

## Module 1: Getting Started with Flutter on the Web

- Introduction to Flutter and Flutter on the web
- Why you should learn Flutter on the web
- What you can build with Flutter on the web
- Making and running a new Flutter web project
- Set Up Your Windows Machine for Flutter Web
- Flutter on the web for web developers
- Flutter on the web for mobile developers

## Module 2: Creating Your First Web App

- Creating a new Flutter project with Flutter web
- Using basic widgets
- Building layouts

## Module 3: Building Responsive and Adaptive Designs

- What is responsive and adaptive design?
- Why there's a need for responsive and adaptive design in Flutter
- Tools and techniques available for responsive and adaptive design

## Module 4: Flutter Web under the Hood

- How does the Flutter Engine produce web apps?
- Different types of web renderers and their advantages and disadvantages
- Choosing between the HTML and CanvasKit renderers

## Module 5: Understanding Routes and Navigation

- The basics of navigation in Flutter
- An introduction to Navigator 2.0
- Implementing Navigator 2.0 in our app

## Module 6: Architecting and Organizing

- The need for properly scalable architecture
- Organizing files and folders
- MVVM architecture
- Implementing MVVM architecture

## Module 7: Implementing Persistence

- The need to persist data
- The tools and techniques available for data persistence

- Persisting data with local storage using the `shared_preferences` plugin

## Module 8: State Management in Flutter

- Understanding the basics of state management
- The options available for state management
- An introduction to Riverpod
- Implementing Riverpod in our app

## Module 9: Firebase Integration

- What is Firebase?
- Getting started with Firebase
- Installing and configuring Firebase SDKs for Flutter
- Authentication with Firebase
- Using Firestore Database to persist data

## Module 10: Building and Deploying a Flutter Web Application

- Technical Requirement
- Building and deploying your first web app
- Configuring a PWA
- Automating with GitHub Actions