Abhay Gupta

D15B

18 **MPL Practical-3**

**Aim:**

To learn how to include and use icons, images, and custom fonts in a Flutter application.

**Theory:**

Flutter allows developers to enhance their app’s UI by adding icons, images, and custom fonts. This improves the app’s aesthetics and usability.

**1. Adding Icons in Flutter**

Flutter provides built-in icons through the Icons class and also supports custom icons.

* **Using Built-in Icons:**

dart

CopyEdit

Icon(Icons.home, size: 50, color: Colors.blue)

* **Using Custom Icons (from Assets, such as FontAwesome):**
  + Add the package to pubspec.yaml:

yaml

CopyEdit

dependencies:

font\_awesome\_flutter: ^10.4.0

* + Use the icon:

dart

CopyEdit

Icon(FontAwesomeIcons.car, size: 50, color: Colors.red)

**2. Adding Images in Flutter**

Flutter supports images from different sources:

* **Adding Asset Images:**
  1. Place the image inside the assets/images/ folder.
  2. Declare it in pubspec.yaml:

yaml

CopyEdit

flutter:

assets:

- assets/images/car.png

* 1. Use it in the app:

dart

CopyEdit

Image.asset('assets/images/car.png', width: 100, height: 100)

* **Using Network Images:**

dart

CopyEdit

Image.network('https://example.com/image.jpg', width: 100, height: 100)

**3. Adding Custom Fonts in Flutter**

Custom fonts allow better UI customization.

* **Steps to Add Custom Fonts:**
  1. Place the font files inside the assets/fonts/ folder.
  2. Declare them in pubspec.yaml:

yaml

CopyEdit

flutter:

fonts:

- family: CustomFont

fonts:

- asset: assets/fonts/CustomFont-Regular.ttf

- asset: assets/fonts/CustomFont-Bold.ttf

weight: 700

* 1. Use the font in the app:

dart

CopyEdit

Text('Welcome to Flutter!', style: TextStyle(fontFamily: 'CustomFont', fontSize: 20))

Code:

// Add this to your pubspec.yaml under flutter section:

// fonts:

// - family: TechnixIcons

// fonts:

// - asset: assets/fonts/TechnixIcons.ttf

import 'package:flutter/material.dart';

class TechnixIcons {

// App Bar & Navigation Icons

static const IconData appLogo = Icons.build\_circle; // App logo

static const IconData menu = Icons.menu; // Drawer menu

static const IconData home = Icons.home\_rounded; // Home screen

static const IconData search = Icons.search; // Search functionality

static const IconData notification = Icons.notifications; // Notifications

// Authentication & Profile Icons

static const IconData login = Icons.login; // Login

static const IconData logout = Icons.logout; // Logout

static const IconData profile = Icons.person; // User profile

static const IconData email = Icons.email; // Email field

static const IconData password = Icons.lock; // Password field

static const IconData eye = Icons.visibility; // Password visibility

static const IconData eyeOff = Icons.visibility\_off; // Password hidden

static const IconData edit = Icons.edit; // Edit profile

// Car Service Related Icons

static const IconData car = Icons.directions\_car; // Car icon

static const IconData repair = Icons.build; // Repair services

static const IconData diagnostic = Icons.memory; // Car diagnostic

static const IconData tire = Icons.tire\_repair; // Tire service

static const IconData battery = Icons.battery\_full; // Battery service

static const IconData oil = Icons.opacity; // Oil change

static const IconData engine = Icons.settings; // Engine service

static const IconData ac = Icons.ac\_unit; // AC service

static const IconData brake = Icons.do\_not\_step; // Brake service

static const IconData wash = Icons.local\_car\_wash; // Car wash

// Location & Navigation Icons

static const IconData location = Icons.location\_on; // Location marker

static const IconData navigation = Icons.navigation; // Navigation

static const IconData map = Icons.map; // Map view

static const IconData direction = Icons.directions; // Get directions

// Booking & Payment Icons

static const IconData calendar = Icons.calendar\_today; // Booking calendar

static const IconData time = Icons.access\_time; // Time selection

static const IconData payment = Icons.payment; // Payment

static const IconData wallet = Icons.account\_balance\_wallet; // Wallet

static const IconData creditCard = Icons.credit\_card; // Credit card

static const IconData offer = Icons.local\_offer; // Offers/Discounts

// Communication Icons

static const IconData chat = Icons.chat; // Chat with mechanic

static const IconData call = Icons.call; // Call support

static const IconData support = Icons.support\_agent; // Customer support

static const IconData feedback = Icons.feedback; // User feedback

// Status & Progress Icons

static const IconData pending = Icons.pending; // Pending status

static const IconData inProgress = Icons.engineering; // Service in progress

static const IconData complete = Icons.check\_circle; // Service complete

static const IconData cancelled = Icons.cancel; // Cancelled service

static const IconData warning = Icons.warning; // Warning/Alert

// Misc Utility Icons

static const IconData share = Icons.share; // Share functionality

static const IconData favorite = Icons.favorite; // Favorites/Wishlist

static const IconData camera = Icons.camera\_alt; // Camera for photos

static const IconData attachment = Icons.attach\_file; // File attachments

static const IconData filter = Icons.filter\_list; // Filter options

static const IconData sort = Icons.sort; // Sort functionality

static const IconData info = Icons.info; // Information

static const IconData help = Icons.help; // Help section

}



**Conclusion:**

By following these steps, icons, images, and fonts can be seamlessly integrated into a Flutter app. This enhances the visual appeal, user engagement, and branding of the application, making it more attractive and interactive.