**Flutter Bootcamp 2023 By Hamza Raziq Khan**

**Chapter 1: Introduction to Flutter**

* What is Flutter?
* Flutter's unique features
* Getting started with Flutter
* Creating your first Flutter app(Hello World)

**Chapter 2: Flutter Widgets**

* Text widgets
* Image widgets
* App Bar
* Colum
* Row
* Buttons
* Containers
* Project: First UI Design

**Chapter 3: Stateful vs Stateless**

* setState
* Difference between stateless and stateful widget
* Life cycle of stateful widget
* Project : Lottery app

**Chapter 4: Custom Widgets**

* What is Custom Widget?
* Need and importance of custom widgets.
* What is reusability?
* Why reusability?
* Different approaches
* Custom widget through functions
* Custom widgets through stateful and stateless widgets

**Chapter 5 : Navigation**

* What is navigation?
* Navigating between screen and passing data
* File system
* Project : Basic Arithmetic operation calculator

**Chapter 6 : State Management:**

* What is state management?
* Why state Management
* Introduction to Provider State Management
* Setter and getter
* Consumer widget
* Counter App
* Project : BMI Calculator using Provider

**Chapter 7 : Pub.dev**

* What is pub.dev?
* Why pub.dev?
* How to use external dependencies in your app?
* Understanding dependencies documentation

**Chapter 8 : Building Whatsapp UI**

* Understanding of Navigation Bar
* List tile widget
* Circular avatar
* Responsiveness

**Chapter 9 : Responsive UI**

* What is responsiveness?
* Why your app should be responsive?
* Media Query
* External Packages(Velocity x etc.)
* Project: Responsive UI (Any)

**Chapter 10 : Shared Preferences**

* Splash Screen and init state function importance
* Async function
* Future functions and await keyword role
* Shared Preference and its importance
* Shared preference and its usage with example
* Project: Login user and managing the session of the user

**Chapter 11 :Rest Api**

* Introduction
* Understanding JSON structure
* What is Model
* How to parse JSON using models
* Introduction to networking
* Get user location
* Get Api
* Get image from gallery and camera
* Post Api
* Upload single and multiple images to server.
* Login and signup with rest APis
* Project: Weather App

**Chapter 12 : Firebase**

* Introduction
* Why firebase?
* Setting up firebase
* Firebase Authentication
* Firebase firestore
* Stream Builder vs Future Builder
* Firebase Storage
* CRUD operations
* Project: Todo app using firebase

**PS: This roadmap is not supposed to be strictly followed. Chapters may be shuffled, or change based on the understanding of students.**

**Note: The motive of this bootcamp is to form a community of like-minded people where we work and help each other and grow together. The rest of the videos of this course will be on-demand by the students.**