

Project Development Phase

Sprint - 2

| | |
|--------------|---|
| Date | 4th November 2022 |
| Team ID | PNT2022TMID02120 |
| Project Name | Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy |

Sprint Plan

Define the initial stages of the problem requirement.

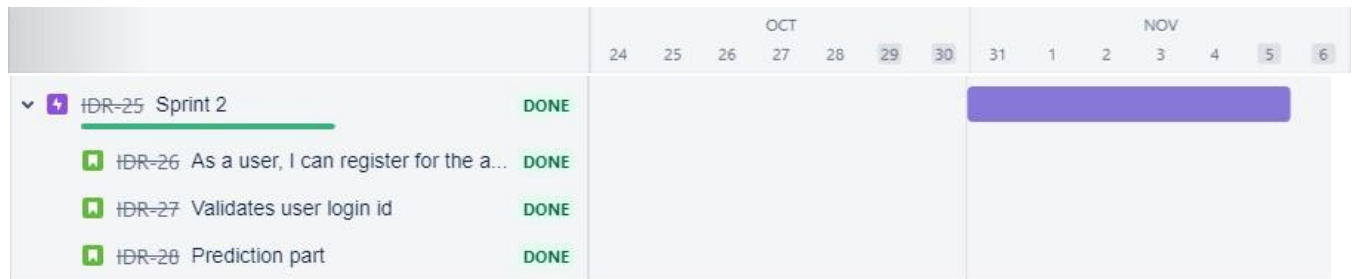
Draw and understand the flowchart of the sprint

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"
```

```

@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