

# Implementation of Ads-

## Implement Facebook/Google Ads (Banner, Interstitial, Video)

### 1. Task Description

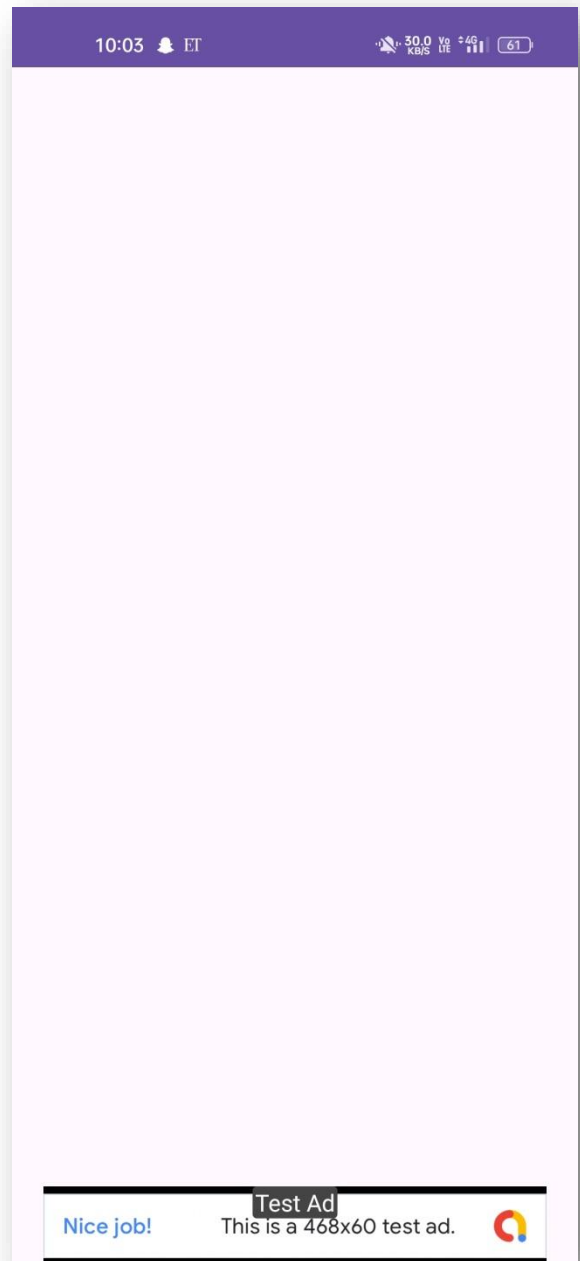
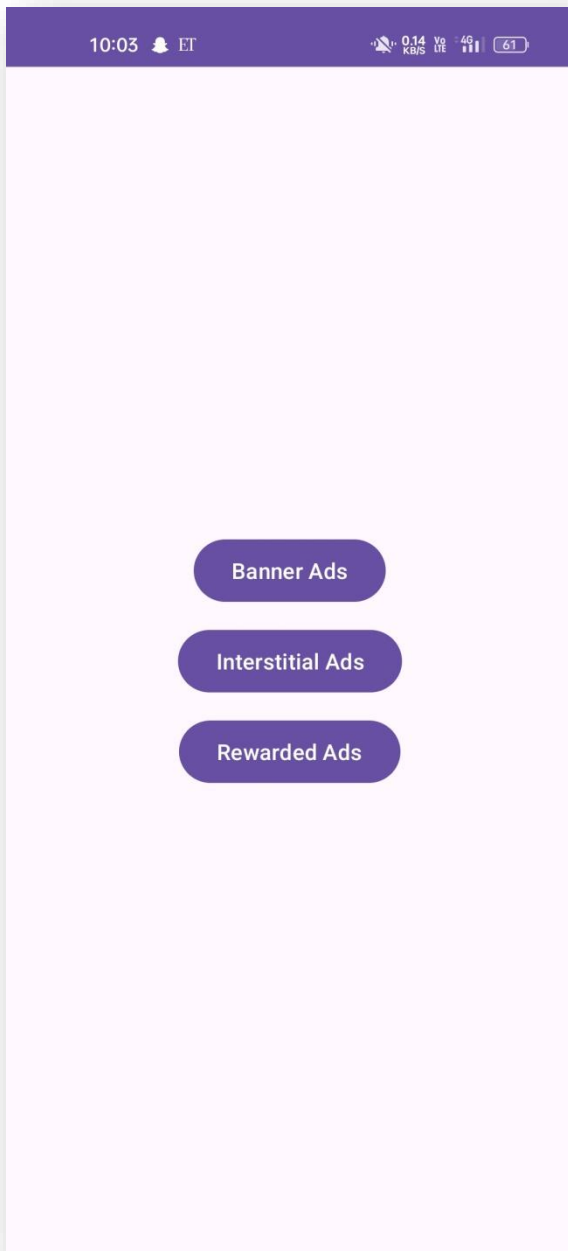
In this task, implement Google Ads in an Android application using **Google Mobile Ads SDK**. The application will display the following ad types:

1. **Banner Ads:** Small rectangular ads that appear at the top or bottom of the app's UI.
2. **Interstitial Ads:** Full-screen ads that appear at natural transition points in the app flow (like after a task completion).
3. **Rewarded Video Ads:** Video ads that give users rewards in exchange for watching them.

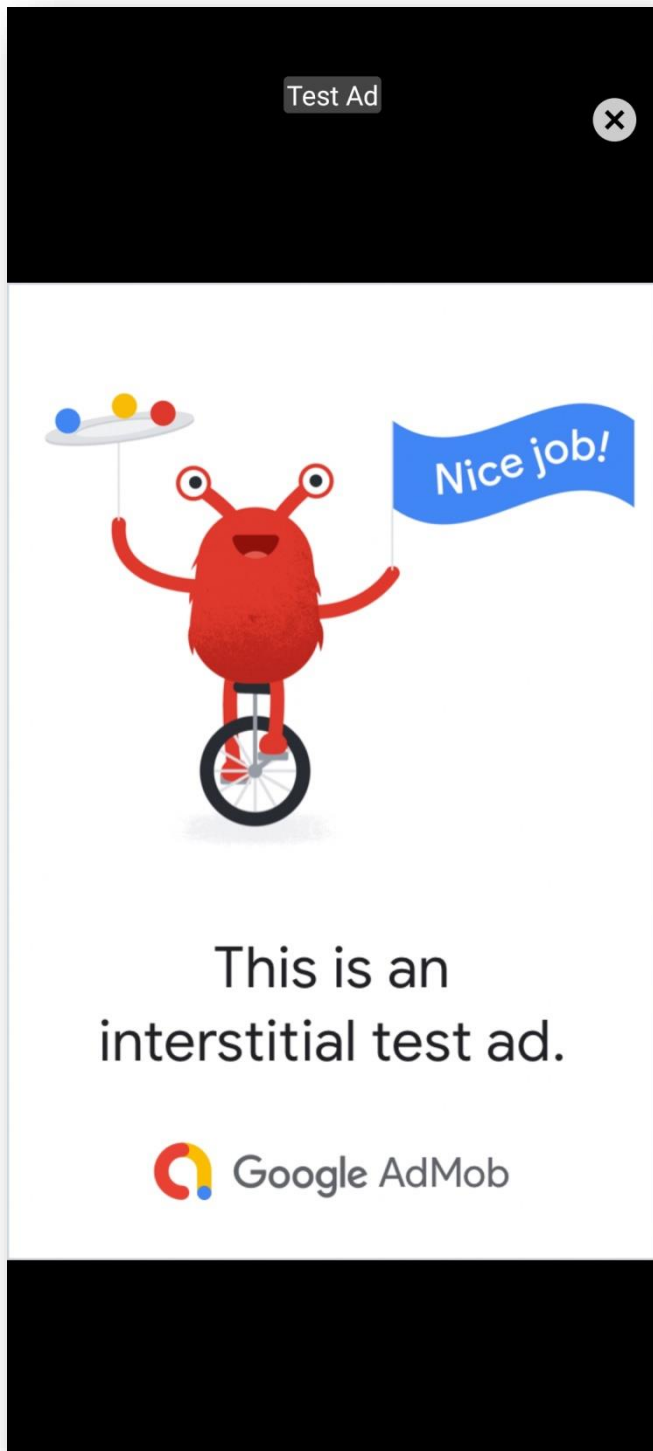
The process includes setting up the **Google Mobile Ads SDK**, initializing the ad components in the code, and displaying them at appropriate points in the app.

## 2. Task Output Screenshot

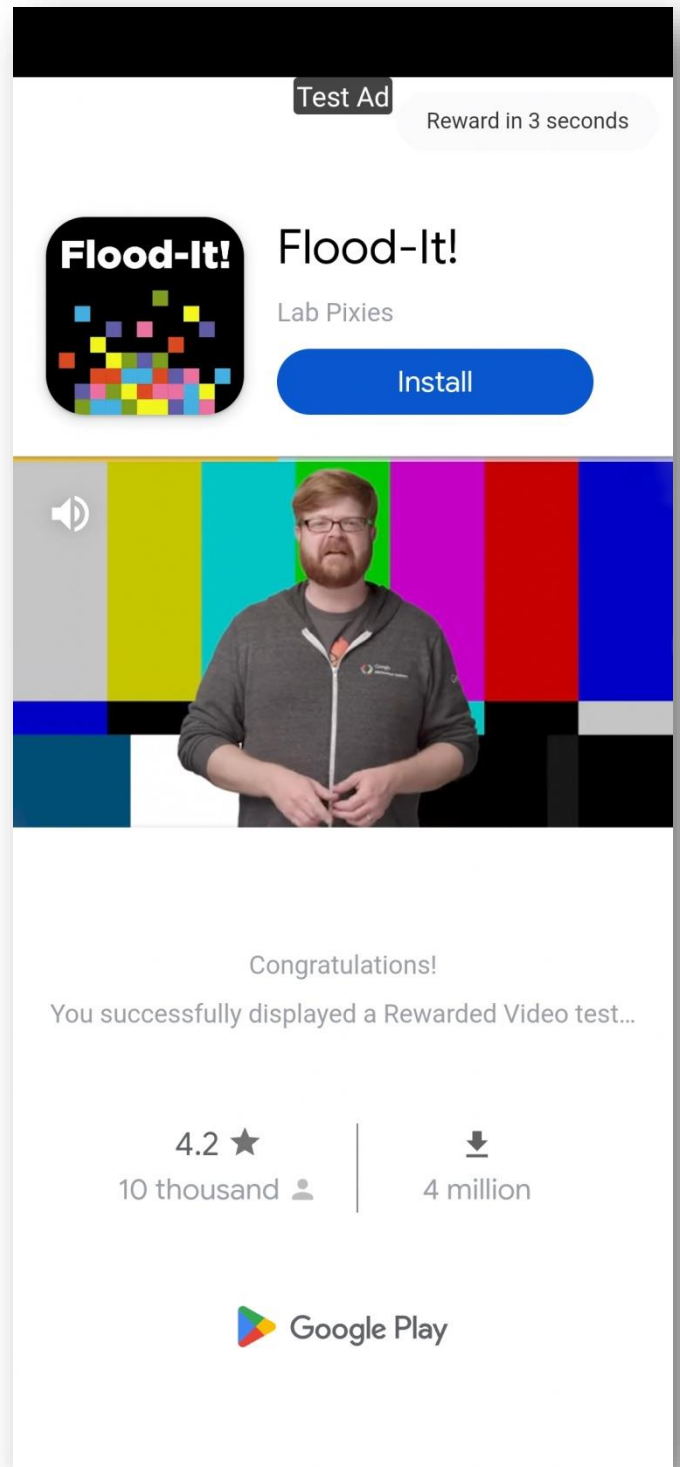
- **Screen 1: Banner Ads**



- Screen: Interstitial Ads



Screen: Rewarded Video Ads



### 3. Widget/Algorithm Used In Task

#### Widgets:

- **AdView (Banner Ads)**

This widget is used to display banner ads within the app. It is added in the XML layout and linked to the Google Ads SDK to fetch and show ads.

```
<com.google.android.gms.ads.AdView
    android:id="@+id/adView"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_gravity="bottom"
    ads:adSize="BANNER"
    ads:adUnitId="YOUR_AD_UNIT_ID_BANNER" />
```

- **Interstitial Ads**

Interstitial ads are not a UI element but a full-screen ad that appears at natural breaks in the app. It is initialized and displayed through the Google Ads SDK in the Java file.

- **Rewarded Video Ads**

Rewarded video ads are initialized similarly to interstitial ads, but they offer rewards to the user for watching the video. They are loaded and shown through code.

#### Permissions:

- **INTERNET Permission**

The app requires internet access to fetch the video from YouTube. This is achieved by adding the following permission to the AndroidManifest.xml file:

```
<uses-permission android:name="android.permission.INTERNET"/>
```

- **ACCESS\_NETWORK\_STATE Permission**

The app also needs permission to check the network state to load ads. Add this permission in the manifest:

```
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
```

## Dependencies:

- **Google Mobile Ads SDK**

The Google Mobile Ads SDK is necessary for adding ad components like banner ads, interstitial ads, and rewarded video ads. Add the dependency to your build.gradle file:

```
dependencies {  
    implementation 'com.google.android.gms:play-services-ads:22.0.0'  
}
```