

EARLY STAGE DIABETES PREDICTION USING MACHINE LEARNING TECHNIQUES & DJANGO

“Execution Procedure”

By

GOLLAPALLI BHAVYA MOULIKA

(Reg No: 17131A0562)

JAHNAVI SANJANA PATNALA

(Reg No: 17131A0577)

KESAVADAS SRI SAI THARUN

(Reg No: 17131A0599)

KURLI VINEETHA

(Reg No: 17131A05B7)

Under the esteemed guidance of

Dr. G. Satya Keerthi
Assistant Professor



COLLEGE OF ENGINEERING
(AUTONOMOUS)

GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING (AUTONOMOUS)

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Madhurawada, Visakhapatnam-530 048

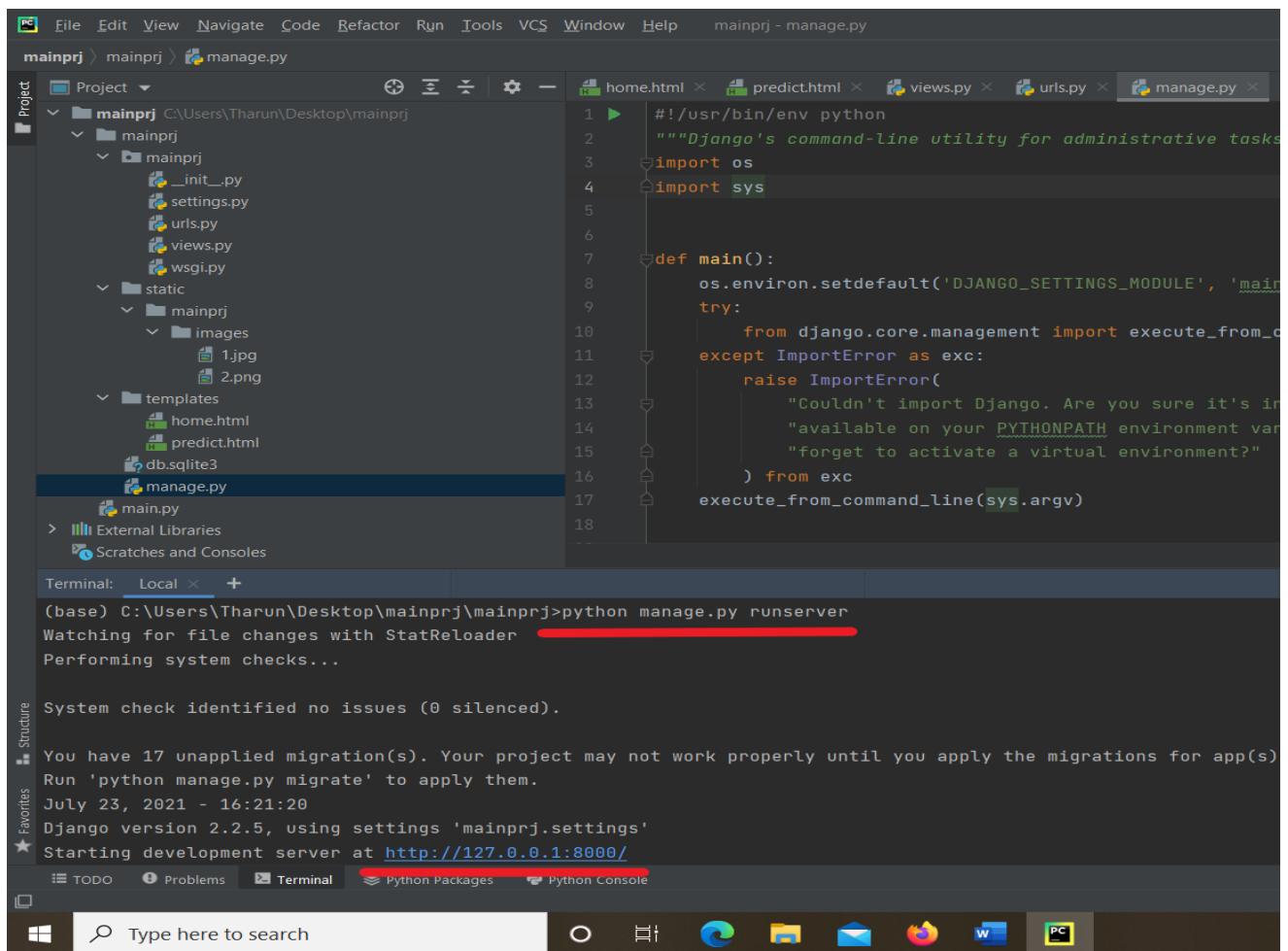
STEP-1:

For our Diabetes Prediction System to work, we have to launch the “Local Host”, from where we can access the System.

The following code is used to launch the Localhost:

“Python manage.py runserver”

[manage.py is automatically created and it creates the environment, so that our system can work.]



The screenshot shows an IDE with a project named 'mainprj' on the left sidebar. The project structure includes folders for 'mainprj' (containing __init__.py, settings.py, urls.py, views.py, wsgi.py), 'static', 'images' (with 1.jpg and 2.png), and 'templates' (with home.html, predict.html, db.sqlite3, and manage.py). The main editor displays the content of manage.py, which is a Django management utility script. The terminal at the bottom shows the command 'python manage.py runserver' being executed. The output indicates that the system checks are successful, but there are 17 unapplied migrations. It also shows the Django version (2.2.5) and the settings used ('mainprj.settings'). The development server is started at http://127.0.0.1:8000/.

```
#!/usr/bin/env python
"""Django's command-line utility for administrative tasks"""
import os
import sys

def main():
    os.environ.setdefault('DJANGO_SETTINGS_MODULE', 'mainprj.settings')
    try:
        from django.core.management import execute_from_command_line
    except ImportError as exc:
        raise ImportError(
            "Couldn't import Django. Are you sure it's installed and\n"
            "available on your PYTHONPATH environment variable? Did you\n"
            "forget to activate a virtual environment?"
        ) from exc
    execute_from_command_line(sys.argv)
```

(base) C:\Users\Tharun\Desktop\mainprj\mainprj>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).

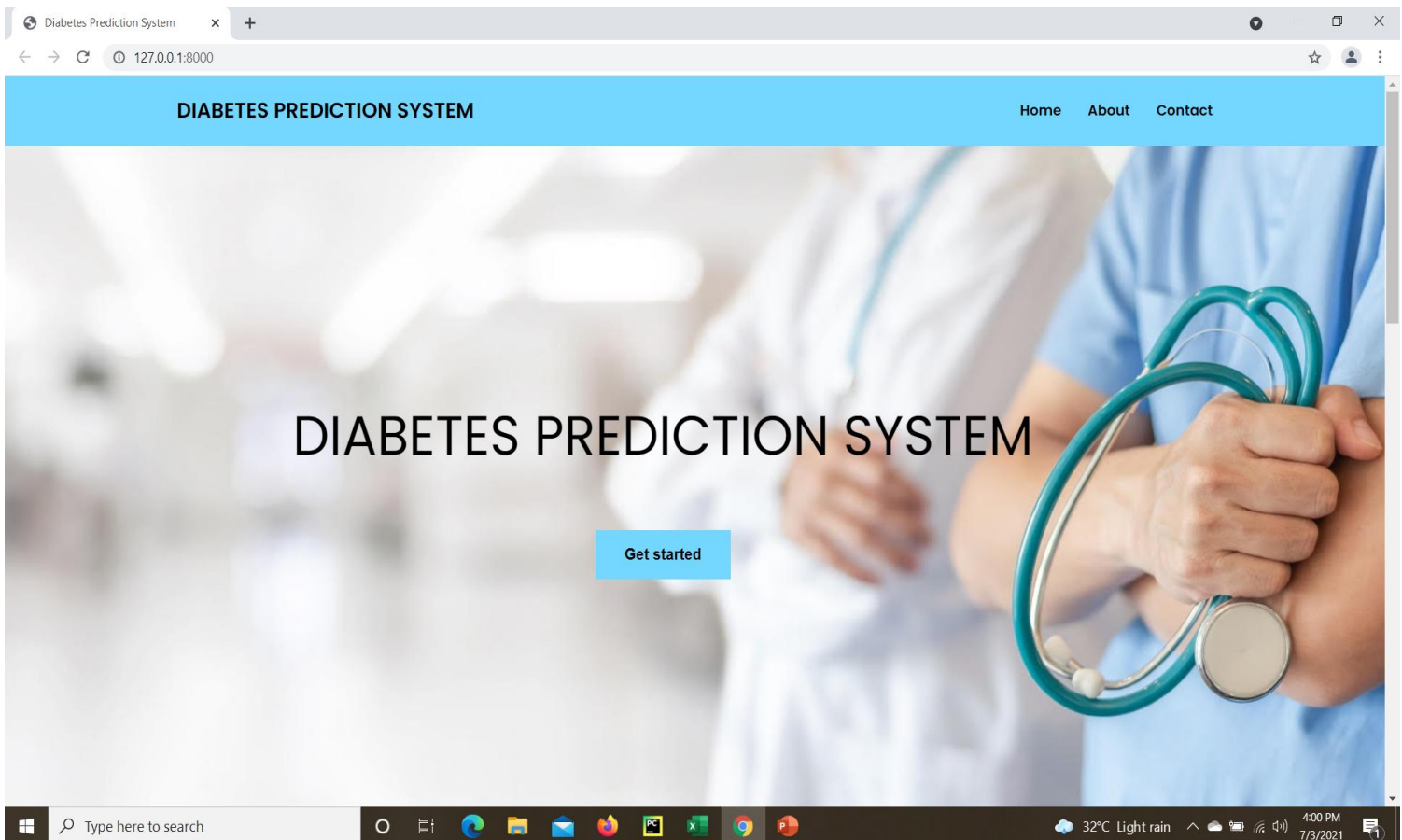
You have 17 unapplied migration(s). Your project may not work properly until you apply the migrations for app(s)
Run 'python manage.py migrate' to apply them.

July 23, 2021 - 16:21:20
Django version 2.2.5, using settings 'mainprj.settings'
Starting development server at http://127.0.0.1:8000/

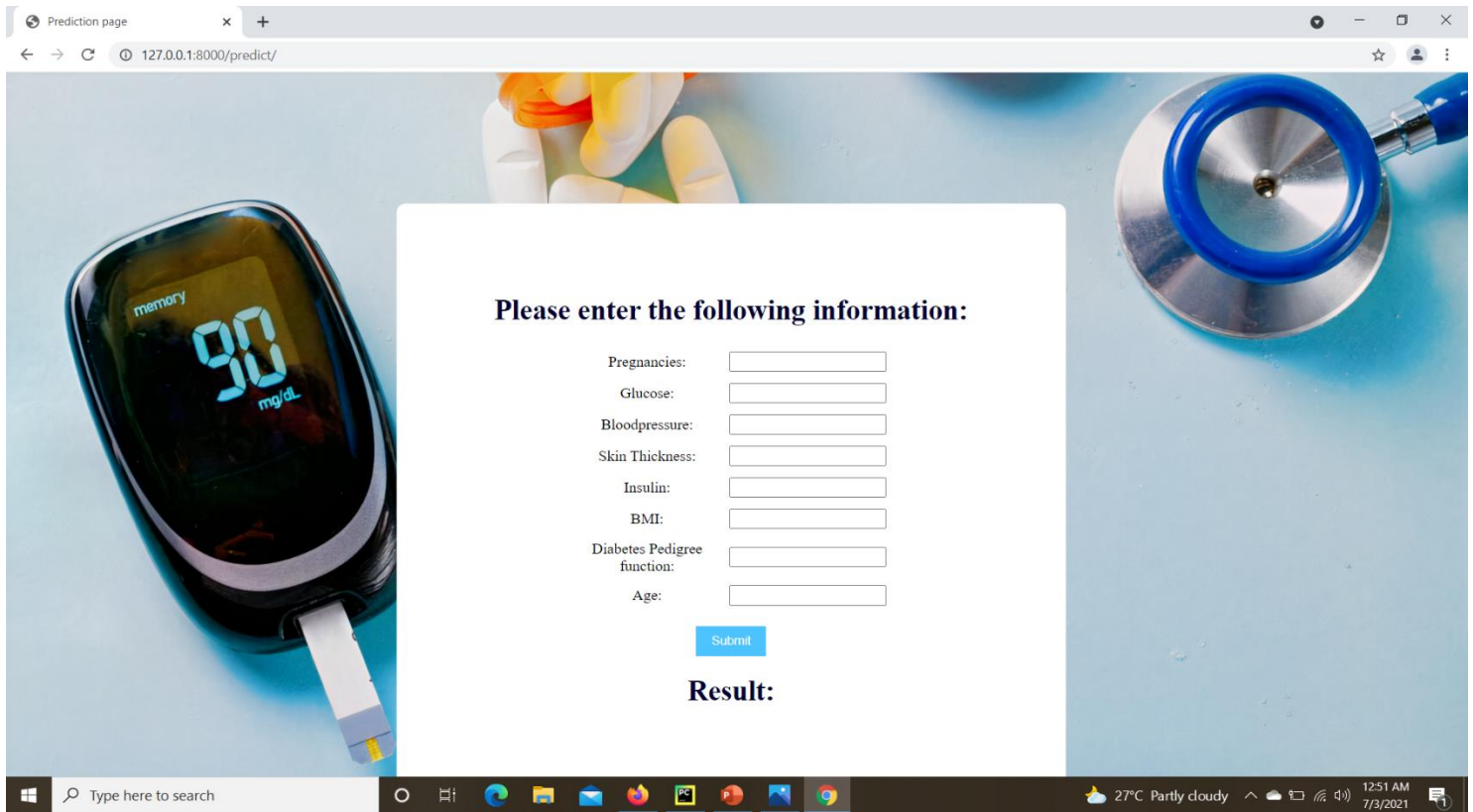
STEP-2:

After launching the Localhost, We can access the Diabetes Prediction System., which consists of a Home page and a Predict page, as follows;

HOME PAGE OF DIABETES PREDICTION SYSTEM:



PREDICT PAGE OF DIABETES PREDICTION SYSTEM:



The screenshot shows a web browser window titled "Prediction page" with the URL "127.0.0.1:8000/predict/". The background of the page features a medical-themed image with a glucose meter on the left displaying "90 mg/dL", a stethoscope on the right, and a hand holding a pill in the center. Overlaid on this is a white form titled "Please enter the following information:". The form contains eight input fields: "Pregnancies:", "Glucose:", "Bloodpressure:", "Skin Thickness:", "Insulin:", "BMI:", "Diabetes Pedigree function:", and "Age:". A blue "Submit" button is located below the "Age" field. Below the form, the text "Result:" is displayed. The browser's address bar and the Windows taskbar are visible at the bottom.

Prediction page

127.0.0.1:8000/predict/

Please enter the following information:

Pregnancies:

Glucose:

Bloodpressure:

Skin Thickness:

Insulin:

BMI:

Diabetes Pedigree function:

Age:

Result:

Hence, in this way, user can check whether he/she is Diabetic or not, by using our “Diabetes Prediction System.”