

# CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY



## DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH

#### WEEKLY REPORT

In this report students require to mention the work has been done during the week and planning for the next week. (Please fill individual report for each week)

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From Date: 13/06/2022	To Date: 17/06/2022
Semester: 6th	Internship ID:

#### Work done last week:

1. Making a firestore database and performing CRUD operation with the user's data.

#### Code:

#### firestore.dart

```
import 'package:annonymus_app/helper%20class/constants.dart';
import 'package:cloud firestore/cloud firestore.dart';
import 'package:firebase auth/firebase auth.dart';
import 'package:flutter/material.dart';
import '../Screens/SignIn.dart';
class Database {
 Create(String FullName, String address, String DOB, String email,
      context) async {
   await FirebaseFirestore.instance.collection('UserData').doc().set({
      'Full name': FullName,
      'address': address,
      'Email': email,
      'DOB': DOB,
    }).then((value) {
      Navigator.push(
          context, MaterialPageRoute(builder: (context) => SignInScreen()));
    });
    print('Data created');
```

```
Update() async {
   await FirebaseFirestore.instance
        .collection('UserData')
        .doc('T0G3GBR5Wp00dgXyalQs')
        .update({'Full name': 'bhavingami'});
}

Delete() async {
   await FirebaseFirestore.instance
        .collection('UserData')
        .doc('5PMdzzZ47MXLg8zVQgkt');
}
```

#### ReadData.dart

```
import 'package:cloud_firestore/cloud_firestore.dart';
import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import '../helper class/constants.dart';
class UserData extends StatefulWidget {
  const UserData({Key? key}) : super(key: key);
 @override
 State<UserData> createState() => _UserDataState();
class _UserDataState extends State<UserData> {
 @override
 Widget build(BuildContext context) {
    return SafeArea(
      child: Scaffold(
        appBar: AppBar(
          iconTheme: IconThemeData(),
          title: Text('Your Profile'),
          backgroundColor: blck,
        ),
        backgroundColor: Colors.white,
        body: Container(
            margin: EdgeInsets.all(5.0),
            padding: EdgeInsets.all(5.0),
            child: StreamBuilder<QuerySnapshot>(
              stream:
```

```
FirebaseFirestore.instance.collection('UserData').snapshots()
builder: (context, UserSnapshot) {
  if (UserSnapshot.connectionState == ConnectionState.waiting) {
    return Center(
      child: CircularProgressIndicator(),
    );
  } else {
    int index = 0;
    final email =
        FirebaseAuth.instance.currentUser!.email.toString();
    final UserDocs = UserSnapshot.data!.docs;
    for (int i = 0; i < UserDocs.length; i++) {</pre>
      if (UserDocs[i]['Email'] == email) {
        index = i;
      } else
        i++;
    return Column(
      children: [
        Icon(
          Icons.person,
          size: 50.0,
        ),
        SizedBox(
          height: 20.0,
        ),
        ListTile(
          contentPadding: EdgeInsets.all(5.0),
          shape: RoundedRectangleBorder(
              borderRadius:
                  BorderRadius.all(Radius.circular(5.0))),
          tileColor: blck,
          leading: Icon(
            Icons.mail,
            color: ylw,
          ),
          title: Text(
            UserDocs[index]['Email'],
            style: TextStyle(fontSize: 20.0, color: ylw),
          ),
        ),
        SizedBox(
          height: 5.0,
        ),
        ListTile(
          contentPadding: EdgeInsets.all(5.0),
```

```
shape: RoundedRectangleBorder(
      borderRadius:
          BorderRadius.all(Radius.circular(5.0))),
  tileColor: blck,
  leading: Icon(
    Icons.person,
    color: ylw,
  ),
  title: Text(
    UserDocs[index]['Full name'],
    style: TextStyle(fontSize: 20.0, color: ylw),
  ),
),
SizedBox(
  height: 5.0,
),
ListTile(
  contentPadding: EdgeInsets.all(5.0),
  shape: RoundedRectangleBorder(
      borderRadius:
          BorderRadius.all(Radius.circular(5.0))),
  tileColor: blck,
  leading: Icon(
    Icons.home,
    color: ylw,
  ),
  title: Text(
    UserDocs[index]['address'],
    style: TextStyle(fontSize: 20.0, color: ylw),
SizedBox(
  height: 5.0,
ListTile(
  contentPadding: EdgeInsets.all(5.0),
  shape: RoundedRectangleBorder(
      borderRadius:
          BorderRadius.all(Radius.circular(5.0))),
  tileColor: blck,
  leading: Icon(
    Icons.calendar_month,
    color: ylw,
  ),
  title: Text(
    UserDocs[index]['DOB'],
    style: TextStyle(fontSize: 20.0, color: ylw),
```

```
),
                      SizedBox(
                        height: 10.0,
                      ),
                      Text(
                        'Change password',
                        style: TextStyle(
                          color: blck,
                          fontSize: 18.0,
                          fontWeight: FontWeight.w500,
                      ),
                   ],
                 );
             },
           )),
     ),
});
```

2. Made an Investment planner page where users can calculate outcomes of SIP and Lumpsum investment as per invested amount and investment period.

#### InvestmentPlanner.dart

```
import 'dart:ffi';
import 'dart:math';

import 'package:annonymus_app/helper%20class/constants.dart';
import 'package:flutter/material.dart';
import 'package:flutter/src/foundation/key.dart';
import 'package:flutter/src/widgets/framework.dart';
import 'package:http/http.dart';

class LaxmiChitFund extends StatefulWidget {
   const LaxmiChitFund({Key? key}) : super(key: key);

   @override
   State<LaxmiChitFund> createState() => LaxmiChitFundState();
```

```
class LaxmiChitFundState extends State<LaxmiChitFund> {
 var maxInvestment = 100000.0;
 var finalExpectedResult = '0';
 double years = 5.0;
 double? periodicRate;
 double maxPercentage = 30.0;
 double maxYear = 35.0;
 double returnPercentage = 5.0;
 Color btn1Color = blck;
 double investment = 10000.0;
 double returnAmount = 0.0;
 double InvestedAmount = 0.0;
 String investmentType = 'Investment';
 Color btn2Color = blck;
 Color ctnColor = Color.fromARGB(255, 14, 20, 56);
 Color ctnBorder = Color.fromARGB(255, 14, 20, 56);
 bool SIP = true;
 @override
 Widget build(BuildContext context) {
   void getAmount() {
     if (investmentType == 'Monthly\nInvestment') {
       InvestedAmount = investment * years * 12;
       periodicRate = (returnPercentage / (years * 12)) / 100;
       num temp = pow(1 + periodicRate!, years * 12 - 1);
       returnAmount = investment * temp * (1 + periodicRate!) / periodicRate!;
       finalExpectedResult = returnAmount.toInt().toString();
     } else {
       print(SIP);
       InvestedAmount = investment * years;
       returnAmount = investment * pow(1 + returnPercentage / 100, years);
       finalExpectedResult = returnAmount.toInt().toString();
   print(InvestedAmount);
   return Scaffold(
     backgroundColor: Color.fromARGB(255, 14, 20, 56),
     appBar: AppBar(
       title: Text('Laxmi Chit Fund'),
       backgroundColor: Color(0xFFEB1555),
      ),
     body: Container(
       margin: EdgeInsets.all(10.0),
       padding: EdgeInsets.all(5.0),
       child: Column(
          children: [
```

```
Row(
  children: [
    ElevatedButton(
      style: ElevatedButton.styleFrom(
        primary: btn1Color,
        onPrimary: ylw,
        onSurface: blck, // Disable color
      onPressed: () {
        setState(() {
          SIP = true;
          if (SIP == true) {
            maxInvestment = 100000;
            btn1Color = Color(0xFFEB1555);
            btn2Color = blck;
            investmentType = 'Monthly\nInvestment';
            ctnBorder = grey2;
            ctnColor = grey;
            //InvestedAmount = investment * years * 12;
          }
        });
      },
      child: Text('SIP'),
    ),
    SizedBox(
      width: 1.0,
    ),
    ElevatedButton(
      style: ElevatedButton.styleFrom(
        primary: btn2Color,
        onPrimary: ylw,
        onSurface: blck, // Disable color
      ),
      onPressed: () {
        setState(() {
          SIP = false;
          if (SIP == false) {
            maxInvestment = 1000000;
            btn2Color = Color(0xFFEB1555);
            ctnBorder = grey2;
            btn1Color = blck;
            ctnColor = grey;
            investmentType = 'Total\nInvestment';
```

```
//InvestedAmount = investment * years;
        });
      },
      child: Text('Lumpsum'),
    ),
  ],
),
Container(
  height: 425.0,
  width: 450.0,
  decoration: BoxDecoration(
      border: Border.all(width: 2, color: ctnBorder),
      borderRadius: BorderRadius.all(Radius.circular(20)),
      color: Color.fromARGB(255, 12, 18, 52),
      boxShadow: [
        BoxShadow(
          color: ctnColor,
          blurRadius: 8,
          spreadRadius: 2,
          offset: Offset(4, 4),
      ]),
  child: Column(
    children: [
      Container(
        margin: EdgeInsets.only(top: 15.0),
        width: 320.0,
        //margin: EdgeInsets.fromLTRB(20, 0.0, 20.0, 0.0),
        height: 120.0,
        decoration: BoxDecoration(
          color: CardColor,
          borderRadius: BorderRadius.circular(10.0),
        padding: EdgeInsets.only(top: 5.0),
        child: Column(
          children: [
            Row(
              mainAxisAlignment: MainAxisAlignment.spaceEvenly,
              children: [
                Text(
                  investmentType,
                  style: headStyle,
                ),
                Text(
                  investment.toInt().toString(),
                  style: numberText,
```

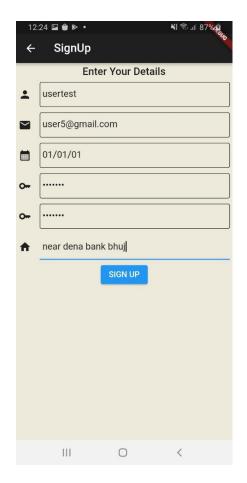
```
),
                          ],
                        ),
                        SliderTheme(
                          data: SliderTheme.of(context).copyWith(
                            activeTrackColor: Colors.white,
                            inactiveTrackColor: Color(0xFF8D8E98),
                            thumbColor: Color(0xFFEB1555),
                            thumbShape:
                                RoundSliderThumbShape(enabledThumbRadius:
15.0),
                            overlayShape:
                                 RoundSliderOverlayShape(overlayRadius: 30.0),
                            overlayColor: Color(0x29EB1555),
                            trackHeight: 0.5,
                           ),
                          child: Slider(
                              value: investment,
                              onChanged: (double newVal) {
                                 setState(() {
                                   investment = newVal.roundToDouble();
                                   getAmount();
                                });
                               },
                              min: 500,
                              max: SIP
                                   ? maxInvestment = 100000.0
                                   : maxInvestment =
                                       1000000.0 //maxInvestment.toDouble(),
                               ),
                        )
                      ],
                    ),
                  ),
                  SizedBox(
                    height: 7.0,
                  ),
                  Container(
                    margin: EdgeInsets.only(top: 8.0),
                    width: 320.0,
                    //margin: EdgeInsets.fromLTRB(20, 0.0, 20.0, 0.0),
                    height: 120.0,
                    decoration: BoxDecoration(
                      color: CardColor,
                      borderRadius: BorderRadius.circular(10.0),
                    ),
                    padding: EdgeInsets.only(top: 5.0),
                    child: Column(
```

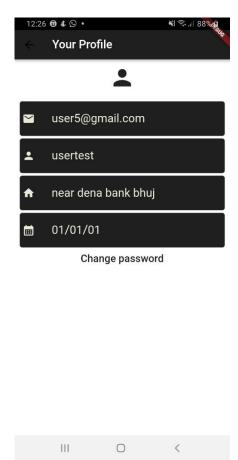
```
children: [
                         Row(
                           mainAxisAlignment: MainAxisAlignment.spaceAround,
                           children: [
                             Text(
                               'Expected\nreturn (p.a)',
                               style: headStyle,
                             ),
                             Text(
                               returnPercentage.toStringAsPrecision(3),
                               style: numberText,
                             ),
                          ],
                         ),
                        SliderTheme(
                           data: SliderTheme.of(context).copyWith(
                             activeTrackColor: Colors.white,
                             inactiveTrackColor: Color(0xFF8D8E98),
                             thumbColor: Color(0xFFEB1555),
                             thumbShape:
                                 RoundSliderThumbShape(enabledThumbRadius:
15.0),
                             overlayShape:
                                 RoundSliderOverlayShape(overlayRadius: 30.0),
                             overlayColor: Color(0x29EB1555),
                             trackHeight: 0.5,
                           ),
                           child: Slider(
                               value: returnPercentage,
                               onChanged: (double newVal) {
                                 setState(() {
                                   returnPercentage = newVal;
                                   getAmount();
                                 });
                               },
                               min: 1,
                               max: maxPercentage),
                      ],
                     ),
                  ),
                  SizedBox(
                    height: 7.0,
                  ),
                  Container(
                    width: 320.0,
                    margin: EdgeInsets.only(bottom: 15.0, top: 8.0),
                    height: 120.0,
```

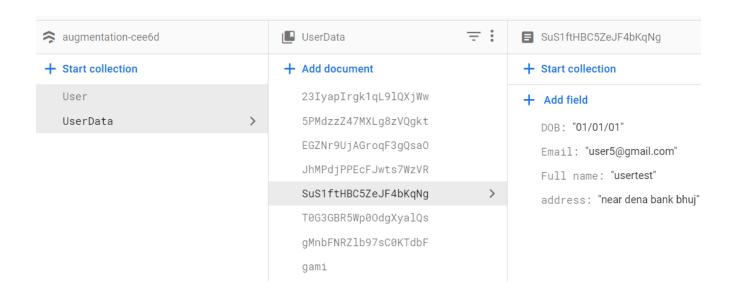
```
decoration: BoxDecoration(
                      color: CardColor,
                      borderRadius: BorderRadius.circular(10.0),
                    ),
                    padding: EdgeInsets.only(top: 5.0),
                    child: Column(
                      children: [
                        Row(
                           mainAxisAlignment: MainAxisAlignment.spaceAround,
                           children: [
                             Text(
                               'Time\nperiod',
                               style: headStyle,
                             ),
                             Text(
                               years.toInt().toString(),
                               style: numberText,
                             ),
                          ],
                        ),
                        SliderTheme(
                           data: SliderTheme.of(context).copyWith(
                             activeTrackColor: Colors.white,
                             inactiveTrackColor: Color(0xFF8D8E98),
                             thumbColor: Color(0xFFEB1555),
                             thumbShape:
                                 RoundSliderThumbShape(enabledThumbRadius:
15.0),
                             overlayShape:
                                 RoundSliderOverlayShape(overlayRadius: 30.0),
                             overlayColor: Color(0x29EB1555),
                             trackHeight: 0.5,
                           ),
                           child: Slider(
                             value: years,
                             onChanged: (double newVal) {
                               setState(() {
                                 years = newVal.roundToDouble();
                                 getAmount();
                               });
                             },
                             min: 1,
                             max: maxYear,
                           ),
                      ],
```

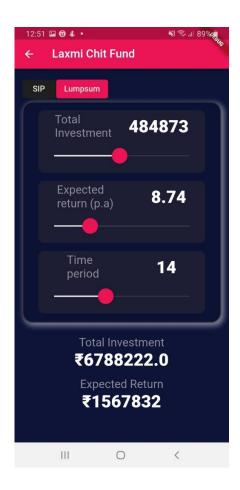
```
],
       SizedBox(
        height: 25.0,
       ),
       Text(
        'Total Investment',
        style: headStyle,
       Text(
         '₹$InvestedAmount',
        style: numberText,
       ),
       SizedBox(
        height: 15.0,
      Text(
         'Expected Return',
        style: headStyle,
       ),
       Text(
        '₹$finalExpectedResult',
        style: numberText,
    ],
),
```

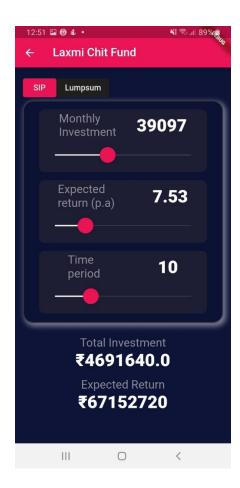
## **Screenshots:**











### **References:**

- <a href="https://firebase.flutter.dev/docs/firestore/usage/">https://firebase.flutter.dev/docs/firestore/usage/</a>
- <a href="https://www.franklintempletonindia.com/investor/lumpsum-calculator">https://www.franklintempletonindia.com/investor/lumpsum-calculator</a>
- <a href="https://blog.codemagic.io/integrate-firebase-cloud-firestore-with-flutter-perform-crud/">https://blog.codemagic.io/integrate-firebase-cloud-firestore-with-flutter-perform-crud/</a>

**Signature of External Supervisor** 

**Signature of Internal Supervisor**