Project Development Phase
Sprint - 2

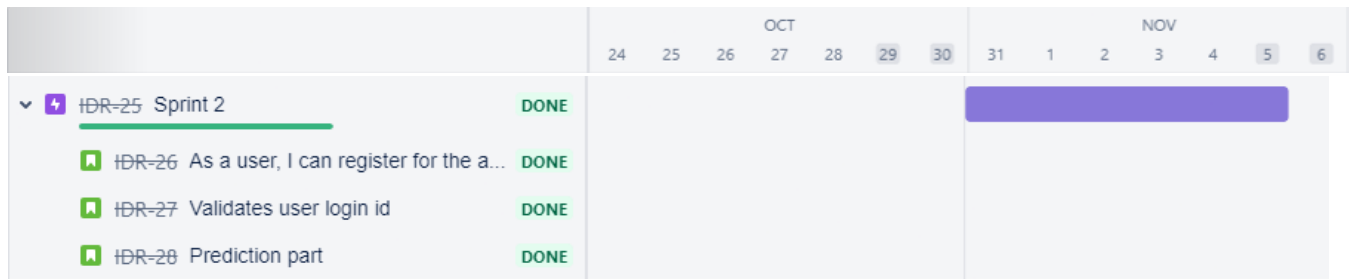| Date	4th November 2022
Team ID	PNT2022TMID17830
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

Sprint Plan

Define the initial stages of the problem requirement.
Draw and understand the flowchart of the sprint
Assign tasks to each teammate

Team Tasks

- As a user, I can register for the application through mail
- Validate login
- Prediction part

Progress

Sprint tracker

start date	end date	current sprint points
31 Oct 2022	05 Nov 2022	16

Velocity for Sprint-2 = 20/8 = 2.5

Code Snippet

```
model = load_model(r"Updated-xception-diabetic-retinopathy.h5")
app = Flask(__name__)
app.secret_key="abc"
app.config['UPLOAD_FOLDER'] = "User_Images"
```

```python
@ app.route('/login', methods=['GET','POST'])
def login():
    if request.method == "GET":
        user = request.args.get('mail')
        passw = request.args.get('pass')
        print(user, passw)
        query = {'mail': {'$eq': user}}
        docs = my_database.get_query_result(query)
        print(docs)
        print(len(docs.all()))
        if (len(docs.all()) == 0):
            return render_template('login.html', pred="")
        else:
            if ((user == docs[0][0]['mail'] and passw == docs[0][0]['psw'])):
                session['user'] = user
                flash("Logged in as " + str(user))
                return render_template('index.html', pred="Logged in as
"+str(user), vis ="hidden", vis2="visible")
            else:
                return render_template('login.html', pred="The password is
wrong.")
    else:
        return render_template('login.html')
```

Test cases

Test cases	Result
Improper mail id given	Not registered
Password not provided	Not logged in
Log in to the application	Successful
Showing logged in mail id	Successful
Upload and correct prediction	Successful (logged in as abc@gmail.com)

Result

Diabetic Retinopathy Classification   Home   Prediction   Logged in as santhoshsingh_cs@mepcoeng.ac.in

Diabetic Retinopathy

Diabetic retinopathy is a diabetes complication that affects eyes. It's caused by damage to the blood vessels of the light-sensitive tissue at the back of the eye (retina). At first, diabetic retinopathy might cause no symptoms or only mild vision problems. But it can lead to blindness. The condition can develop in anyone who has type 1 or type 2 diabetes. The longer you have diabetes and the less controlled your blood sugar is, the more likely you are to develop this eye complication.

NORMAL EYE   DIABETIC RETINOPATHY