


Building python code

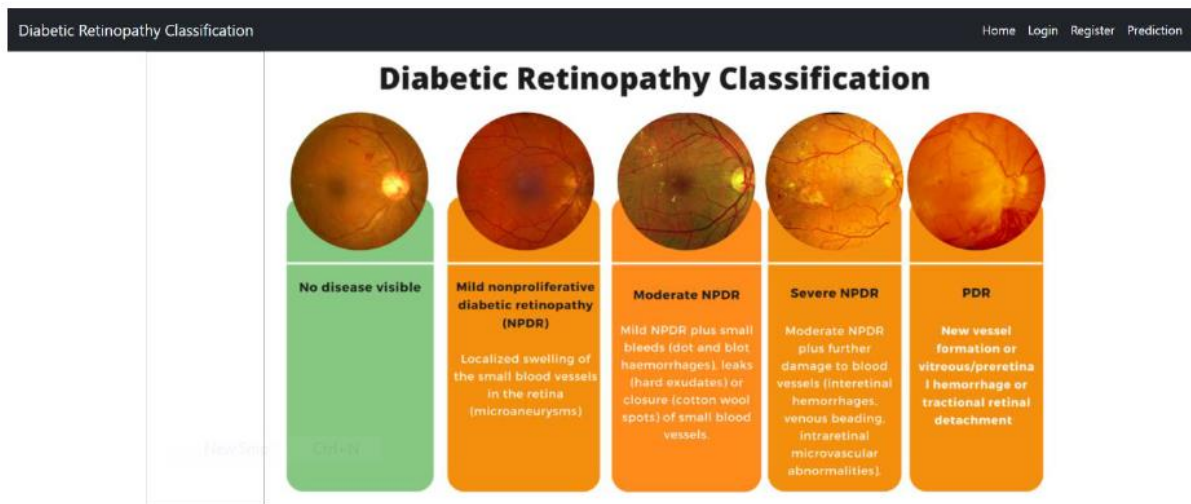


```

1 import numpy as np
2 import os
3 from tensorflow.keras.models import load_model
4 from tensorflow.keras.preprocessing import image
5 from tensorflow.keras.applications.inception_v3 import preprocess_input
6 import requests
7 from flask import Flask, request, render_template, redirect, url_for
8 from cloudant.client import Cloudant
9 model = load_model("Updated-xception-diabetic-retinopathy.h5")
10 app = Flask(__name__)
11 # Authenticate using an IAM API key
12 client = Cloudant . iam('d3ffc21e-c8d1-4276-a7c3-d7a40a549e1f-bluemix',
13                        'oSerF5LE8-d81yJW4VEzDRxk1iIN5ebQn8o3yqKXf3zu', connect=True)
14 # Create a database using an initialized client
15 my_database = client.create_database('my_database')
16
17 # default home page or route
18 #app.route('/')
19 def index():
20     return render_template('index.html')
21
22 # app.route('/index')
23 def home():
24     return render_template("index.html")
25
26 # registration page
27 # app.route('/register')
28 def register():
29     return render_template('register.html')
30
31 # app.route('/afterreg', methods=['POST'])
32 def afterreg():
33     x = [x for x in request.form.values()]

```

a) index.html



b) login.html

DR Register

Home Login Register

Enter Registered Mail ID

Enter Password


Login

c) register.html

Register page involves in user registration with name, mail id and password field.

DR Register

Home Login Register



Login

Already Registered: Login Here

d) prediction.html

The prediction percentage shows the type of disease (i.e.) if the percentage shows 75% then the patient is infected with severe NPDR type.

Diabetic Retinopathy Classification

Home Logout

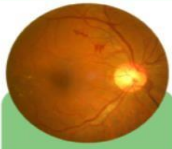
Upload Image

Choose File


No file chosen

Predict

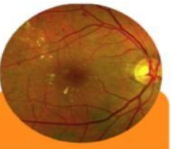
25%



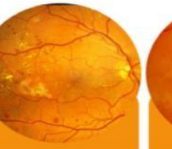
No disease visible



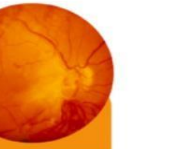
Mild nonproliferative diabetic retinopathy



Moderate NPDR



Severe NPDR



PDR

e) logout.html

Diabetic Retinopathy

Home Login Register

Successfully Logged Out!

Login for more Information