

# **PLACEMENTDOST**

#### Note:

Please be advised that these assessment inquiries are designed to accommodate interns with diverse skill levels, ranging from novices to seasoned analysts. Should you encounter any challenging questions, you are encouraged to seek solutions independently or reach out to us for assistance at Intern@Placement.com.

Best wishes for success in completing the assessment!

#### 1. User Interface Design:

• Design the user interface for a simple weather app that displays the current temperature, weather condition, and location.

## 2. Activity Lifecycle

- Task: Implement lifecycle methods in an Android activity to manage the state of the app when it is paused, resumed, or destroyed.
- Task: Write Java code in the MainActivity class to override lifecycle methods such as onCreate(), onPause(), onResume(), and onDestroy(). Add log statements to each method to track the activity lifecycle events.

#### 3. Data Storage

- Task: Implement data storage functionality in an Android app to store user preferences using <u>SharedPreferences</u>.
- Task: Modify the <u>SettingsActivity</u> class to include Text fields for user input (e.g., name, email). Use <u>SharedPreferences</u> to save and retrieve user preferences across app sessions. Update the UI to reflect the saved preferences.

# 4. Networking

- Task: Integrate networking functionality in an Android app to fetch weather data from a remote API.
- Task: Write Java code to create an AsyncTask or use Retrofit library to make a network request to a weather API (e.g., OpenWeatherMap). Parse the JSON response to extract relevant weather information and update the UI accordingly.

## 5. User Interaction

- Task: Implement event handling in an Android app to respond to user interactions, such as button clicks or list item selections.
- Task: Add a button to the MainActivity layout and define an OnClickListener to handle button clicks. When the button is clicked, display a Toast message or navigate to a new activity/screen.

# Projects :

1. **Develop a To-Do List App**: Develop a basic to-do list application that allows users to add, edit, and delete tasks. Implement features such as task categories, due dates, and priority levels. Focus on user-friendly interfaces and intuitive interactions.

2. **Develop a Calculator App**: Create a simple calculator application that performs basic arithmetic operations (addition, subtraction, multiplication, division). Design an interface with numeric keypad and operation buttons, and implement logic to perform calculations accurately.