EXPERIMENT 7

Aim :

Develop an Online News Application for Mobile Phone using Android Studio.

Theory :

We will use New York Times API key to get the latest news updates for this application. This API key will automatically fetch all the latest news updates for our application. First thing we have to do is get this key from the website that is mentioned below:

https://developer.nytimes.com/apis

Create your account on this website using your email address and the API key will be sent to your registered email address.

Requirements :

- Android Studio

- Knowledge of XML and JAVA

- Android emulator (or) Android Mobile

Steps for Online News Application :

Step 1: Create a **New Project**

Create a new project in Android Studio and select **Java** as the programming language.

Step 2: Get **API Key**

Copy the API key you received on your email and paste it in **build.gradle** file present in your project.

Step 3: Working with **activity_main.xml** file

Code :

activity_main.xml file

```xml
<?xml version="1.0" encoding="utf-8"?>

<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:fitsSystemWindows="true"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <android.support.v7.widget.Toolbar
        android:id="@+id/toolbar"
        android:layout_width="match_parent"
        android:layout_height="?attr/actionBarSize"
```

```xml
            android:background="@color/colorPrimary"
            android:theme="@style/ToolbarTheme"
            app:popupTheme="@style/ThemeOverlay.AppCompat.Light"
            app:titleTextAppearance="@style/Toolbar.TitleText" />

        <android.support.design.widget.TabLayout
            android:id="@+id/sliding_tabs"
            style="@style/CategoryTab"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            app:tabGravity="fill"
            app:tabMode="fixed" />

        <android.support.v4.view.ViewPager
            android:id="@+id/viewpager"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:orientation="vertical" />

</LinearLayout>
```

Step 4: Working with **MainActivity.java** file

Code :

MainActivity.java file

```java
package com.example.android.thenews;

import android.os.Bundle;
import android.support.annotation.Nullable;
import android.support.design.widget.TabLayout;
import android.support.v4.content.ContextCompat;
import android.support.v4.view.ViewPager;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.widget.Toolbar;
import android.view.Menu;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(@Nullable Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toolbar toolbar = findViewById(R.id.toolbar);
        toolbar.setTitle(getString(R.string.app_name));
        setSupportActionBar(toolbar);
        ViewPager viewPager = findViewById(R.id.viewpager);
        TabLayout tabLayout = findViewById(R.id.sliding_tabs);
```

```
        tabLayout.setSelectedTabIndicatorColor(ContextCompat.getColor(this
, R.color.colorAccent));
        tabLayout.setTabTextColors(
            ContextCompat.getColor(this, android.R.color.white),
            ContextCompat.getColor(this, android.R.color.black)
        );
        tabLayout.setupWithViewPager(viewPager);
        NewsCategoryAdapter adapter = new NewsCategoryAdapter(this, getSup
portFragmentManager());
        viewPager.setAdapter(adapter);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.activity_main, menu);
        return true;
    }
}
```

App Screenshot :