EXP 3

Aim: To include icons, images, fonts in Flutter app

Theory:

In a Flutter application, visual elements like icons, images, and custom fonts enhance the user experience. These assets can be bundled within the app or loaded from external sources.

1. Icons are graphical representations of actions, objects, or ideas. In Flutter:
● Material Icons are included by default and follow Material Design guidelines.
● Icons are vector-based and scalable, making them resolution-independent.
● Custom icon sets (like Font Awesome or custom SVG icons) can also be used by adding them as font files or via third-party packages.
● Icons enhance UI clarity and visual appeal, especially in buttons, labels, or navigation elements.

2. Images in Flutter

   Images are a key part of app UI and user experience. In Flutter:

● Asset Images are bundled with the app during development and included in the final build.
● Network Images are loaded from a URL and useful for dynamic or remote content.
● File Images are loaded from the local device storage, often used in apps that access user-generated photos.

3. Fonts in Flutter

   Custom fonts let you personalize typography and branding in your app. In Flutter:

● You can include custom fonts by adding .ttf or .otf font files to the project.
● Fonts must be registered in the app's configuration file (usually pubspec.yaml).
● Custom fonts can be applied globally or to specific widgets for consistent styling.
● Flutter supports multiple font weights and styles (like bold, italic).

Code for homescreen.dart:

```dart
import 'package:flutter/material.dart';
import 'package:animated_text_kit/animated_text_kit.dart';
import 'SelectionScreen.dart';

class WelcomeScreen extends StatefulWidget {
  const WelcomeScreen({super.key});

  @override
  _WelcomeScreenState createState() => _WelcomeScreenState();
}

class _WelcomeScreenState extends State<WelcomeScreen> {
  static const Color pastelPink = Color(0xFFF35E74);
  static const Color pastelPurple = Color(0xFFDAAAFF);
  static const Color pastelBlue = Color.fromARGB(255, 142, 205, 248);
  static const Color pastelGreen = Color.fromARGB(255, 56, 238, 56);
  static const Color textDark = Color(0xFF4A4A4A);

  Color selectedThemeColor = pastelPurple; // Default theme color

  @override
  Widget build(BuildContext context) {
    double screenWidth = MediaQuery.of(context).size.width;
    double screenHeight = MediaQuery.of(context).size.height;

    return Scaffold(
      body: Stack(
        children: [
          Positioned.fill(
            child: Container(
              decoration: BoxDecoration(
                gradient: LinearGradient(
                  colors: [selectedThemeColor.withOpacity(0.7), Colors.white],
                  begin: Alignment.topLeft,
                  end: Alignment.bottomRight,
                ),
              ),
            ),
          ),
          Positioned.fill(
            child: CustomPaint(
```

```
      painter: NotebookLinePainter(accentPink: selectedThemeColor),
    ),
  ),
  SafeArea(
    child: Padding(
      padding: EdgeInsets.symmetric(horizontal: screenWidth * 0.05),
      child: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          SizedBox(height: screenHeight * 0.015),
          Column(
            mainAxisAlignment: MainAxisAlignment.center,
            crossAxisAlignment: CrossAxisAlignment.start, // Align text and icon to the left
            children: [
              Padding(
                padding: EdgeInsets.only(left: screenWidth * 0.05),
                child: Row(
                  mainAxisSize: MainAxisSize.min,
                  children: [
                    Text(
                      'MoodLog',
                      style: TextStyle(
                        fontFamily: 'DancingScript',
                        fontSize: 48,
                        color: textDark,
                        fontWeight: FontWeight.w700,
                      ),
                    ),
                    const SizedBox(width: 10),
                    Image.asset(
                      'icons/pencil.png',
                      width: 35,
                      height: 40,
                    ),
                  ],
                ),
              ),
            ],
          ),
          const SizedBox(height: 16),
          SizedBox(
            height: 40,
            child: DefaultTextStyle(
```

```dart
        style: TextStyle(
          fontFamily: 'DancingScript',
          fontSize: 25,
          color: textDark.withOpacity(0.9),
          fontWeight: FontWeight.w600,
          letterSpacing: 1.0,
          shadows: [
            Shadow(
              offset: Offset(0.5, 0.5), // Reduced offset for subtle effect
              blurRadius: 3.0, // Lower blur for softer shadow
              color: Colors.black.withOpacity(0.2), // Less opacity for cleaner look
            ),
          ],
        ),
        child: AnimatedTextKit(
          key: ValueKey('welcomeText'),
          totalRepeatCount: 1,
          pause: Duration(milliseconds: 300),
          animatedTexts: [
            TypewriterAnimatedText(
              'Write your day, track your mood',
              speed: Duration(milliseconds: 100),
            ),
          ],
        ),
      ),
    ),
    const SizedBox(height: 48),
    Row(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        Icon(Icons.star_border, color: pastelPink, size: 36),
        SizedBox(width: 24), // Kept spacing same
        Icon(Icons.favorite_border, color: pastelBlue, size: 36),
        SizedBox(width: 24),
        Icon(Icons.mood, color: pastelGreen, size: 36),
      ],
    ),
    const SizedBox(height: 32),
    Container(
      width: double.infinity,
      height: 56,
      decoration: BoxDecoration(
```

```
          color: selectedThemeColor.withOpacity(0.85), // Slightly darkened
          borderRadius: BorderRadius.circular(28),
          boxShadow: [
            BoxShadow(
              color: Colors.black.withOpacity(0.3), // Improved shadow contrast
              blurRadius: 10,
              offset: Offset(0, 5),
            ),
          ],
        ),
        child: ElevatedButton(
          onPressed: () {
            Navigator.push(
              context,
              MaterialPageRoute(builder: (context) => SelectionScreen()),
            );
          },
          style: ElevatedButton.styleFrom(
            backgroundColor: const Color.fromARGB(255, 179, 85, 250),
            foregroundColor: Colors.white,
            elevation: 0,
            shape: RoundedRectangleBorder(
              borderRadius: BorderRadius.circular(28),
            ),
          ),
          child: const Text(
            'Get Started',
            style: TextStyle(
              fontSize: 18,
              fontWeight: FontWeight.w600,
              letterSpacing: 0.5,
            ),
          ),
        ),
      ),
    ],
  ),
),
);
}
```
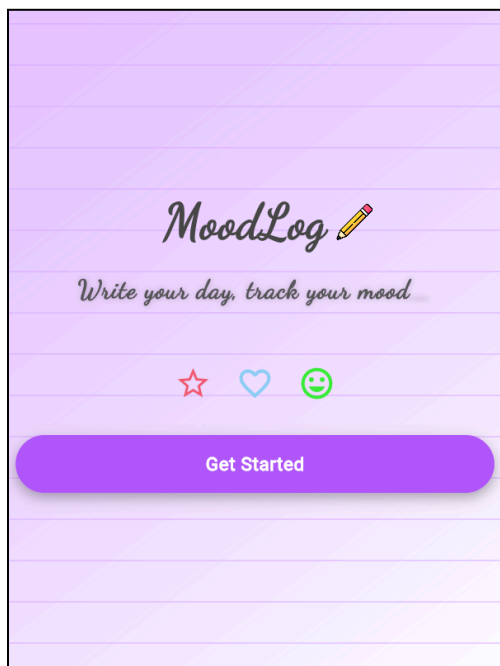
```
}

class NotebookLinePainter extends CustomPainter {
  final Color accentPink;
  NotebookLinePainter({required this.accentPink});

  @override
  void paint(Canvas canvas, Size size) {
    final Paint paint = Paint()
      ..color = accentPink.withOpacity(0.5)
      ..strokeWidth = 1.5
      ..style = PaintingStyle.stroke;

    double lineSpacing = 40.0;
    for (double i = 0; i < size.height; i += lineSpacing) {
      canvas.drawLine(Offset(0, i), Offset(size.width, i), paint);
    }
  }

  @override
  bool shouldRepaint(covariant CustomPainter oldDelegate) {
    return true;
  }
}
```

Output:

Conclusion:

In conclusion, the home page design of the app makes effective use of visual elements to create an engaging and journal-like experience. Icons such as flower, heart, and pencil enhance the visual appeal and intuitiveness of the interface. The background image of notebook lines reinforces the concept of journaling, while the use of the DancingScript font adds a handwritten, personal touch.