



SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Category - I Deemed to be University) Porur, Chennai

SRI RAMACHANDRA ENGINEERING AND TECHNOLOGY

FLUTTER APPLICATION (FITNESS APP)

CONTINUOUS ASSESSMENT 4 REPORT

Quarter IV (Year 2)

Submitted by

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in

COMPUTER SCIENCE AND ENGINEERING

(Cyber Security and IOT)

Sri Ramachandra Engineering

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**Sri Ramachandra Institute of Higher Education and Research, Porur,
Chennai -600116**

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ABSTRACT

Fitness Application made through flutter (dart) programming language . As health is concerned doing exercise is essential thing which is main theme of this application. Both home and gym workouts are programmed inside the application . So that user can benefited through following the steps and guidance it provides.

PROBLEM STATEMENT

To develop a fitness application with different types of workouts both for home and gym purposes .

PROPOSED WORK

- First planned for the design and came up with a layout
- Then designed the home page which has home workouts
- And designed page for gym workout with cards and different fonts
- Finally added BMI calculator to the application for better experience

SAMPLE CODE

HOME_SCREEN.DART :

```
import 'dart:convert';

import 'package:fitness_kpdesign/gymwork/mainfile.dart';
import 'package:fitness_kpdesign/bmi/input_page.dart';
import 'package:fitness_kpdesign/screens/exercise.dart';
import 'package:fitness_kpdesign/screens/exercise_start.dart';
import 'package:fitness_kpdesign/screens/exercises_creen.dart';
import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;

class HomeWork extends StatefulWidget {

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

class _HomePageState extends State<HomeWork> {

  final String apiURI =
    "https://jsonstorage.net/api/items/584565a7-518b-4004-b0a0-f318aa4fe9bc";

  Exercise exercise;

  @override
  void initState() {
    getExercises();

    super.initState();
  }

  void getExercises() async {
```

```
var response = await http.get(apiURI);  
var body = response.body;  
var decodejson = jsonDecode(body);  
exercise = Exercise.fromJson(decodejson);  
setState(() {});  
}
```

```
@override
```

```
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(  
      backgroundColor: Colors.indigo,  
      elevation: 0,  
      title: Text('HOME WORKOUTS', style: TextStyle(  
        fontWeight: FontWeight.w500,  
        fontFamily: 'DancingScript',  
        fontSize: 15  
      )),  
      centerTitle: false,  
    ),  
  
    body: Center(  
      child: Container(  
        child: exercise != null  
          ? ListView(  
            children: exercise.exercises.map((e) {  
              return InkWell( //rectangular widget for touch animations  
                onTap: () {  
                  Navigator.push(  

```

```

context,
MaterialPageRoute(
  builder: (context) => ExerciseStartScreen(
    exercises: e,
  ),
),
);
},
child: Hero( //for zoomingin which looks like animation
  tag: e.id,
  child: Container(
    margin: EdgeInsets.only(left:10.0,right:10.0,top:10.0),

    decoration: BoxDecoration(
      borderRadius: BorderRadius.circular(16),
    ),
    child: Stack(
      children: <Widget>[
        ClipRRect(
          borderRadius: BorderRadius.circular(15),
          child: FadeInImage(

            image: NetworkImage(e.thumbnail),

            placeholder:
              AssetImage("assets/placeholder.jpg"),
            width: MediaQuery.of(context).size.width,
            height: 250.0,
            fit: BoxFit.cover,

```

```

    ),
  ),
  ClipRRect(
    borderRadius: BorderRadius.circular(16),
    child: Container(
      width: MediaQuery.of(context).size.width,
      height: 250.0,
      decoration: BoxDecoration(

        gradient: LinearGradient(
          colors: [
            Color(0xFF000000),
            Color(0xFF000000),
          ],
          begin: Alignment.bottomCenter,
          end: Alignment.center,
        ),
      ),
    ),
  ),
  Container( //opening another container for text
    height: 250,
    margin:
      EdgeInsets.only(right: 10.0 ),
    alignment: Alignment.bottomRight,
    child: Text(
      e.title,
      style: TextStyle(
        fontWeight: FontWeight.w800,

```



```

        fontSize: 20.0,
        fontFamily: 'SpaceMono',
        shadows: [
          Shadow(
            blurRadius: 10.0,
            color: Colors.black,
            offset: Offset(5.0, 5.0),
          ),
        ],

        color: Colors.white,
      ),
    ),
  ),
],
),
),
),
);
}).toList(),
)

: CircularProgressIndicator(), //else condition if exercise is null
),
),
drawer: Drawer( //for side button
  child : ListView(
    padding: EdgeInsets.zero,
    children: <Widget>[
      DrawerHeader(

```

```

        decoration : BoxDecoration(
          color : Colors.black,
        ),
        child: Image.asset("assets/sideimg2.jpg",fit:BoxFit.cover,),

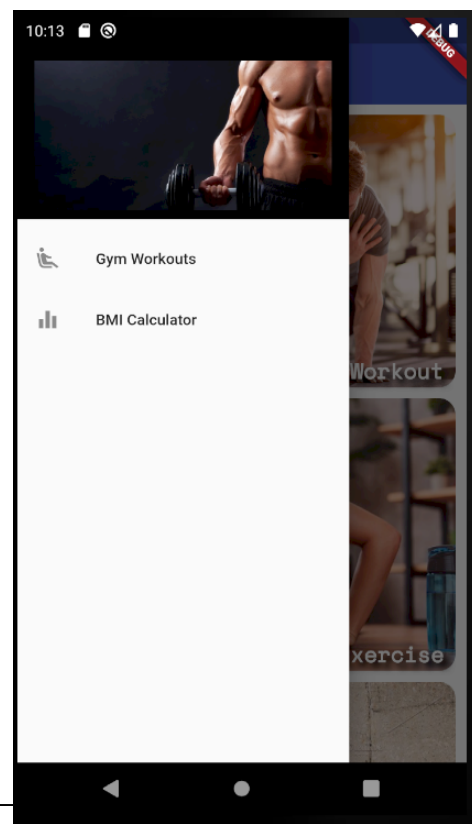
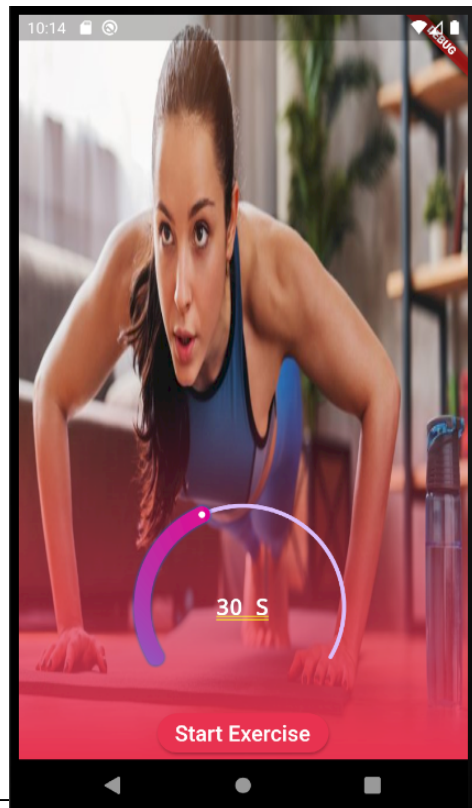
      ),
      // ListTile(
      //   leading: Icon(Icons.accessibility_new),
      //   title: Text("Home Workout"),
      //   onTap: () {
      //     Navigator.push(context,MaterialPageRoute(builder:(context){return
HomePage();}),);
      //   },
      // ),
      ListTile(
        leading: Icon(Icons.airline_seat_recline_extra),
        title: Text("Gym Workouts"),          //,textAlign: TextAlign.center,
        onTap: () {
          Navigator.pushAndRemoveUntil(
            context,
            MaterialPageRoute(builder: (BuildContext context) => GymWork()),
            ModalRoute.withName('/'),
          );
        },
      ),
      ListTile(
        leading: Icon(Icons.equalizer),
        title : Text("BMI Calculator"),
        onTap: (){

```

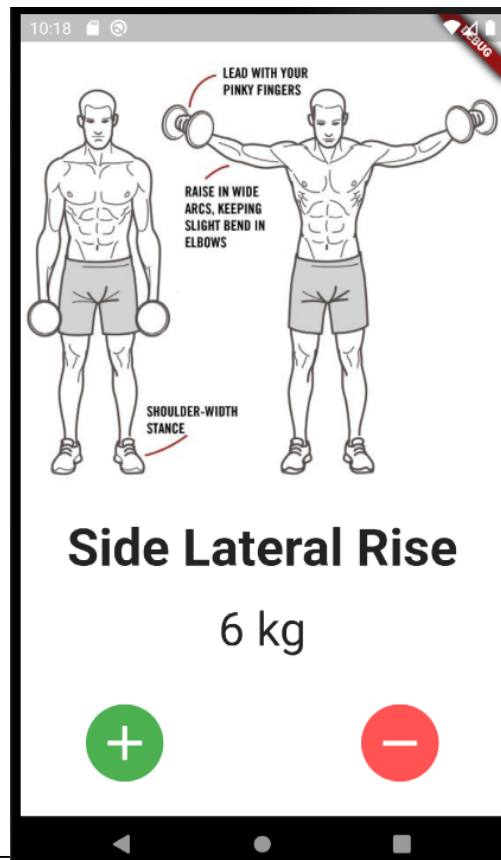
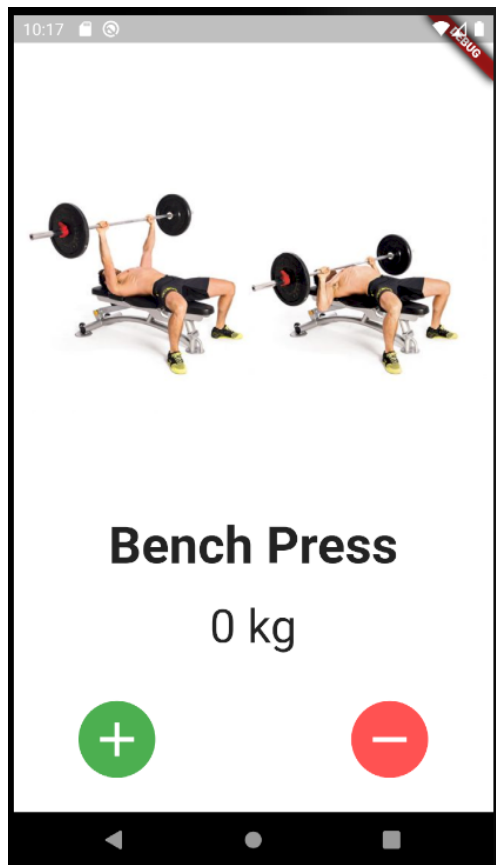
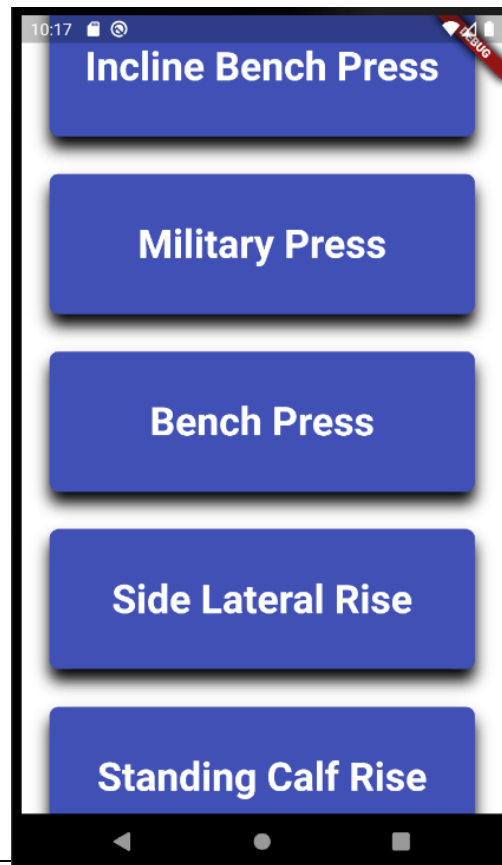
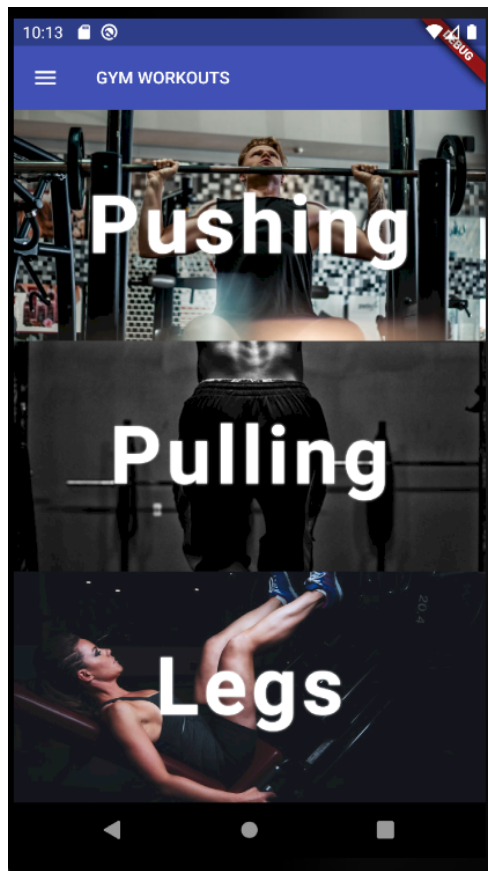
```
        Navigator.push(context,MaterialPageRoute(builder:(context){return
BmiPage();},),);
    },
)
],
)
),
);
}
}
```

SAMPLE OUTPUT

HOME PAGE :



GYM WORKOUTS :



BMI CALCULATOR :

