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AIM: To design Flutter UI by including common widgets.

Theory :

Flutter is a UI toolkit developed by Google for building natively compiled applications for mobile, web, and desktop from a single codebase. One of Flutter's core strengths is its rich set of **predefined widgets**, which can be used to create responsive, beautiful, and functional user interfaces.

1. Understanding Widgets in Flutter: Everything in Flutter is a widget, whether it's structural

elements (like buttons or text), stylistic
elements (like padding or alignment), or layout models (like rows and columns). Widgets are either:

● **StatelessWidget:** A widget that does not require mutable state.

● **StatefulWidget:** A widget that maintains mutable state and can rebuild when the state

changes.

2. Commonly Used Flutter Widgets:

Here are some of the most frequently used widgets in Flutter UI development:3. UI Design Structure:

Text - Displays a string of text.

Container - A box model widget used for layout and styling.

Row / Column - Aligns children horizontally (Row) or vertically (Column).

Image - Displays images from assets or networks.

Icon - Displays material design icons.

ElevatedButton - A material design button with elevation.

TextField - Accepts user input in text form.

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ListView - A scrollable list of widgets.

Card - A material design card with rounded corners and elevation.

Flutter UI is built by combining widgets in a tree structure, often referred to as the **widget tree**. The layout is achieved using parent-child relationships where each widget nests within another.

4. Customization and Styling:

Widgets in Flutter are highly customizable using properties like:

- ● `padding, margin, alignment for layout`

- ● `color, fontSize, borderRadius for styling`

- ● BoxDecoration, TextStyle, etc., for advanced UI effects

An example of the use of widgets inside of my application,each page is navigated to using a separate widget.

Conclusion:

Designing a Flutter UI using common widgets provides a modular and reusable approach to app development. Mastering these core widgets is essential for creating interactive, responsive, and visually appealing user interfaces.