Assignment 2: Android Intents

Turn in Instructions: Submit one zip file containing: 1) PDF file with answers for part 1, and 2) your entire Android Studio project file.
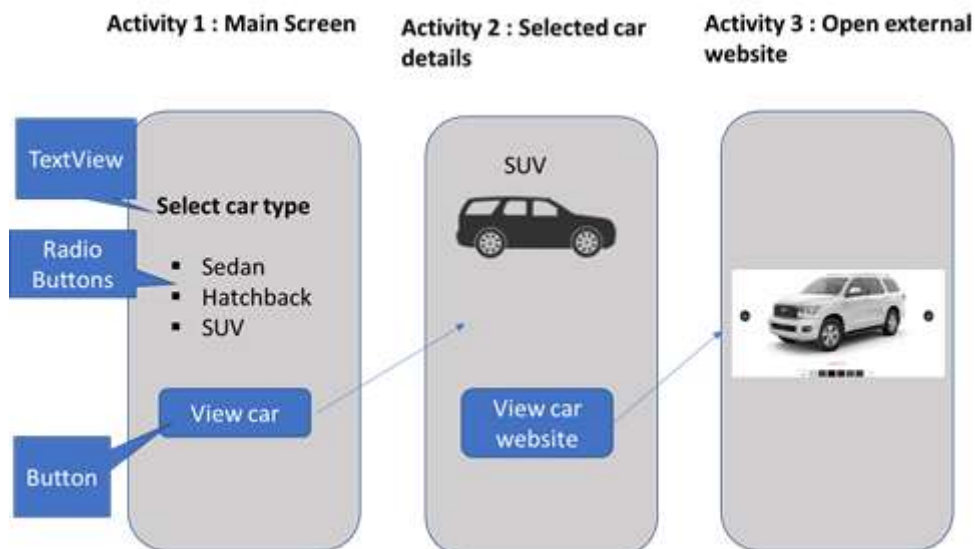
Part 1: Analysis of fake applications in the app market (30 points)

In this part of assignment, you will analyze some of the fake applications that are present in the app market. Check out this article to get an overview of fake apps and its threats. Study a couple of articles online regarding the existing fake apps, and precautions that users can take to overcome them. Write a 1-page summary by addressing the following questions:

1. List at least five fake apps that you came across in your analysis
2. Based on your analysis - What are some of the potential risks that these fake apps can cause? (briefly explain them)
3. What are the steps to eradicate the fake apps? And what are the measures that users can take to stay away from them?

Part 2: Car Selection App (70 points)

In this part of the assignment you will practice implementation of implicit and explicit intents by building a simple car selection app. The app should have two screens - main screen and car details screen. Below figure represents the overview of the car selection app.

- **Main Screen (see figure 1 for reference)**

  The main screen will offer three car choices for user to select from. Selection types can be following: Sedan, Hatchback or SUV.

  Create a layout for main screen with the following widgets:

  1. **A Textview:** Instruction to select the car type. This should be in bold.
  2. **RadioButtons:** Select the type of car from the radio button group (SUV, Sedan, or hatchback). Only one car can be selected at a time.
  3. **A Button:** Upon tapping this button, the activity should transition from main Screen to car details screen.
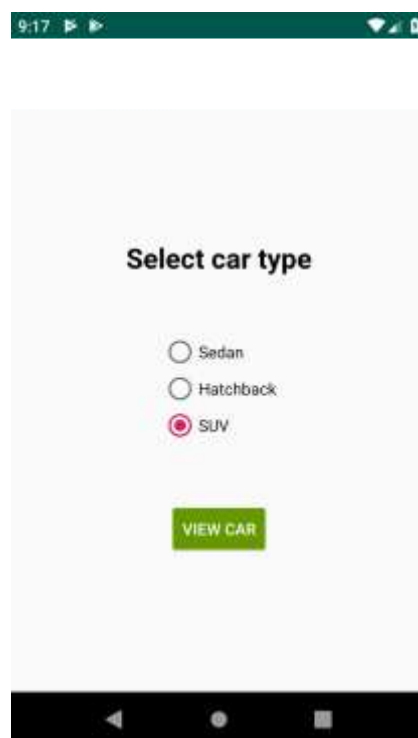

Figure 1: example of main screen layout with radio button group

When the "View car" button is clicked, a new activity (Car details screen) should open with the image of the car type that was selected by the user in previous activity (MainScreen).

- **Car Details Screen (See figure 2 for reference)**

  In the second activity, the user can view the details of the selected car (from the previous activity). You need to pass the user selection (car type) data from mainactivity to car details activity through intents. Based on the user selection data from the previous activity, the contents (Imageview, text, button-which links for the respective car website) in the car details activity should change.

Create a layout for car details screen with the following widgets:

1. **ImageView**: Image of one the three car types selected from the main screen. Images can be taken from IconFinder or PixaBay. The maximum resolution for a car image allowed is "512*512", but you can choose a smaller resolution to suit your requirements.

2. **TextView**: Details about the car. Make sure that the text chosen does not limit visibility of the other components.

3. **Button**: The button should take you to the actual website of the car. This website can be a description or purchase page. This will require the use of implicit intents. Redirection to a random page or use of hyperlink instead of a button is not allowed. You can find various actions/example implementations for implicit intents in the Android documentation
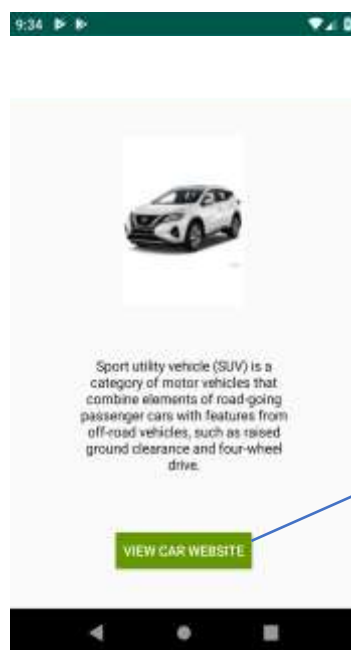

Figure 2: car details screen   **Figure 3: Car website (external site)**

Note: A good user experience can be created for any application when the content in the layout is minimalistic and allows the user to focus on the task. This is why the content in the screens is centered. This is a standard design practice followed by the Android developers and has been extended further as a design language by Google. [Read more at https://material.io/design/]