Hybrid mobile application development using Ionic, Cordova, Angular

Module 1: Introduction to Hybrid Mobile App Development

- Introduction to Hybrid Mobile App Development
- Overview of Ionic, Cordova, and Angular
- Setting up Development Environment
- Creating Your First Ionic App
- Ionic CLI Commands
- Ionic Navigation and Routing
- Ionic UI Components Overview
- Module 1 Labs
  - Lab 1.1: Setup and Create a Basic Ionic App
  - Lab 1.2: Explore Ionic CLI Commands and Navigation

Module 2: Ionic Basics and UI Components

- Recap and Q&A Session
- Advanced Ionic UI Components
- Ionic Forms and Validations
- Ionic Services and APIs
- Firebase Integration with Ionic
- Module 2 Labs
  - Lab 2.1: Implement Advanced UI Components in Ionic App
  - Lab 2.2: Implement Form Validations and Services in Ionic
  - Lab 2.3: Integrate Firebase Authentication in Ionic App

Module 3: Cordova Integration and Device APIs

- Recap and Q&A Session
- Introduction to Cordova Plugins
- Cordova Plugin Development
- Integrating Cordova Plugins with Ionic
- Testing on Emulators and Devices
- Module 3 Labs
  - Lab 1: Develop and Integrate Custom Cordova Plugins
  - Lab 2: Test Cordova Plugins on Emulators and Devices

Module 4: Angular Basics for Ionic Development

- Recap and Q&A Session
- Introduction to Angular for Ionic
- Angular Components and Services
- Data Binding and Forms in Angular
- Integrating Angular with Ionic
- Module 4 labs
  - Lab 4.1: Implement Angular Components and Services in Ionic App
  - Lab 4.2: Explore Data Binding and Forms in Angular with Ionic

Module 5: Advanced Topics, Firebase, and Deployment

- Advanced Ionic Features (Animations, Theming, etc.)
- Handling Authentication with Firebase
- Real-time Database with Firebase
- Building and Deploying Ionic Apps
- Module 5 labs
  - Lab 5.1: Implement Advanced Ionic Features in App
  - Lab 5.2: Integrate Real-time Database Functionality with Firebase
  - Lab 5.3: Deploy Ionic App on App Stores