Name: Viven Hotwani Experiment-3 D15C/17 DOP: DOS:

**AIM**: - To Include icons, images & fonts in the flutter app

# Theory:

Flutter provides robust support for customizing the UI using **icons**, **images**, and **custom fonts**. These elements enhance the visual appeal and user experience of the application. Below is a detailed explanation of each component:

## 1. Icons in Flutter:

Icons are graphical representations of actions, files, devices, or app features. Flutter uses Material Design Icons by default, but also allows adding custom icons.

Types of Icons in Flutter:

- Built-in Icons: Provided by Flutter in the Icons class (Material Design).
- Custom Icons: You can use .ttf icon fonts (like Font Awesome) by adding them in the pubspec.yaml and referring via IconData.

## 2. Images in Flutter:

Flutter supports both **network** and **local images** to display pictures, logos, banners, and illustrations.

#### Types of Images:

- Asset Images: Stored in the app's assets folder.
- Network Images: Fetched from a URL at runtime.

#### **How to Add Asset Images:**

- 1. Create an assets/ folder in the root of the project.
- 2. Place image files inside this folder (e.g., logo.png).
- 3. Declare the image in pubspec.yaml:
- 4. Use the image in code:

## 3. Fonts in Flutter:

Flutter allows the use of **custom fonts** for branding and better typography.

#### **How to Add Custom Fonts:**

- 1. Create a fonts/ folder and place .ttf or .otf files.
- 2. Declare fonts in pubspec.yaml:
- 3. Use the custom font in your app:

#### Font Properties You Can Customize:

- fontSize
- fontWeight (e.g., FontWeight.bold)
- fontStyle (e.g., FontStyle.italic)
- letterSpacing and wordSpacing

# **Output:**



### **Conclusion:**

In Flutter, incorporating **icons**, **images**, **and fonts** is essential for crafting a visually appealing and functional UI. Icons add intuitive controls, images make interfaces vibrant, and custom fonts bring personality and branding to the application. Mastering how to properly use and manage these assets ensures a consistent, professional, and user-friendly design across different platforms.