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## **MAD PWA LAB 3**

### **AIM:**

To include icons, images, fonts in flutter app.

### **THEORY:**

#### **1. Icons:**

Flutter provides the Icon widget for displaying material design icons. We can also use icon packages like font\_awesome\_flutter for additional icon options.

#### **2.Images:**

We can use the Image widget to display images in your Flutter app. Images can be loaded from assets, the internet, or other sources.

#### **3.Fonts:**

To use custom fonts in Flutter, you need to include the font files (usually .ttf or .otf) in your project and then reference them in your Flutter code.

### **SYNTAX:**

#### **1.Icons:**

```
actions: [  
    IconButton(  
      icon: Icon(Icons.more_vert),  
      onPressed: () {  
        // Handle more options  
      },  
    ),  
  ],  
)
```

#### **2.Images:**

```
void _getImageAndUpload() async {  
  final pickedFile = await _picker.pickImage(source: ImageSource.gallery);  
  if (pickedFile != null) {  
    // Valid file path obtained  
    print('File Path: ${pickedFile.path}');
```

```

// Check if the file exists
File imageFile = File(pickedFile.path);
if (await imageFile.exists()) {
  setState(() {
    _imageFile = imageFile;
  });

  String? downloadURL = await DatabaseMethods().uploadImage(_imageFile!);

  if (downloadURL != null) {
    // Image uploaded successfully
    print('Image uploaded. Download URL: $downloadURL');
    // Update the UI with the new story URL and timestamp
    setState(() {
      _stories.add(downloadURL);
      _storyTimestamps.add(DateTime.now());
    });
  } else {
    // Image upload failed
    print('Image upload failed.');
```

### 3.Fonts:

```

// Loading custom font
Text(
  'Custom Font Text',
  style: TextStyle(
    fontFamily: 'Font Family',
    fontSize: 16,
  ),
);
```

### **WIDGETS AND PROPERTIES:**

The widgets we focussed in this lab are:

- Images- We added the X logo image on the page.
- Icons- We added a facebook icon on the page from the FontAwesomeIcons library along with person and lock icons for username and password field.
- Fonts

### **CODE:**

```
import 'dart:io';
```

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

```
import 'package:image_picker/image_picker.dart';
```

```
import 'package:messenger_clone/services/database.dart';
```

```
import 'dart:convert';
```

```
class StoriesScreen extends StatefulWidget {
```

```
  @override
```

```
  _StoriesScreenState createState() => _StoriesScreenState();
```

```
}
```

```
class _StoriesScreenState extends State<StoriesScreen> {
```

```
  List<String> _stories = [];
```

```
  List<DateTime> _storyTimestamps = [];
```

```
File? _imageFile;
```

```
final ImagePicker _picker = ImagePicker();
```

```
@override
```

```
void initState() {
```

```
    super.initState();
```

```
    _loadStories();
```

```
}
```

```
void _loadStories() async {
```

```
    // Implement logic to fetch stories from Firestore
```

```
    // For now, I'm just setting some placeholder URLs and timestamps
```

```
    setState(() {
```

```
        _stories = [
```

```
            'https://example.com/image1.jpg',
```

```
            'https://example.com/image2.jpg',
```

```
            // Add more story URLs here
```

```
        ];
```

```
        _storyTimestamps = [
```

```
            DateTime.now().subtract(Duration(hours: 3)), // Example timestamp
```

```
            DateTime.now().subtract(Duration(minutes: 30)), // Example timestamp
```

```

        // Add more timestamps here

    ];

    });

}

void _getImageAndUpload() async {

    final pickedFile = await _picker.pickImage(source: ImageSource.gallery);

    if (pickedFile != null) {

        // Valid file path obtained

        print('File Path: ${pickedFile.path}');


        // Check if the file exists

        File imageFile = File(pickedFile.path);

        if (await imageFile.exists()) {

            setState(() {

                _imageFile = imageFile;

            });

            String? downloadURL = await DatabaseMethods().uploadImage(_imageFile!);

            if (downloadURL != null) {

```

```
// Image uploaded successfully

print('Image uploaded. Download URL: $downloadURL');

// Update the UI with the new story URL and timestamp

setState(() {

  _stories.add(downloadURL);

  _storyTimestamps.add(DateTime.now());

});

} else {

  // Image upload failed

  print('Image upload failed.');
```

  

```
}

} else {

  // File does not exist

  print('Selected file does not exist.');
```

  

```
}

} else {

  // File picker returned null

  print('No file selected.');
```

  

```
}

}
```

**@override**

**Widget build(BuildContext context) {**

**return Scaffold(**

**appBar: AppBar(**

**title: Text(\_storyTimestamps.isNotEmpty**

**? 'Stories (\${\_storyTimestamps.length}) -  
\${\_storyTimestamps.first.hour}:\${\_storyTimestamps.first.minute}'**

**: 'Stories'),**

**),**

**body: \_stories.isEmpty**

**? Center(**

**child: Text('No stories available'),**

**)**

**: ListView.builder(**

**itemCount: \_stories.length,**

**scrollDirection: Axis.horizontal,**

**itemBuilder: (context, index) {**

**return Padding(**

**padding: EdgeInsets.symmetric(horizontal: 8.0),**

**child: Column(**

**crossAxisAlignment: CrossAxisAlignment.start,**

**mainAxisAlignment: MainAxisAlignment.start,**

```
children: [  
  
  Container(  
  
    width: 100,  
  
    height: 180,  
  
    decoration: BoxDecoration(  
  
      borderRadius: BorderRadius.circular(8.0),  
  
      image: DecorationImage(  
  
        image: NetworkImage(_stories[index]),  
  
        fit: BoxFit.cover,  
  
      ),  
  
    ),  
  
    ),  
  
    ),  
  
    SizedBox(height: 8.0),  
  
    // Show username only when a story is available  
  
    Text(  
  
      'My Story', // Display username or other info here  
  
      style: TextStyle(  
  
        fontWeight: FontWeight.bold,  
  
      ),  
  
    ),  
  
  ],
```



```
        ),  
      );  
    },  
  ),  
  floatingActionButton: FloatingActionButton(  
    onPressed: _getImageAndUpload,  
    child: Icon(Icons.camera_alt),  
  ),  
);  
  
}  
  
}
```

## OUTPUT:



## CONCLUSION:

1. Learnt about fonts, images and icons in flutter.
2. Imported a new library for icons and added it to the pubspec.yaml file.
3. Faced errors in adding image due to usage of assets syntax instead of network syntax while using image from browser.