

# Advanced Android App Development Syllabus

## **Multithreading: 6 Hours - 6 Topics**

- **Thread (Day 1)**
- **Using Java Multithreading classes (Day 1)**
- **How to use Handler Class (Day 2)**
- **UI Thread (Day 2)**
- **Android Applications on Multithreading(My Splashscreen, Stopwatch, ThreadHandler) (Day 3)**

## **Sensors in Android 4 Hours - 4 Topics**

- **Sensor Listener (Day 4)**
- **Sensor Manager (Day 4)**
- **Sensor Events (Day 4)**
- **Android Application on Sensors(Accelerometer and Proximity) (Day 5)**

## **Android Location Based Services 6 Hours - 4 Topics**

- **Geo-Coding and Reverse Geo-Coding (Day 6)**
- **Intent Service (Day 6)**
- **How to get Location address in an Android app (Day 7)**
- **Application to track the user's Location(Latitude, Longitude and Address) (Day 8)**

## **Android Google Maps 4 Hours - 3 Topics**

- **Discussion on Google API Console (Day 9)**
- **How to create Google Maps API key, Google Places API key (Day 9)**
- **Android Google Map Application Development to place the marker in user's current location, search any places and navigate (Day 10)**

## **Android Web Services 6 Hours - 6 Topics**

- **Uses and Characteristics of Json in Real Time (Day 11)**
- **Json Parser (Day 11)**
- **UI Thread and what is Async Task**
- **Async Task Operations(onPreExecute(), doInBackground(), onPostExecute()) (Day 11)**
- **API formation (Day 12)**
- **Android Applications to parse Json Data from API (Day 13)**

## **Android WebView 4 Hours - 2 Topics**

- **How to design and Develop Android Web Application for any Website (Day 14)**
- **Modification and Updation of Android Webview (Day 15)**



**Android WiF** **4 Hours - 3 Topics**

- **Wifi Manager API (Day 16)**
- **Broadcast Receiver (Day 16)**
- **Android Wifi Application (Day 17)**

**Android Bluetooth** **4 Hours - 3 Topics**

- **Bluetooth Adapter (Day 18)**
- **Bluetooth Permissions (Day 18)**
- **Android Bluetooth Application Development (Day 19)**

**Android Application Security** **2 Hours - 4 Topics**

- **How to Secure the Android Application? (Day 20)**
- **APK attack surface (Day 20)**
- **Application Obfuscation (Day 20)**
- **Mobile Application security scanner (Day 20)**