

I'm Abbas Hassan, a full-stack developer with a Bachelor's in Computer Science from Lebanese University. I have worked in several roles, most recently at Expert Captions, where I developed applications and websites using Flutter, React, and Firebase to ensure smooth and engaging user experiences. I also have experience working remotely and on-site, including positions with Aleph Consultancy and Lead by Tech. My strengths include problem-solving, staying current with new technologies,

Describe some key projects you have worked on and the technologies used.

- **Barr (Gym App):** "Barr is a gym app that I developed to help users track workouts and manage fitness goals. I used **Flutter** for the mobile app, **React** for the admin panel, and **Firebase** for the backend, which allowed seamless real-time updates and a responsive user experience."
- **The Key Apart (Hotel App):** "The Key Apart is a hotel booking app that enables users to book and manage stays efficiently. I again used **Flutter** for mobile, **React** for the admin interface, and **Firebase** for data handling, ensuring quick data access and smooth booking processes."**Describe a problem you faced in any of your work and how you solved it.**
- I encountered performance issues with a large list. I optimized it using `ListView.builder`, which improved rendering performance significantly.
- In a project, my teammate kept making changes to the shared code without informing me, which caused conflicts. I solved it by suggesting we use a clear workflow with Git branches and communicate before merging changes. This avoided conflicts and improved teamwork.

Where do you see yourself in five years?

In five years, I aim to be a senior full-stack developer with a strong command of both frontend and backend technologies. I plan to work on complex projects, mentor junior developers, and help drive efficient development practices. My goal is to stay updated with evolving technologies and contribute to impactful, high-quality solutions

What would you say is your greatest strength?

Answer: "My greatest strength is my adaptability in learning new technologies and applying them quickly to projects. This helps me keep pace with evolving tech stacks and ensures my work remains relevant and efficient."

What would you say is your greatest weakness?

Answer: "A weakness I've identified is my tendency to focus on perfecting details, which can slow down my progress. I'm working on balancing this by setting time limits for refining specific aspects to maintain project timelines."

What is flutter and what are its advantages over other mobile dev frameworks?

Flutter is an open-source UI toolkit developed by google for building natively compiled applications for mobile, web and desktop from a single codebase. Its advantages include fast development, hot reload and a rich set of customizable widgets and tools.

what is dart and how does it differ from other programming languages?

Dart is an object-oriented programming language developed by google. its syntax resembles both java and JavaScript. It also includes features like optional typing and asynchronous programming.

what are the main widgets used in flutter and how do they work?

Widgets are the building blocks of the UI. They represent everything visible or invisible on the screen.

what is the difference between stateless and stateful widget in flutter?

Stateless widget does not maintain any state and does not change once it is built.

Stateful widget has mutable state, meaning its appearance or behavior can change dynamically during runtime.

what is the purpose of the build method in flutter?

It is responsible for creating and rendering the widget tree, which defines the UI of the app.

Every widget has a build method.

What is the Widget Tree?

Widget tree is a nested arrangement of widgets that defines the UI and its behavior

what is hot reload in flutter and how does it work?

It is a feature in flutter that allows developers to instantly see the changes they make in the code without restarting the app or losing its current state.

Navigator.push and Navigator.pushReplacement

Navigator.push is used to push a new route onto the navigator's stack.

Navigator.pushReplacement replaces the current route with a new one.

what is the purpose of the async keyword in Dart and how is it used in flutter?

The `async` keyword is used to define a function that performs asynchronous operations, such as fetching data from an api. It allows the program to perform non-blocking tasks.

how do u manage state in flutter and what are the best practices for doing so?

SetState, InheritedWidget and providers

The best practice for state management includes separating UI components from business logic, minimizing the use of setState and using immutable ds.

what is inheritedwidget in flutter and how is it used?

Special type of widget that allows data to be passed down the widget tree, from parent to child, without the need of explicit callbacks or state management.

how do u handle user input in flutter?

User input is typically handled through callbacks.

what is the purpose of the futurebuilder in flutter?

It is used to handle and display asynchronous data or operations.

how do u handle errors in flutter and what are the best practices for doing so?

- Try-Catch Blocks
- .catchError
- User-Friendly Messages and Log Errors

how do u handle different screen sizes in flutter?

- Media Query
- Flexible and Expanded Widgets
- Layout Builder
- Responsive Packages

what is the difference between main.dart file and pubspec.dart file in flutter?

Main.dart Contains the `main()` function, which initializes and runs the app.

Pubspec.yaml Manages app's dependencies and configuration settings.

what is the purpose of the material design widget library in flutter?

Provides ready-to-use widgets like AppBar, FloatingActionButton, Drawer, and more, reducing development time.

what is the purpose of the navigator widget in flutter?

The **Navigator** widget in Flutter manages the app's navigation stack, allowing users to transition between different screens (routes) in the app.