```
1. Project Name: Git Fighter
2. Group Information:
Member 1:
      Pavankumar Bhadane
      pavankumar.bhadane20@vit.edu
      CS - C
      12010226
Member 2:
      Shreya Roy
      shreya.roy20@vit.edu
      E&TC - D
      12010171
Member 3:
      Shubham Shah
      shubham.shah20@vit.edu
      CS - D
      12010796
```

3. Project GitHub Link: https://github.com/suhas-kadu/robospark-2021-FT-Git_Fighter.git

4. Project Workflow:

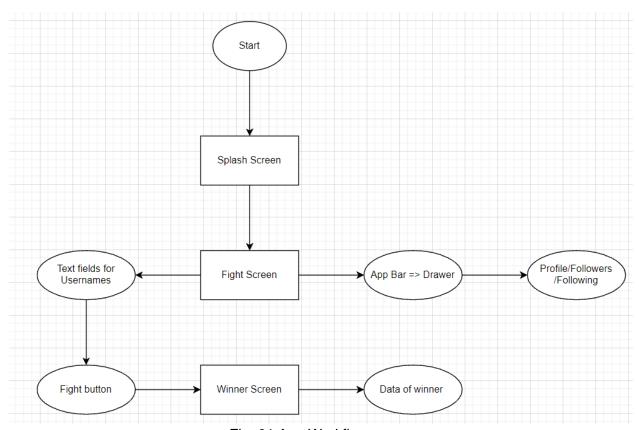


Fig. 01 App Workflow

5. Problems Faced:

- Learning everything on our own and implementing them the right way took time.
- Use of GitHub for pushing the code to our respective branches was quite new for us.
- Visual Studio took a long time to build the project on the mobile emulator every time.
- We were facing a glitch in the winner screen.

6. Alternative Solutions found for problems mentioned above:

- We referred to Dr.Angela's playlist on Udemy for learning flutter.
- Our mentor taught us how to use features of Github not known to us in projects.
- Some of the features to be merged later were implemented individually and run on Chrome which saved time.
- We removed the glitch in the winner screen by referring to stack overflow.

7. Code snippet ss:

Main.dart:

```
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
import 'package:git fighter/screens/splash screen.dart';
void main() => runApp(MyApp());
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
   return MaterialApp(
        debugShowCheckedModeBanner: false,
        title: 'Git Fighter',
        theme: ThemeData(
            brightness: Brightness.dark, primaryColor:
Colors.yellowAccent),
        darkTheme: ThemeData.dark(),
       home: SplashScreen());
  }
```

Splash Screen Code:

```
import 'dart:async';
```

```
import 'fight screen.dart';
  @override
  @override
   super.initState();
   Timer(Duration(seconds: 5), () {
     Navigator.pushReplacement(context,
          MaterialPageRoute(builder: (BuildContext context) =>
FightScreen());
   });
  @override
  Widget build(BuildContext context) {
     body: Stack(
```

```
fit: StackFit.expand,
children: [
 Container (
   mainAxisAlignment: MainAxisAlignment.start,
   children: [
       flex: 2,
       child: SingleChildScrollView(
         child: Column(
           mainAxisAlignment: MainAxisAlignment.center,
                backgroundColor: Colors.white,
                child: FaIcon(
                  FontAwesomeIcons.githubSquare,
                  size: 140.0,
```

```
Padding(
     padding: EdgeInsets.only(top: 10.0),
      style: TextStyle(
          color: Colors.grey[900],
          fontWeight: FontWeight.bold),
child: Column(
 mainAxisAlignment: MainAxisAlignment.center,
  children: [
     style: TextStyle(
         color: Colors.grey[900],
```

Fight Screen code:

```
import 'dart:convert';
import 'package:flutter/material.dart';
import 'package:git_fighter/screens/winner_screen.dart';
import 'package:http/http.dart' as http;

class FightScreen extends StatefulWidget {
    @override
```

```
FightScreenState createState() => FightScreenState();
class FightScreenState extends State<FightScreen> {
  final TextEditingController txtUser1Controller =
TextEditingController();
  final TextEditingController txtUser2Controller =
TextEditingController();
  var responseUser1, responseUser2;
  @override
  Widget build(BuildContext context) {
     appBar: AppBar(
     drawer: Drawer(
       child: Column(
         children: [
          Container(
             width: double.infinity,
```

```
padding: EdgeInsets.all(20),
              color: Colors.grey[800],
             child: Center(
                child: Column(
                  children: [
                        height: 100,
                        margin: EdgeInsets.only(top: 30, bottom: 10),
                          shape: BoxShape.circle,
                          image: DecorationImage(
                              image: NetworkImage(
56e2902208183cd7401c2aa2&v=4'),
                              fit: BoxFit.fill),
                      style: TextStyle(fontSize: 22, color: Colors.white),
                      'pavan49719@gmail.com',
```

```
style: TextStyle(fontSize: 15, color: Colors.white),
width: double.infinity,
padding: EdgeInsets.all(20),
color: Colors.grey[700],
child: Center(
    child: Text(
  style: TextStyle(fontSize: 20, color: Colors.white),
)),
width: double.infinity,
padding: EdgeInsets.all(20),
color: Colors.grey[700],
child: Center(
    child: Text(
```

```
style: TextStyle(fontSize: 20, color: Colors.white),
        )),
        width: double.infinity,
        padding: EdgeInsets.all(20),
       color: Colors.grey[700],
        child: Center(
           child: Text(
          style: TextStyle(fontSize: 20, color: Colors.white),
        )),
body: Center(
        padding: EdgeInsets.all(10),
        child: SingleChildScrollView(
         child: Column(
            mainAxisAlignment: MainAxisAlignment.start,
            children: [
```

```
SizedBox(height: 60),
  style: TextStyle(
    color: Colors.greenAccent,
   fontWeight: FontWeight.bold,
  textAlign: TextAlign.center,
SizedBox(height: 90),
  controller: txtUser1Controller,
SizedBox(height: 60),
 onTap: () {
  startFight();
```

```
borderRadius: BorderRadius.circular(20),
child: Container(
  clipBehavior: Clip.antiAlias,
  alignment: Alignment.center,
  height: 120,
   borderRadius: BorderRadius.circular(60),
   color: Colors.indigoAccent,
  child: Row(
      mainAxisAlignment: MainAxisAlignment.center,
      children: [
        Image.asset(
          height: 120,
          alignment: Alignment.center,
```

```
SizedBox(height: 60),
TextField(
  controller: txtUser2Controller,
SizedBox(height: 90),
Container (
  alignment: Alignment.topLeft,
 height: 6.0,
 color: Colors.greenAccent,
SizedBox(height: 20),
  alignment: Alignment.topLeft,
  width: 2000.0,
 height: 6.0,
  color: Colors.greenAccent,
```

```
))),
 void startFight() async {
   if (txtUser1Controller.text == "" ||
       txtUser2Controller.text == "" ||
       txtUser1Controller.text == null ||
       txtUser2Controller.text == null) {
     ScaffoldMessenger.of(context).showSnackBar(SnackBar(
       content: Text("Please enter username"),
     responseUser1 = await http
         .get(Uri.http('api.github.com',
'users/${txtUser1Controller.text}'));
     responseUser2 = await http
         .get(Uri.http('api.github.com',
'users/${txtUser2Controller.text}'));
     var jsonData1 = jsonDecode(responseUser1.body);
     var jsonData2 = jsonDecode(responseUser2.body);
```

```
if (jsonData1["message"] == "Not Found" ||
   jsonData2["message"] == "Not Found") {
 ScaffoldMessenger.of(context).showSnackBar(SnackBar(
   content: Text("Enter valid username"),
 ));
 int user1Followers = jsonData1['followers'];
 int user1Following = jsonData1['following'];
 int user2Following = jsonData2['following'];
 setState(
      if ((user1Followers + user1Following) >
          (user2Followers + user2Following))
       winner = txtUser1Controller.text;
       winner = txtUser2Controller.text;
     print("winner is $winner");
     Navigator.push(
       context,
       MaterialPageRoute(
         builder: (BuildContext context) => Winner(winner),
```

```
);
},

);
}
}
```

Winner Screen Code:

```
import 'dart:convert';
import 'package:flutter/material.dart';
import 'package:git_fighter/models/winner_data.dart';
import 'package:git_fighter/widget/all_confetti_widget.dart';
import 'package:http/http.dart' as http;

class Winner extends StatefulWidget {
   String winner;

Winner(String winner) {
    this.winner = winner;
}
```

```
@override
  WinnerState createState() => WinnerState(winner);
class WinnerState extends State<Winner> {
  WinnerData winnerData = new WinnerData();
  String winner;
  _WinnerState(String winner) {
   this.winner = winner;
  }
  @override
  void initState() {
   super.initState();
   getProfileData();
   setState(() {});
  }
 void getProfileData() async {
   var response = await http.get(Uri.http('api.github.com',
'users/$winner'));
   var jsonData = await jsonDecode(response.body);
```

```
setState(() {
    winnerData = WinnerData.fromJson(jsonData);
  });
}
@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
     centerTitle: true,
      title: Center(child: Text("Winner : $winner ")),
    ),
    body: Center(
      child: (SingleChildScrollView(
        child: Padding(
          padding: const EdgeInsets.all(10.0),
          child: Column (
            crossAxisAlignment: CrossAxisAlignment.stretch,
            mainAxisAlignment: MainAxisAlignment.start,
            children: <Widget>[
              AllConfettiWidget(),
              SizedBox(height: 20),
              Container (
```

```
height: 200.0,
  width: 200.0,
  child: winnerData.avatarUrl != null
      ? CircleAvatar(
          backgroundImage:
              NetworkImage("${winnerData.avatarUrl}"),
          radius: 20,
          backgroundColor: Colors.transparent,
          foregroundColor: Colors.transparent,
      : Container(),
),
Padding (
 padding: EdgeInsets.fromLTRB(10, 0, 0, 0),
),
Text(
  "Followers : ${winnerData.followers}",
  style: TextStyle(fontSize: 30),
 textAlign: TextAlign.center,
),
Text(
  "Following : ${winnerData.following}",
  style: TextStyle(fontSize: 30),
```

```
textAlign: TextAlign.center,
),
SizedBox(height: 20),
Container (
  alignment: Alignment.topLeft,
 width: 2000.0,
 height: 6.0,
 color: Colors.blueAccent,
),
SizedBox(height: 20),
Text(
  "Repos : ${winnerData.publicRepos}",
 style: TextStyle(fontSize: 24),
SizedBox(height: 20),
winnerData.bio != null
    ? Text(
        "Bio : ${winnerData.bio}",
        style: TextStyle(
         fontSize: 24,
        ),
    : Container(),
```

```
Padding(
 padding: EdgeInsets.only(top: 30),
),
winnerData.company != null
   ? Text(
        "Company : " "${winnerData.company}",
        style: TextStyle(
         fontSize: 24,
       ),
      )
    : Container(),
Padding (
 padding: EdgeInsets.only(top: 30),
winnerData.location != null
    ? Text(
        "Location : " "${winnerData.location}",
        style: TextStyle(
         fontSize: 24,
       ),
    : Container(),
Padding(
```

```
padding: EdgeInsets.only(top: 30),
              ),
              Container (
                alignment: Alignment.topLeft,
                width: 2000.0,
                height: 6.0,
                color: Colors.blueAccent,
            ],
        ),
     )),
 );
}
```

Animation Code:

```
import 'dart:math';
import 'package:confetti/confetti.dart';
import 'package:flutter/material.dart';
import 'package:confetti/src/enums/confetti_controller_state.dart';
```

```
class AllConfettiWidget extends StatefulWidget {
  const AllConfettiWidget({
   Key key,
  }) : super(key: key);
  @override
  _AllConfettiWidgetState createState() => _AllConfettiWidgetState();
class AllConfettiWidgetState extends State<AllConfettiWidget> {
  ConfettiController controller;
  @override
  void initState() {
   super.initState();
    controller = ConfettiController(duration: Duration(seconds: 5));
   controller.play();
  }
  static final double right = 0;
  static final double down = pi / 2;
  static final double left = pi;
```

```
static final double top = -pi / 2;
final double blastDirection = left;
@override
Widget build(BuildContext context) {
 return GestureDetector(
   behavior: HitTestBehavior.opaque,
   onTap: () {
     if (controller.state == ConfettiControllerState.playing) {
       controller.stop();
     } else {
      controller.play();
     }
   },
   child: Stack(
     children: [
       buildConfetti(),
    ],
 );
```

```
Widget buildConfetti() => Align(
      alignment: Alignment.center,
      child: ConfettiWidget(
        confettiController: controller,
        colors: [
          Colors.red,
          Colors.blue,
          Colors.orange,
          Colors.purple,
          Colors.lightBlue,
        ],
        //blastDirection: blastDirection,
        blastDirectionality: BlastDirectionality.explosive,
        shouldLoop: true,
        emissionFrequency: 0.05,
        numberOfParticles: 5,
        gravity: 0.2,
        maxBlastForce: 2,
        minBlastForce: 1,
        particleDrag: 0.1,
     ),
    );
```

8. Output:



Fig. 02: Splash Screen

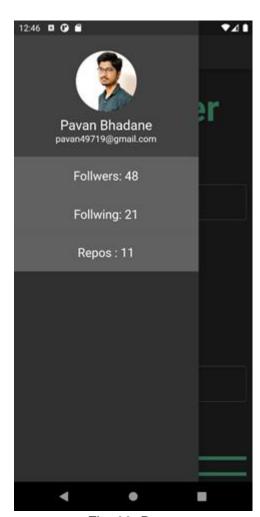


Fig. 03: Drawer

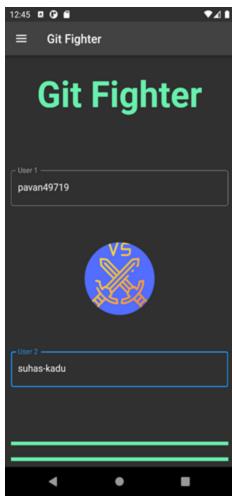


Fig. 04: Fight Screen

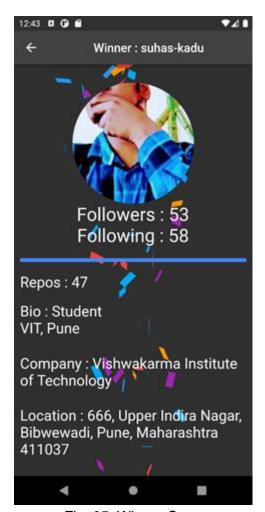


Fig. 05: Winner Screen