Semester	T.E. Semester V – Computer Engineering
Subject	Software Engineering
Subject Professor In-charge	Prof. Sneha Annappanavar
Assisting Teachers	Prof. Sneha Annappanavar
Laboratory	M313B

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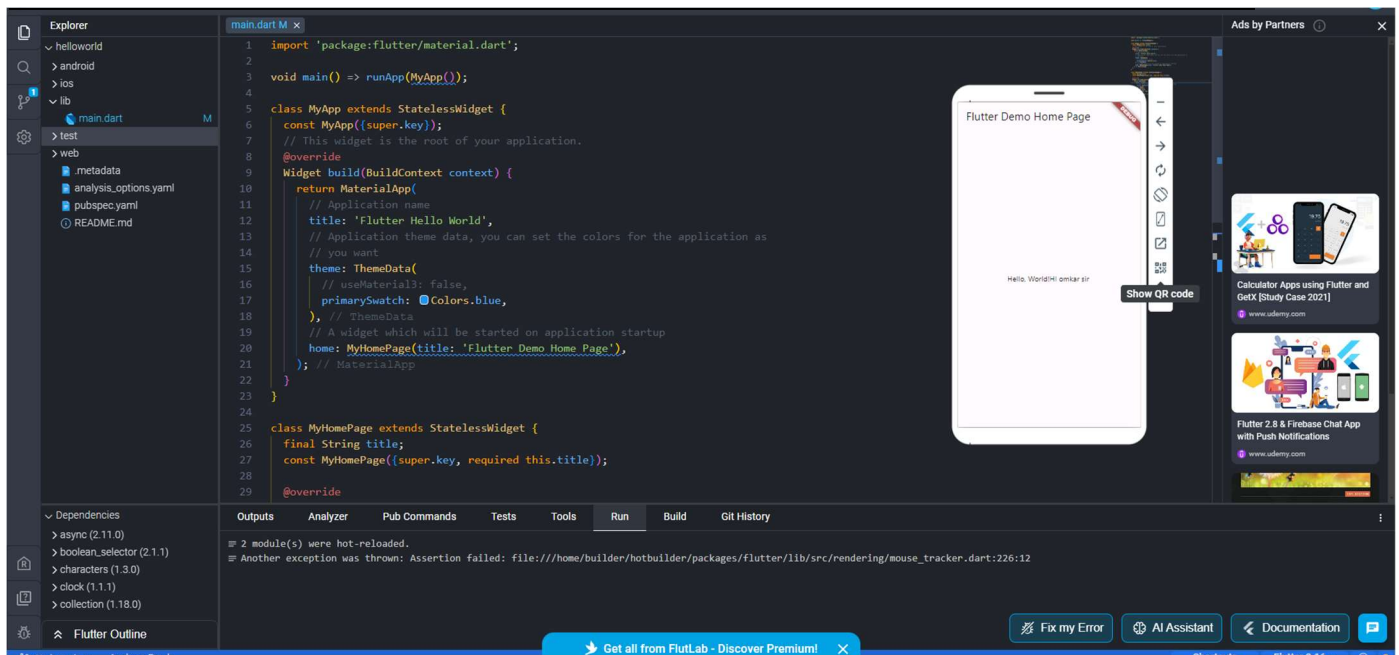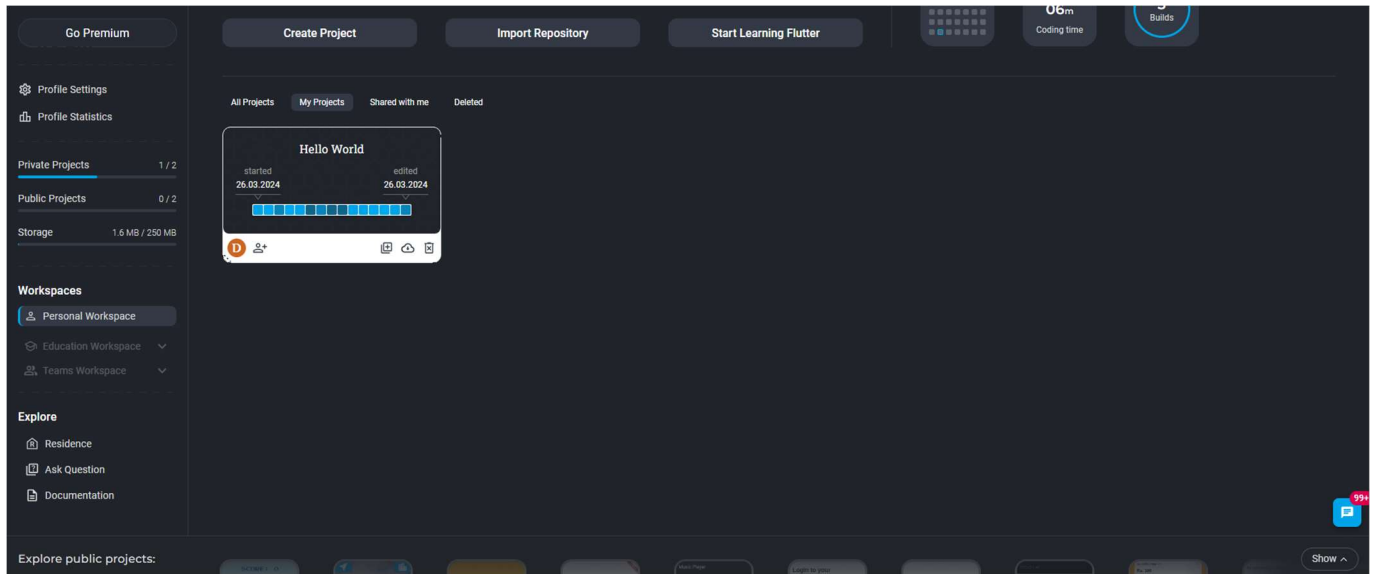**Title: Introduction to Flutter**

Explanation:

Flutter is an open-source UI framework created by Google that allows you to build beautiful, high-performance apps for mobile (Android and iOS), web, and desktop (Windows, macOS, Linux) using a single codebase.

Here's a breakdown of some key points about Flutter:

- **Built with Widgets:** Everything in Flutter is built using widgets, which are reusable building blocks that represent a part of the UI. You can think of them like Legos for your app. By composing these widgets together, you can create complex and interactive UIs.
- **Dart Language:** Unlike many other mobile frameworks that rely on JavaScript, Flutter uses Dart, a modern object-oriented language known for its ease of learning and development speed.
- **Single Codebase:** One of the biggest advantages of Flutter is its ability to write code once and deploy it across multiple platforms. This saves developers a significant amount of time and effort compared to developing separate native apps for each platform.
- **Hot Reload:** Flutter features a super helpful function called hot reload, which allows you to see the changes you make to your code reflected in the app in real-time without having to restart the app. This significantly improves development efficiency.
- **Performance:** Flutter apps are known for their smooth performance and fast rendering. This is because Flutter uses its own rendering engine, which bypasses the need for platform-specific UI components.

Implementation:

Conclusion:

In conclusion, Flutter offers a compelling development experience for creating visually stunning, high-performing applications across various platforms. With its intuitive

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widget system, modern Dart language, single codebase advantage, hot reload functionality, and smooth performance, Flutter empowers developers to build robust apps efficiently. If you're looking for a framework to streamline your mobile, web, or desktop app development process, Flutter is definitely worth considering.