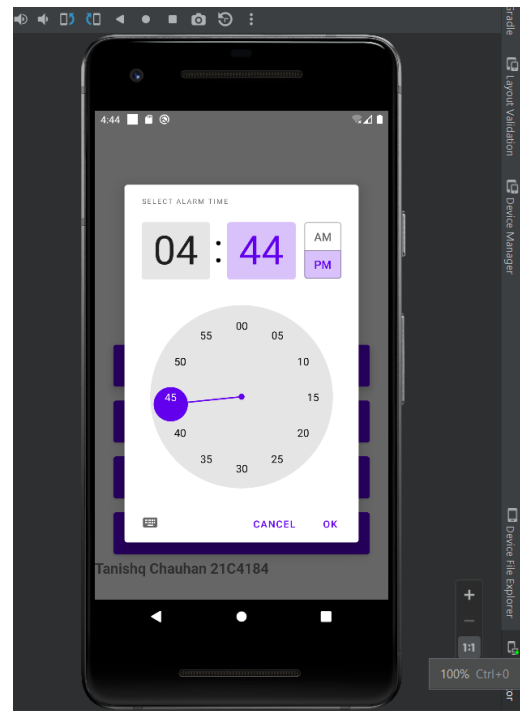
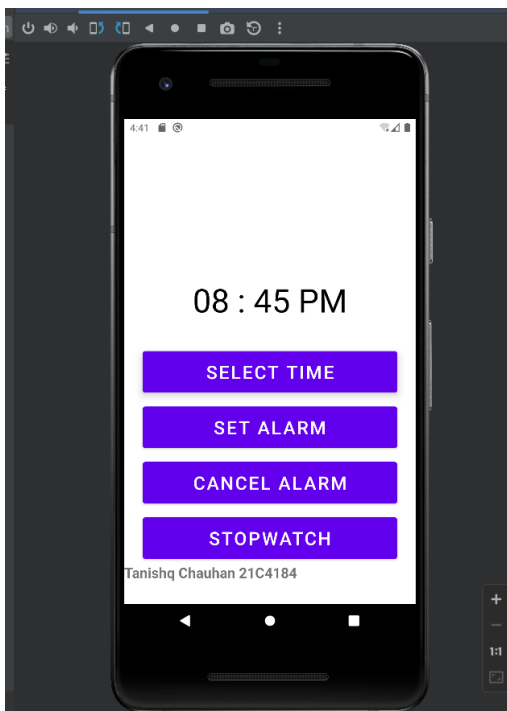
# Assignment-2

- b) Develop an application which have name, mobile no, class and branch form with two button Submit and Reset.
- c) Store above information in database.

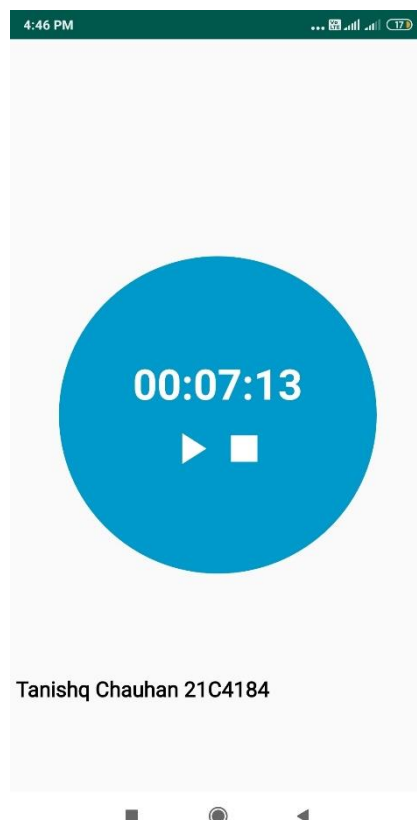
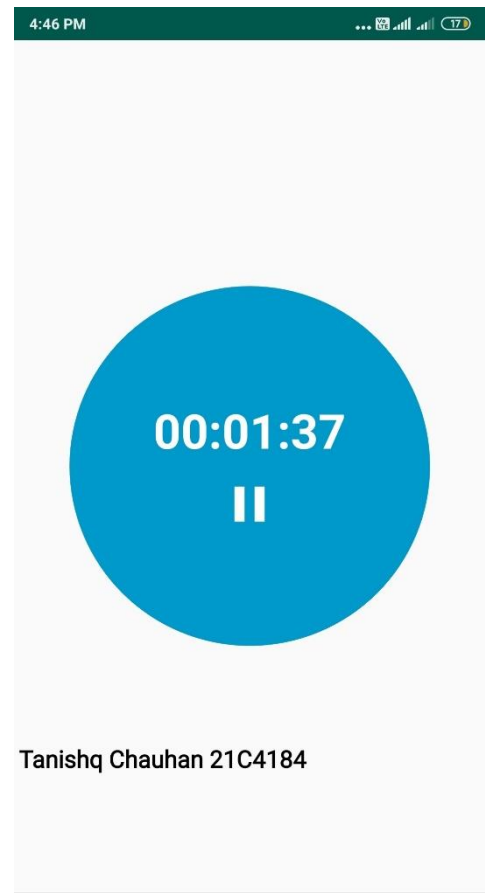
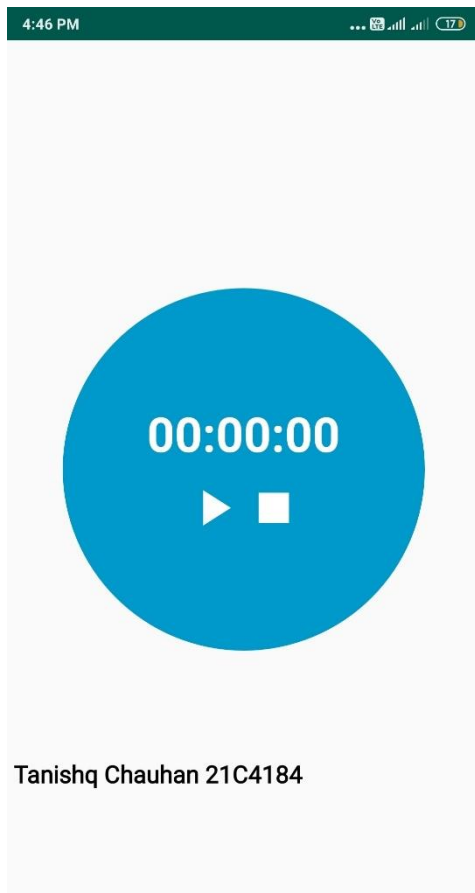


# Assignment-3

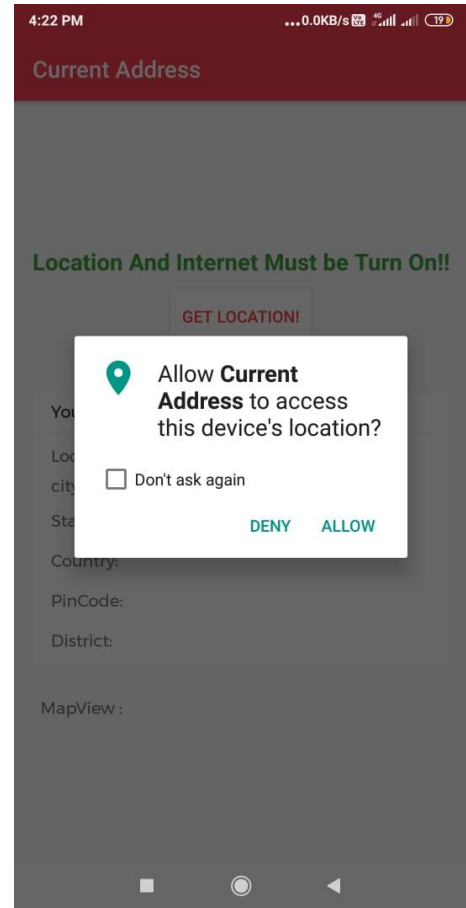
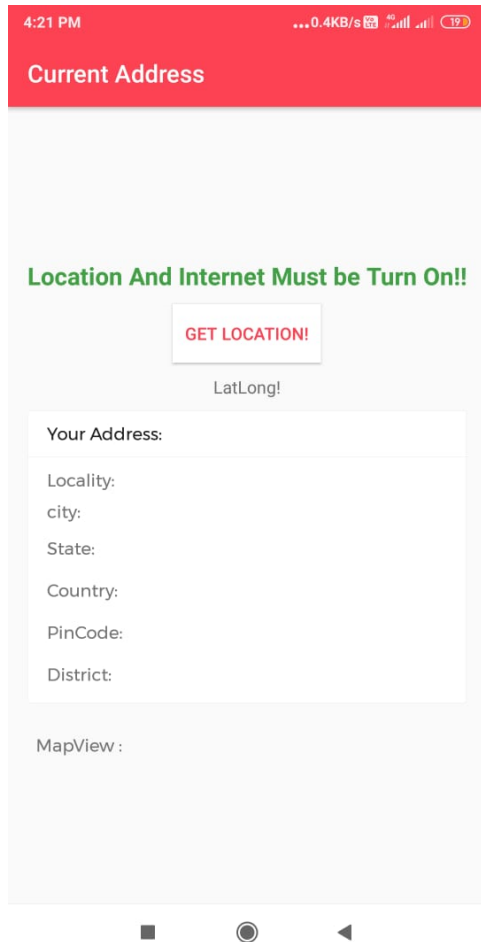
**d) Develop an application of watch with alarm clock and stopwatch feature.**







**e) Develop a native application for showing GPS location Coordinates and Direction Knowledge. (Distance of changing the coordinates.).**



4:21 PM

...0.3KB/s VoLTE 4G 19

## Current Address

**Location And Internet Must be Turn On!!**

**GET LOCATION!**

Latitude : 22.6801542  
Longitude: 75.8147151

Your Address:

Locality: 527A

city: **Indore**

State: **Madhya Pradesh**

Country: **India**

PinCode: **452009**

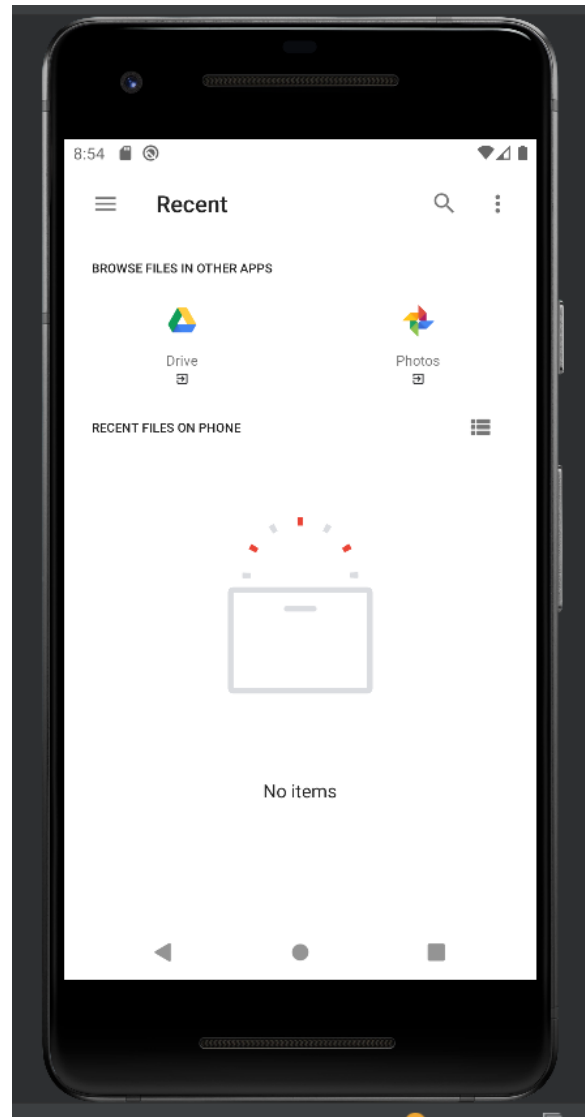
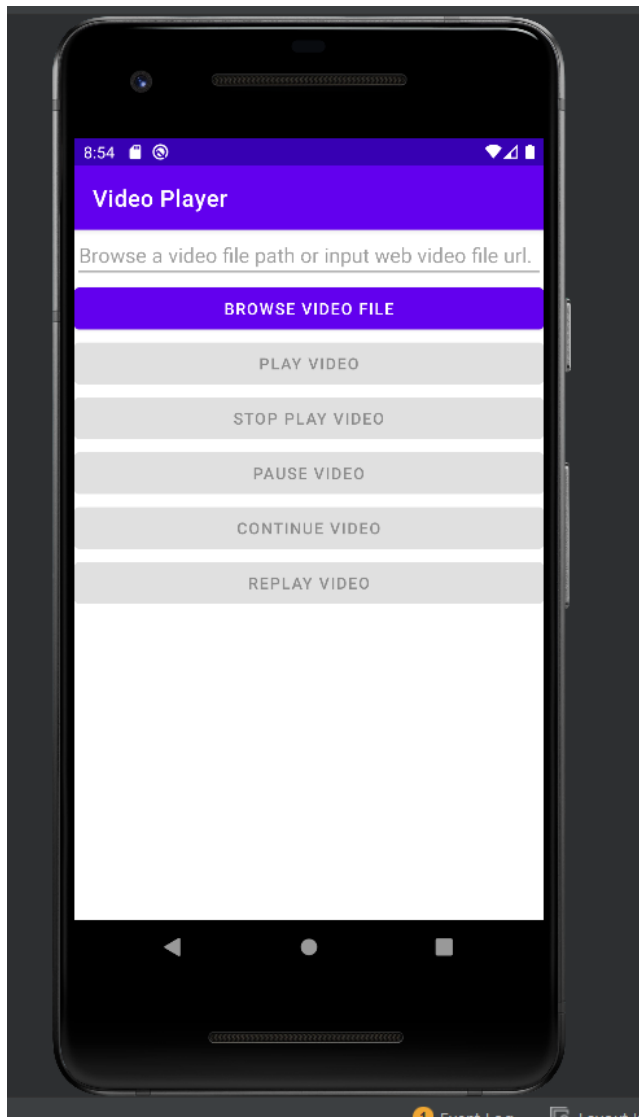
District: **Indore**

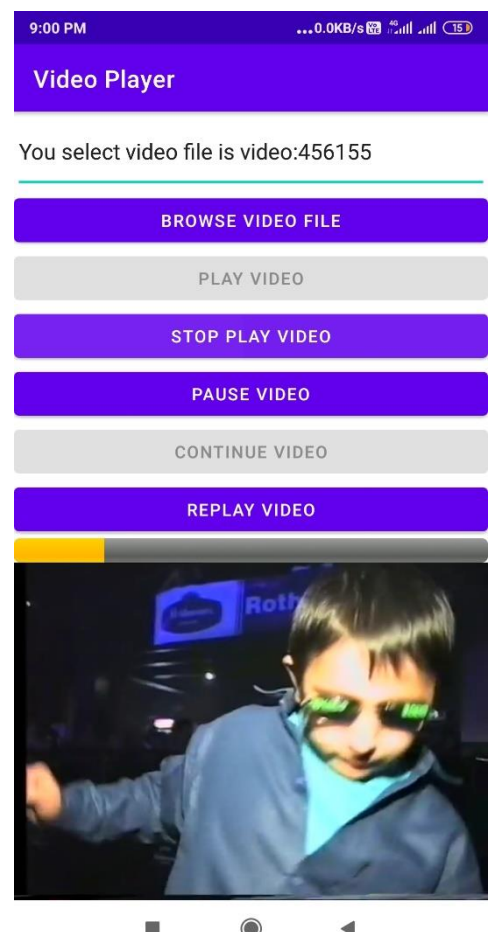
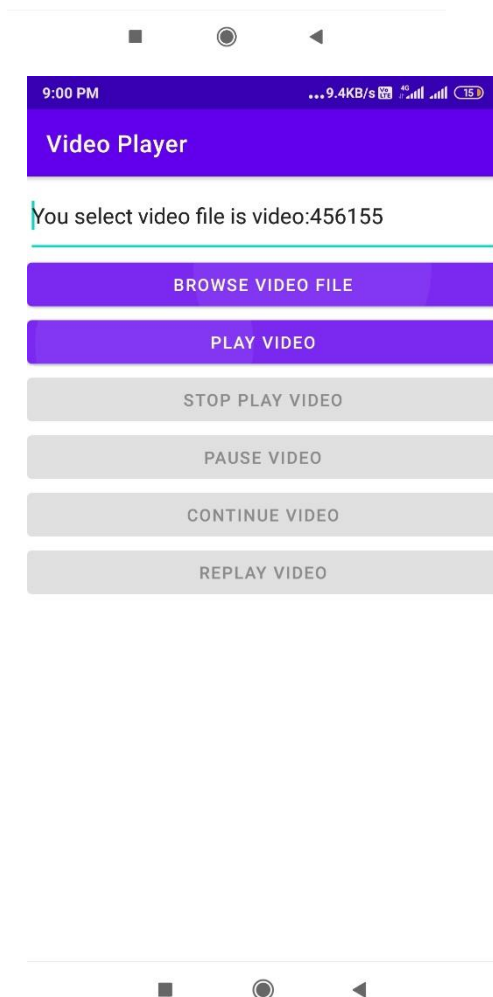
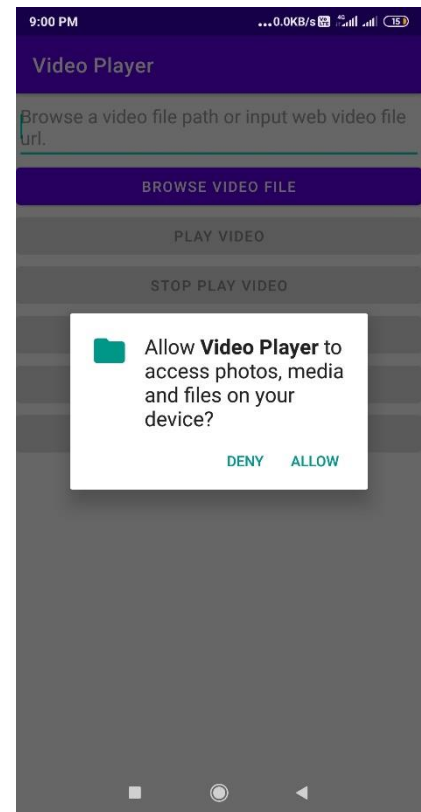
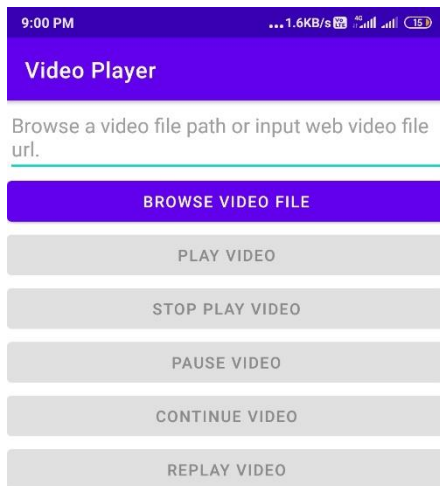
MapView :



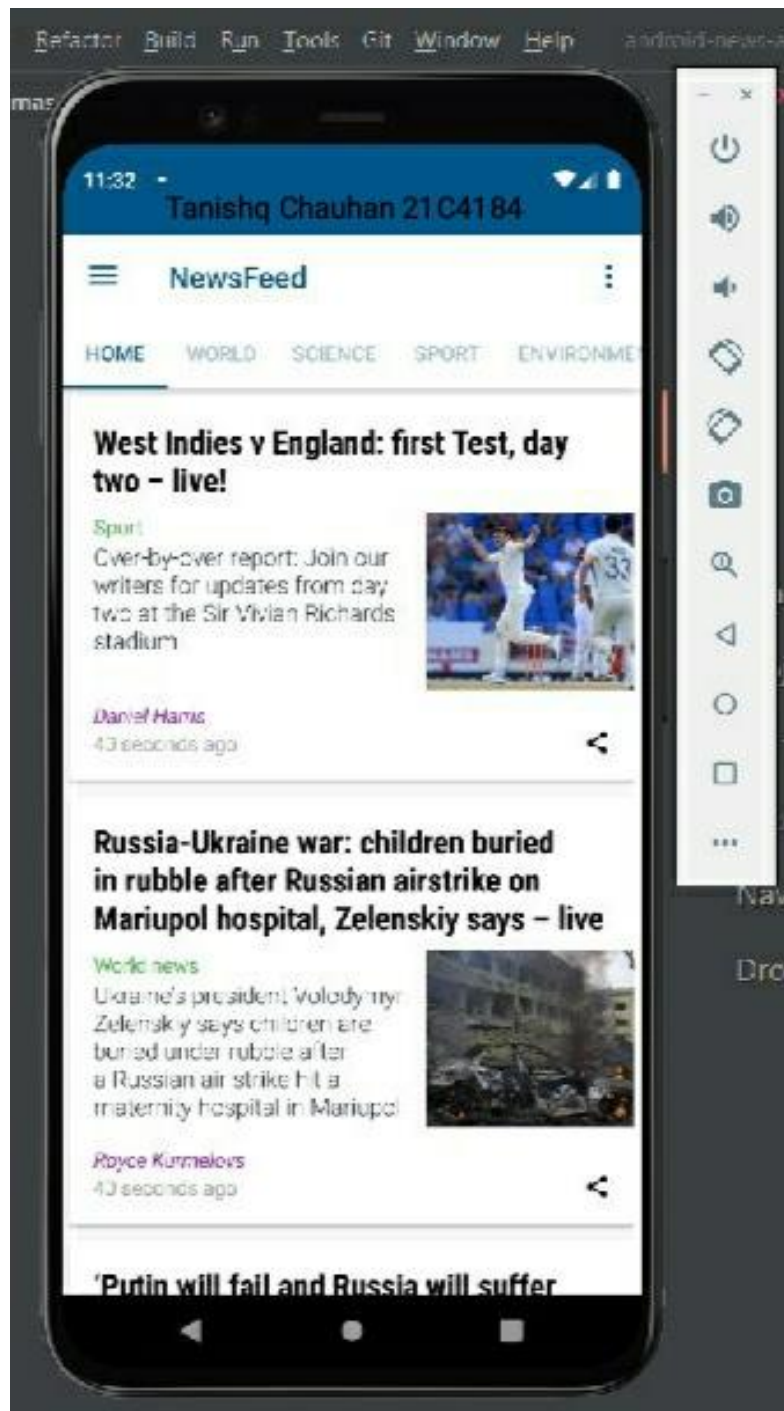
# Assignment-4

**f) Implement an application of video player that reads and plays video files from the SD card. (Multithreading).**





g) Develop an application of news feed with alert (notification) on screen.



# Assignment-5

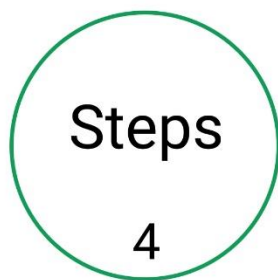
**h) To Creating an app for step count and motion detection scenario.**

## StepCounter

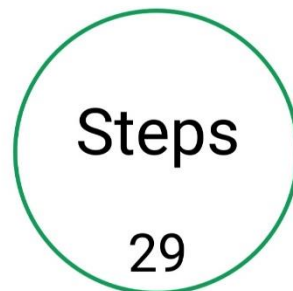


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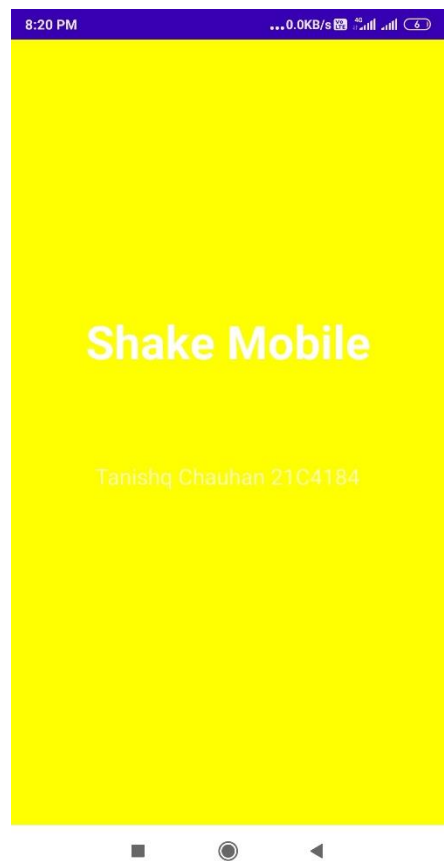
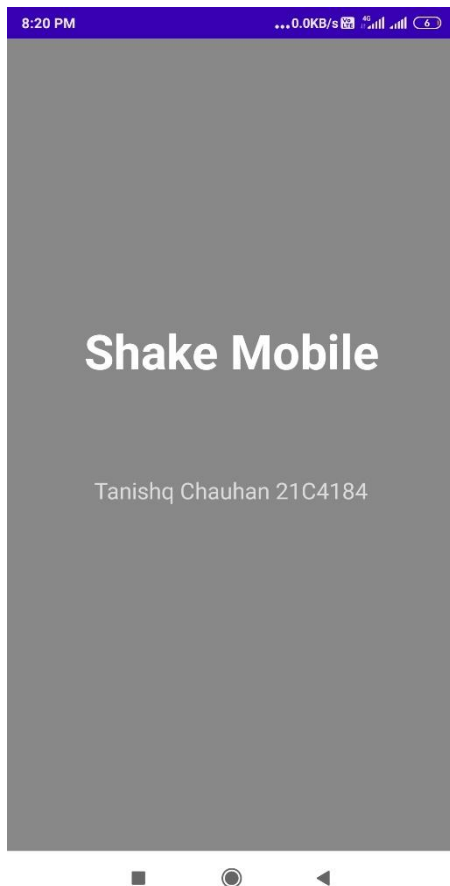
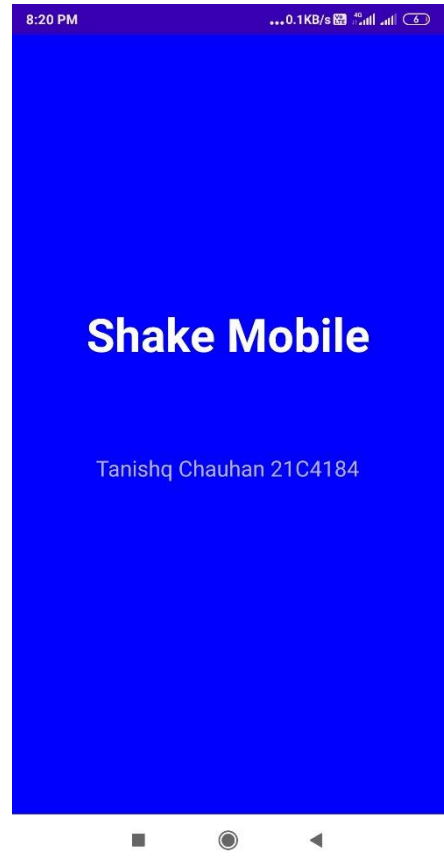
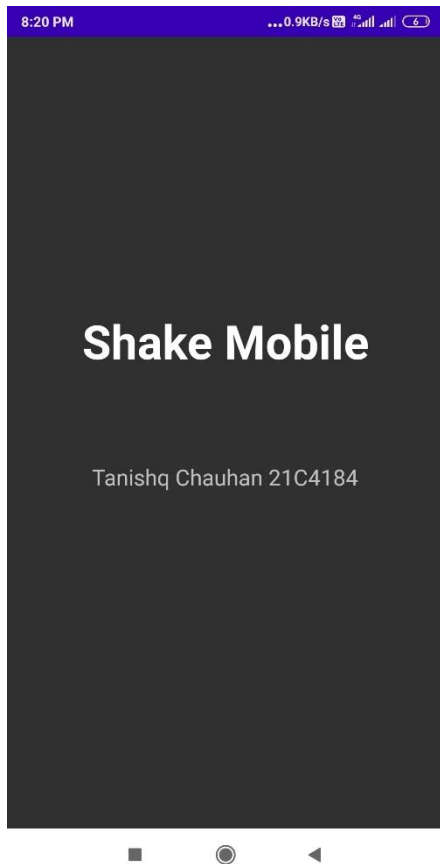


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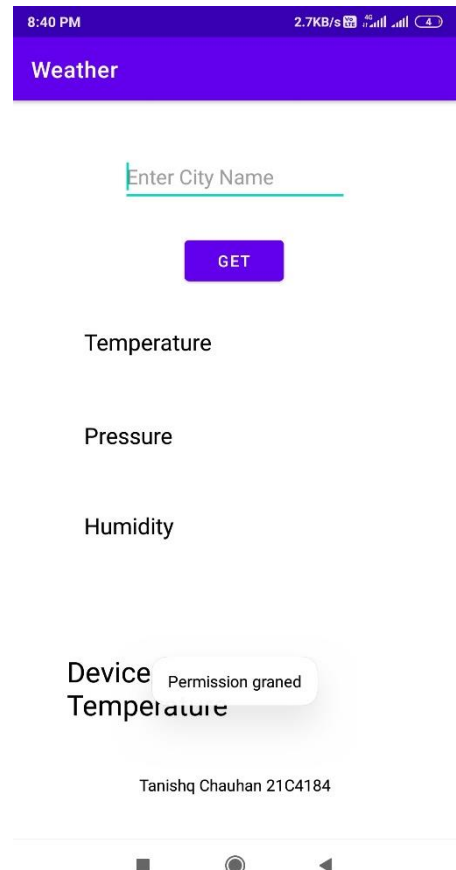
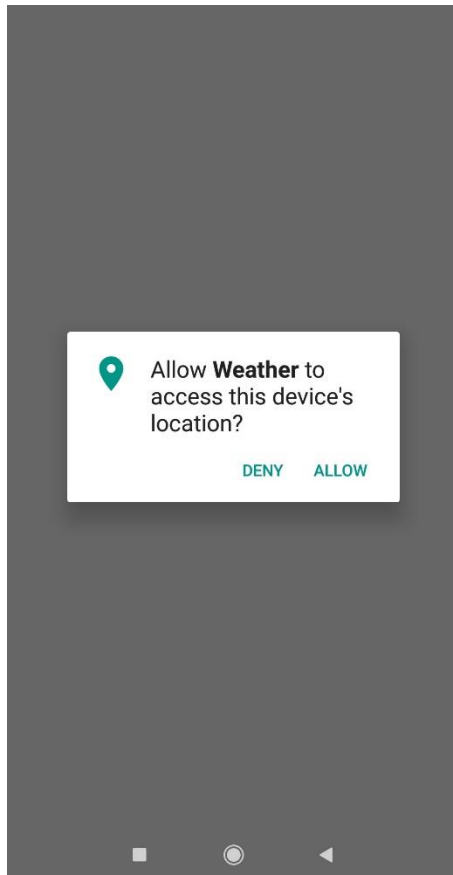


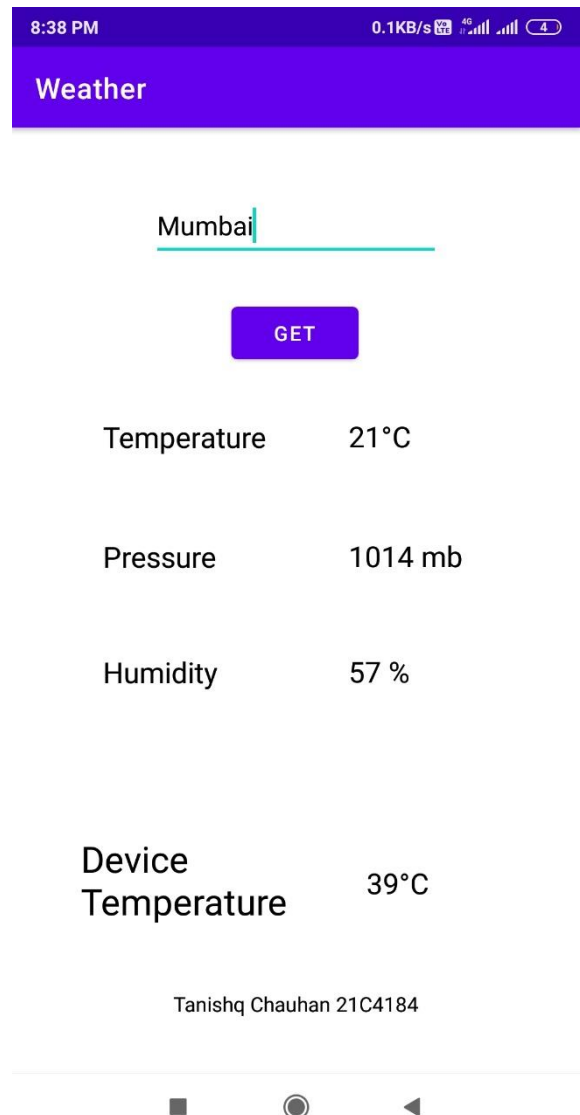
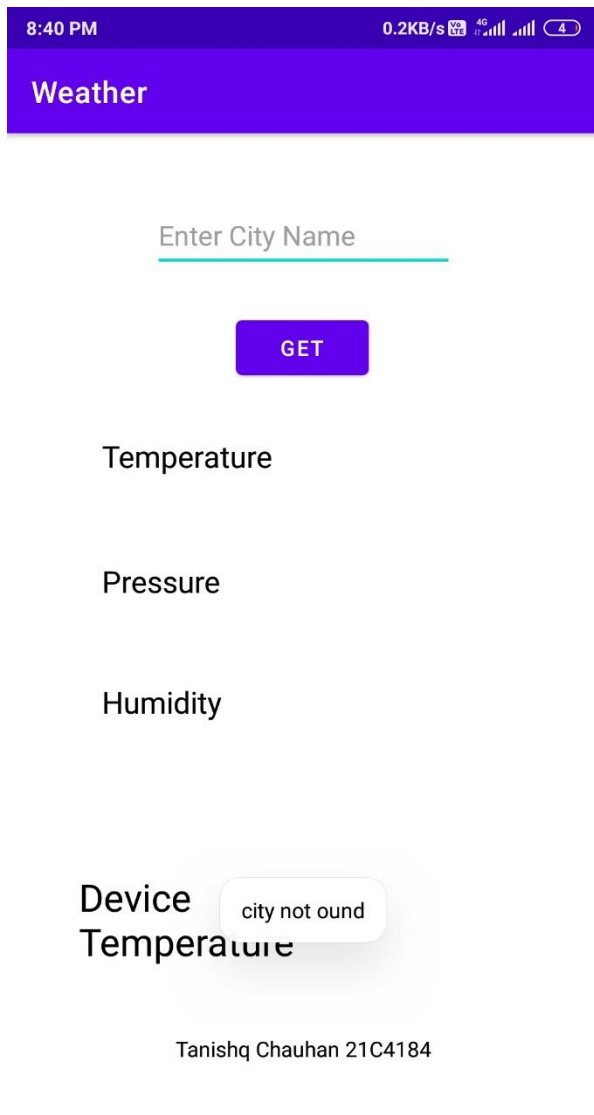


# Motion Detection



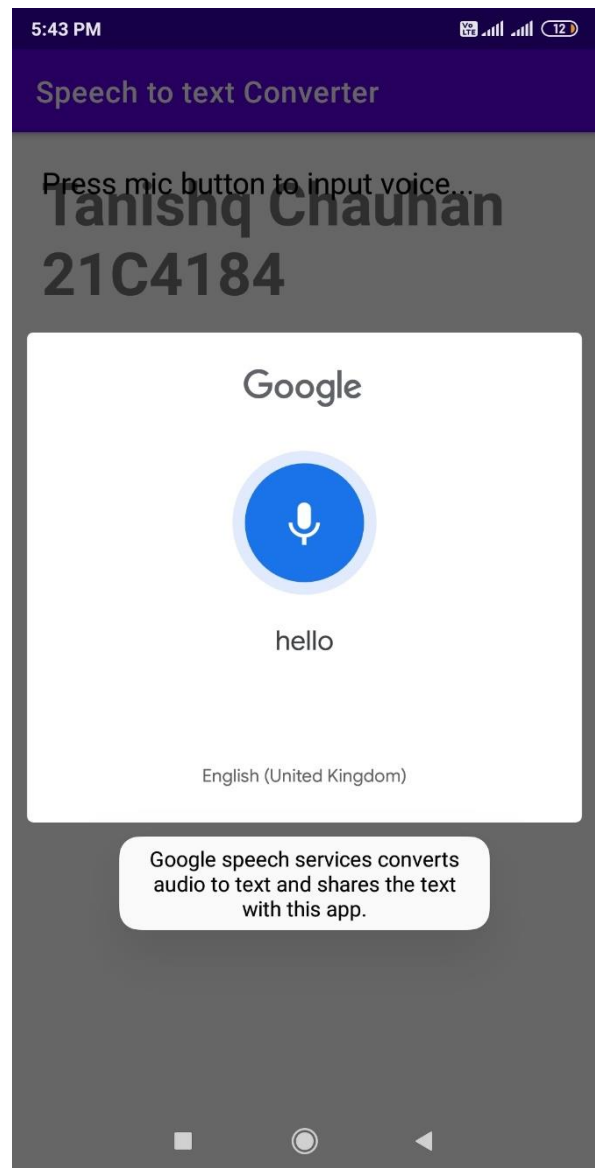
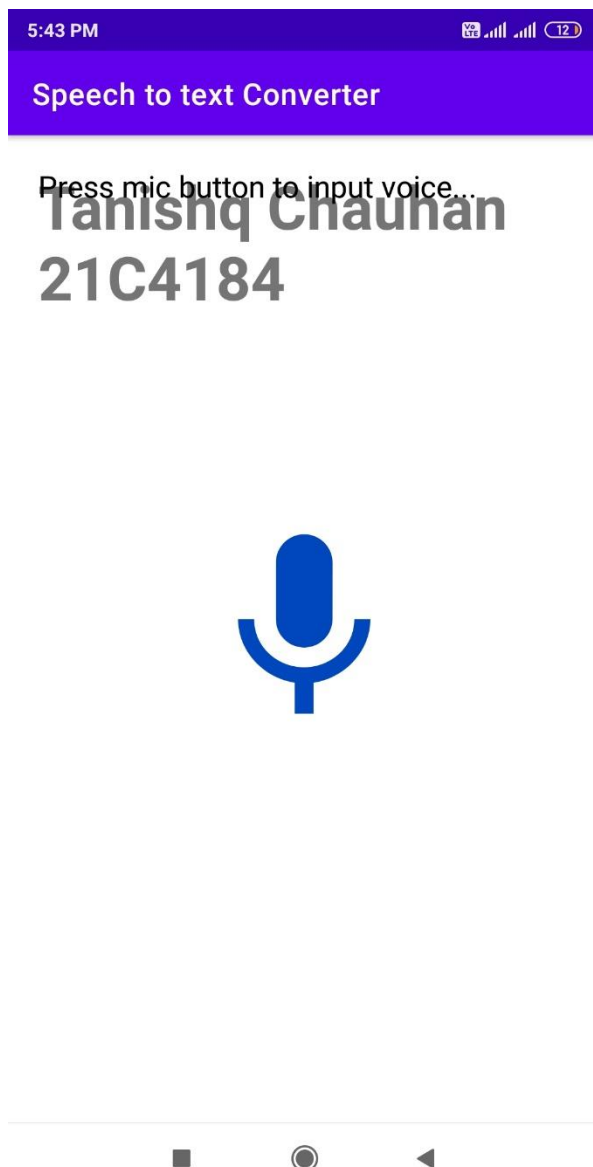
- i) **Develop an application to show Environment data (Such as temperature, pressure, device temperature, and humidity).**





# Assignment-6

j) To Implement an app for makes transcript and notes from speech .(text to speech api)



5:43 PM



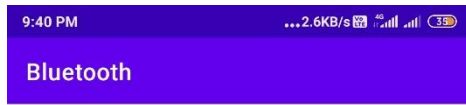
## Speech to text Converter

hello

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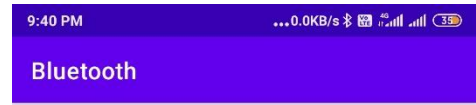
## k) To create an app for search wifi and Bluetooth device.



Bluetooth Status

CLICK

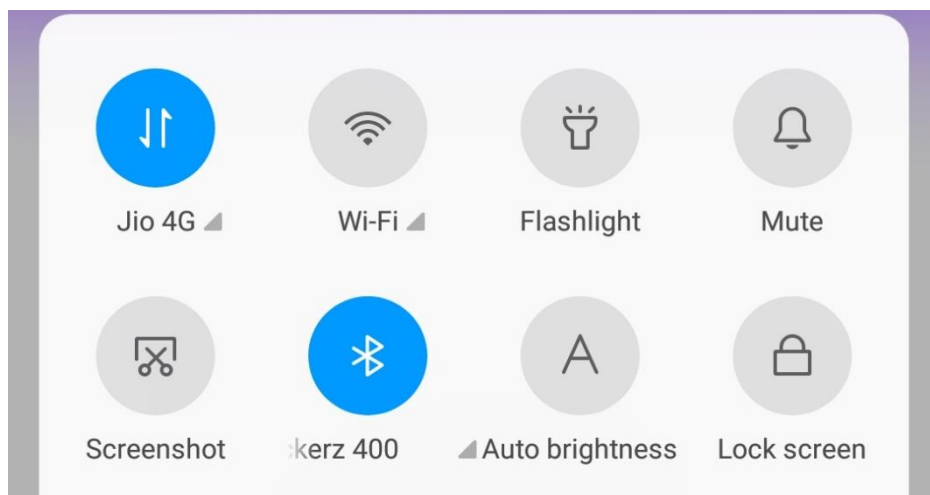
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Bluetooth is ON

CLICK

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9:40 PM

...0.3KB/s VoLTE 4G   35

## Bluetooth

Bluetooth is OFF

CLICK

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21C4184



9:47 PM

0.0KB/s VoLTE 4G   35

## WIFIScanner

# Wifi Status

CLICK

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# Assignment-7

**1) To develop an Android application based on problem identified by Student.**

## **HAPPY PLACES**

**Have a Happy Journey with Happy Place**

**Problem Statement :-** Sometimes we think about a destination or someone told us but after some time we forget about that place when we want to plan a trip.

**Is it also happening with you?**

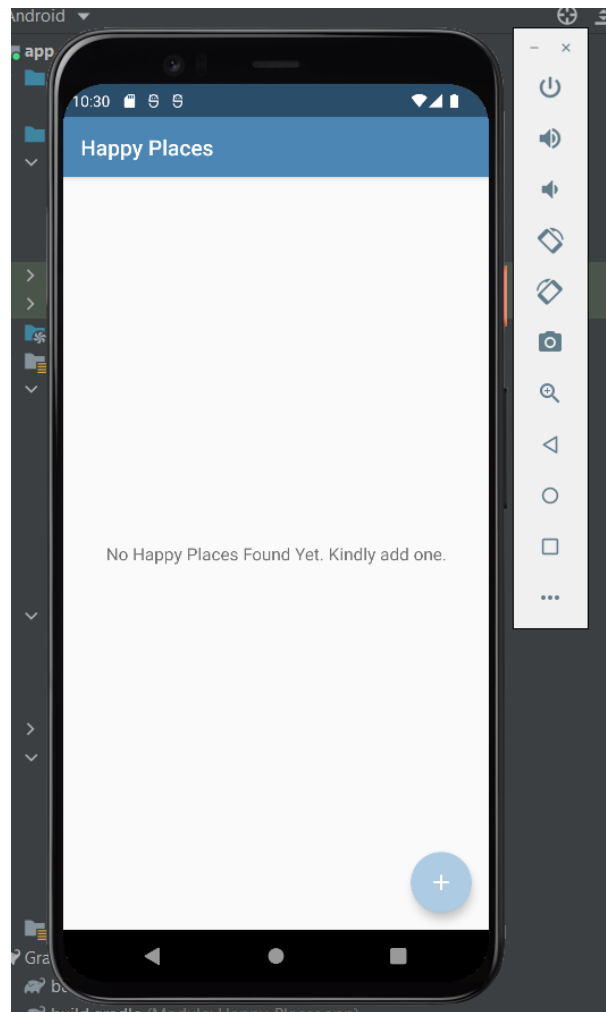
**Don't Fear, "HAPPY PLACES" is here**

**Solution:-** To solve this problem, Here I am going to develop an app, in that, whenever you think or listen about a new place create a card/list and add the name of the place in the title with some description that you know or listen to about the place. You can also add an image or as well as location. So after that whenever you plan a trip you don't have to wander.

**Have a HAPPY JOURNEY WITH HAPPY PLACES**

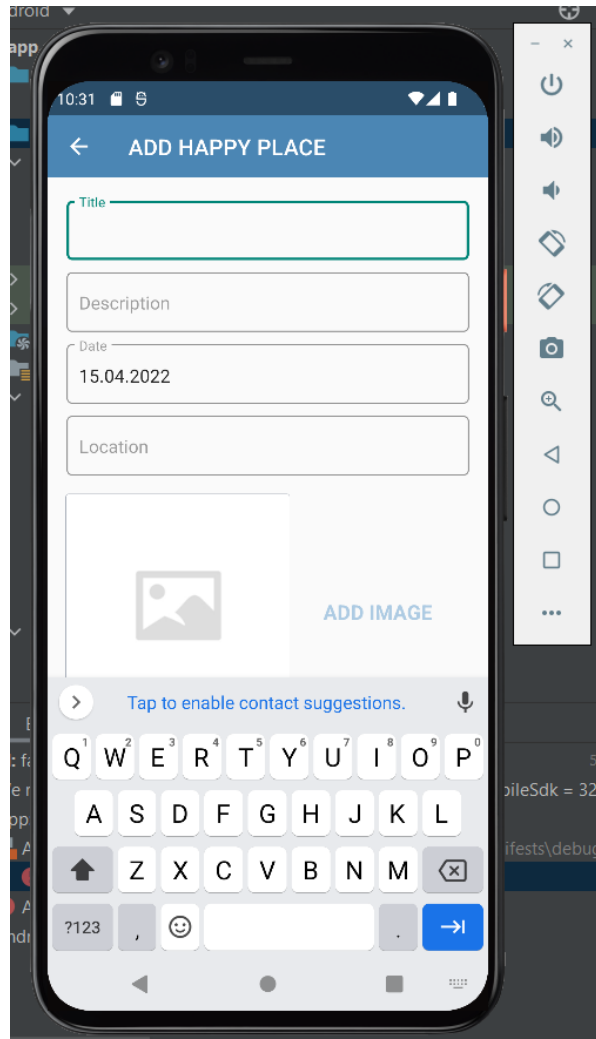
**Here I am adding some screenshots of the HAPPY PLACES below:**

## **MainActivity**



- This is the main activity page of the **HAPPY PLACE**.
- Where you can see all your **HAPPY PLACES**.
- You also have a **ADD** button here to direct you to **AddHappyPlaces** Activity.
- Where you can add you Happy Places.

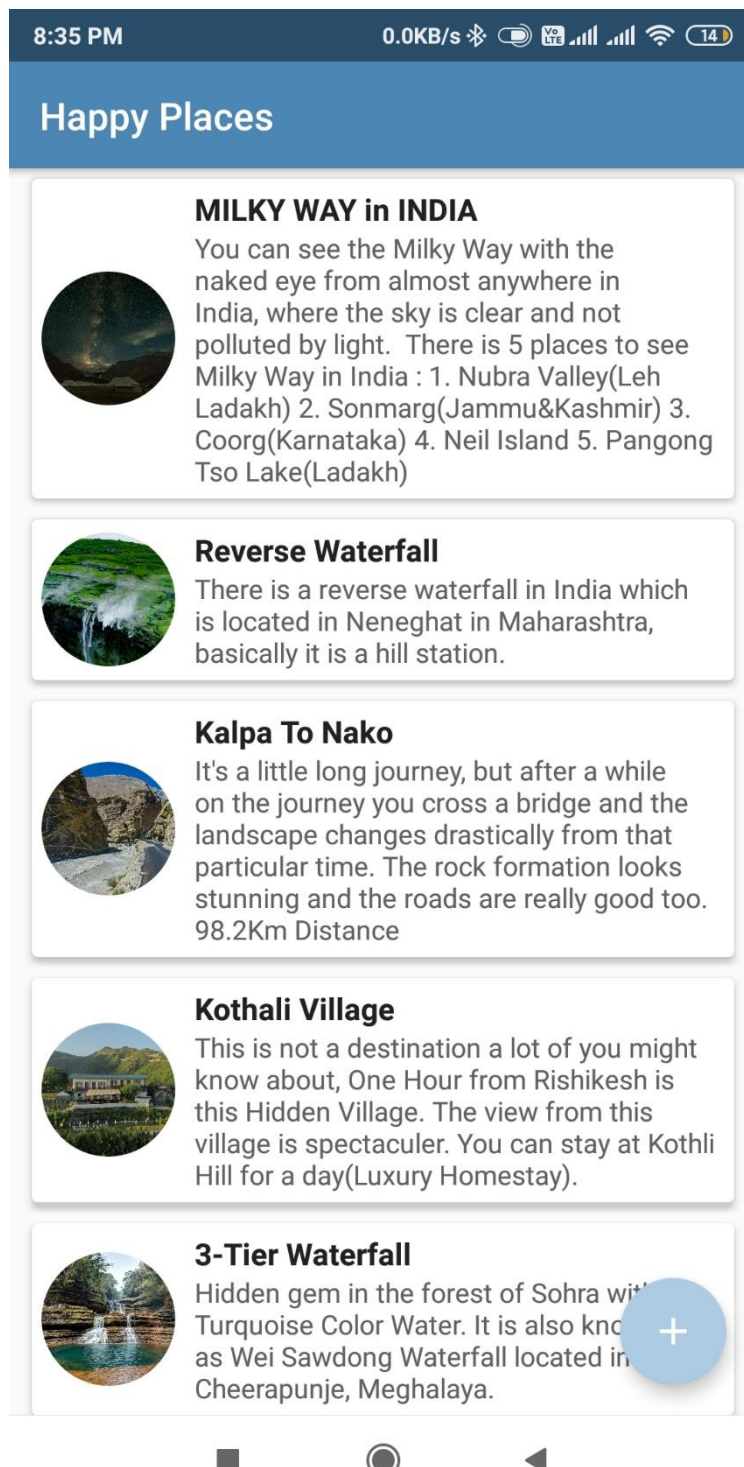
## AddHappyPlace Activity



- This one is the **AddHappyPlace Activity** page.
- Here you can add your all the wishlisted Happy Place where you want to travel in your lifetime.
- There is some basic steps or fullfill the data to add a Happy Place.
- You can see all the required fields on the screen.

Do you want to see some of the Happy places?

So Lets see, which I already added on my Happy Place List.



## Now, Lets create a HappyPlace for you.

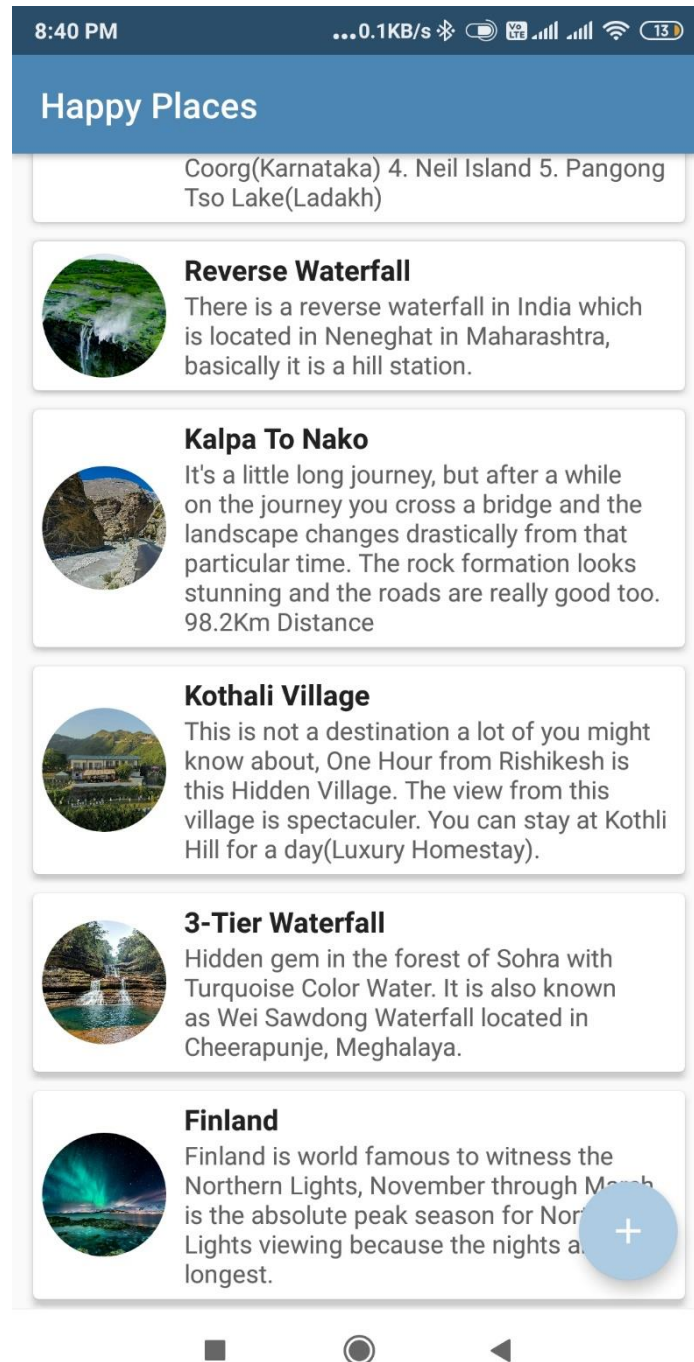
- Open the HappyPlace App
- You will see the main page with your HappyPlaces.
- To Add New Happy Place Click on Add button to direct on AddHappyPlace Activity.

The screenshot shows the 'ADD HAPPY PLACE' screen of the HappyPlace app. At the top, there is a blue header with a back arrow and the text 'ADD HAPPY PLACE'. Below the header, the form contains the following fields and elements:

- Title:** A text input field containing 'Finland'.
- Description:** A text input field containing 'or Northern Lights viewing because the nights are'.
- Date:** A date picker field showing '18.05.2022'.
- Location:** A text input field containing '522, 392, Vidur Nagar, Indore, Madhya Pradesh'.
- SELECT CURRENT LOCATION:** A button with a location pin icon and the text 'SELECT CURRENT LOCATION'.
- Image:** A preview image of the Northern Lights over a lake, with the text 'ADD IMAGE' to its right.
- SAVE:** A large blue button at the bottom with the text 'SAVE'.

- **Title :** Name of the place/ or title.
- **Description :** Some details about the place.
- **Date :** On which date you see or some told you about the place.
- **Location :** Place where it is located.
- **Images :** Display Picture image. (Gallery/Camera)

- When we click on the **SAVE** button, we again redirect on the **MainActivity** Page where all the **HappyPlaces** are there.



- We can also **update** this page by just right swipe.

8:41 PM 7.4KB/s

← Edit Happy Place

Title  
Finland

Description  
Finland is world famous to witness the Northerr

Date  
18.05.2022

Location  
522, 392, Vidur Nagar, Indore, Madhya Pradesh

SELECT CURRENT LOCATION

ADD IMAGE

UPDATE

- We can also **DELETE, HAPPY PLACES** by just left swipe.

## HappyPlaceDetail Activity

- Here you can see the **details** of the Happy Place which you added while creating or adding a new Happy Place in your list.

