

**CET-222 Mobile Application Development**

**LAB # 04**

**LAB Title**

| Exploring styling widgets and applying themes to the layout, Using Custom Fonts and Icons. Navigation from one screen to another screen. Open Ended Task. |
| --- |

**Assessment of CLO: 03, PLO: 05**

| **Student Name:** |  | | |
| --- | --- | --- | --- |
| **Roll No.** |  | | |
| **Semester** |  | **Session** |  |

| **S. No.** | **Perf. Level**  **Criteria** | **Excellent**  **(2.5)** | **Good**  **(2)** | **Satisfactory**  **(1.5)** | **Needs Improvement**  **(0 ~ 1)** | **Marks Obtained** |
| --- | --- | --- | --- | --- | --- | --- |
| **1** | Project Execution & Implementation | Fully functional, optimized, and well-structured. | Minor errors, mostly functional. | Some errors, requires guidance. | Major errors, non-functional, or not Performed. |  |
| **2** | Results & Debugging  Or Troubleshooting | Accurate results with effective debugging  Or Troubleshooting. | Mostly correct, some debugging Or Troubleshooting needed. | Partial results, minimal debugging  Or Troubleshooting. | Incorrect results, no debugging Or Troubleshooting, or not attempted. |  |
| **3** | Problem-Solving & Adaptability  (VIVA) | Creative approach, efficiently solves challenges. | Adapts well, minor struggles. | Some adaptability, needs guidance. | Lacks innovation or no innovation, unable to solve problems. |  |
| **4** | Report Quality & Documentation | Clear, structured, with detailed visuals. | Mostly clear, minor gaps. | Some clarity issues, missing details. | Poorly structured, lacks clarity, or not submitted. |  |
| **Total Marks Obtained Out of 10** | | | | | |  |

**Experiment evaluated by**

| **Instructor’s Name** | **Sidra Khatoon** | | |
| --- | --- | --- | --- |
| **Date** |  | **Signature** |  |

**Objective**

The objective of lab is exploring inkwell widgets and its usages. Also learn how to use ScrollView, ListView and ListTile widget.

**Assessment**

**Task:** You are required to build a simple Flutter app with **two screens**:

* **Home Screen**: The main screen of the app with buttons to navigate to Student List Screen. In this screen you have display your Batch name and Semester by using new font. Import font manually.
* **Student List Screen**: Displays a list of students by using ListView in this Screen. List contain Name in title and registration number in subtitle.

main.dart:

// ignore\_for\_file: use\_key\_in\_widget\_constructors, duplicate\_ignore

import 'package:flutter/material.dart';

void main() {

runApp(MyApp());

}

// ignore: use\_key\_in\_widget\_constructors

class MyApp extends StatelessWidget {

final ThemeData theme = ThemeData(

primarySwatch: Colors.indigo,

fontFamily: 'Schyler', // Using custom font globally

);

@override

Widget build(BuildContext context) {

return MaterialApp(title: 'Student App', theme: theme, home: HomeScreen());

}

}

// ignore: use\_key\_in\_widget\_constructors

class HomeScreen extends StatelessWidget {

final String batch = "Batch: CET-2022";

final String semester = "Semester: 6th";

@override

Widget build(BuildContext context) {

return Scaffold(

appBar: AppBar(title: Text('Home')),

body: Center(

child: Padding(

padding: const EdgeInsets.all(20.0),

child: Column(

mainAxisAlignment: MainAxisAlignment.center,

children: [

Text(batch, style: TextStyle(fontSize: 24)),

Text(semester, style: TextStyle(fontSize: 24)),

SizedBox(height: 30),

InkWell(

onTap: () {

Navigator.push(

context,

MaterialPageRoute(

builder: (context) => StudentListScreen(),

),

);

},

child: Container(

padding: EdgeInsets.symmetric(vertical: 12, horizontal: 20),

decoration: BoxDecoration(

color: Colors.indigo,

borderRadius: BorderRadius.circular(10),

),

child: Text(

'View Student List',

style: TextStyle(color: Colors.white, fontSize: 18),

),

),

),

],

),

),

),

);

}

}

class StudentListScreen extends StatelessWidget {

final List<Map<String, String>> students = [

{'name': 'Ali Khan', 'reg': 'CET-222-001'},

{'name': 'Sara Malik', 'reg': 'CET-222-002'},

{'name': 'Ahmed Raza', 'reg': 'CET-222-003'},

{'name': 'Ayesha Noor', 'reg': 'CET-222-004'},

{'name': 'Usman Tariq', 'reg': 'CET-222-005'},

];

@override

Widget build(BuildContext context) {

return Scaffold(

appBar: AppBar(title: Text('Student List')),

body: ListView.builder(

itemCount: students.length,

itemBuilder: (context, index) {

return ListTile(

leading: Icon(Icons.person),

title: Text(students[index]['name']!),

subtitle: Text(students[index]['reg']!),

);

},

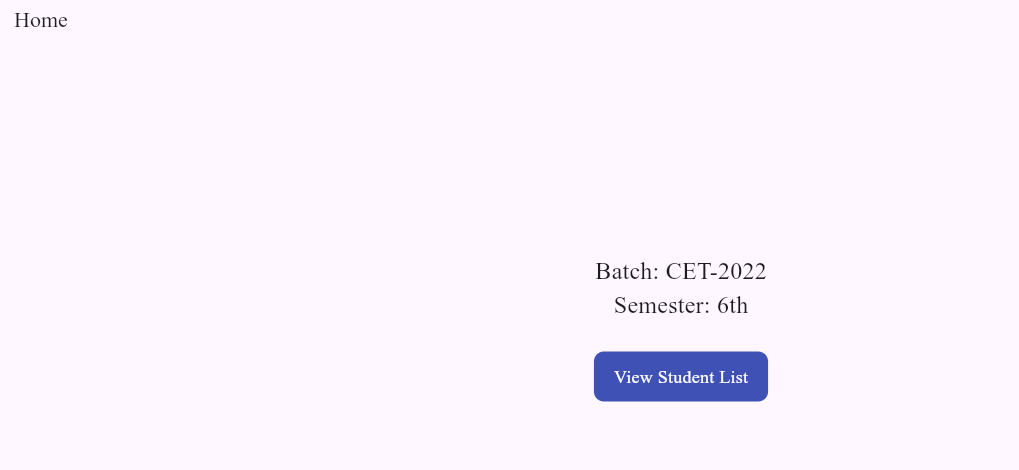
),

);

}

}

OUTPUT:



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