1. Host a Ubuntu Virtual Machine using Oracle VM Virtual Box.

A computer screen shot of a computer screen

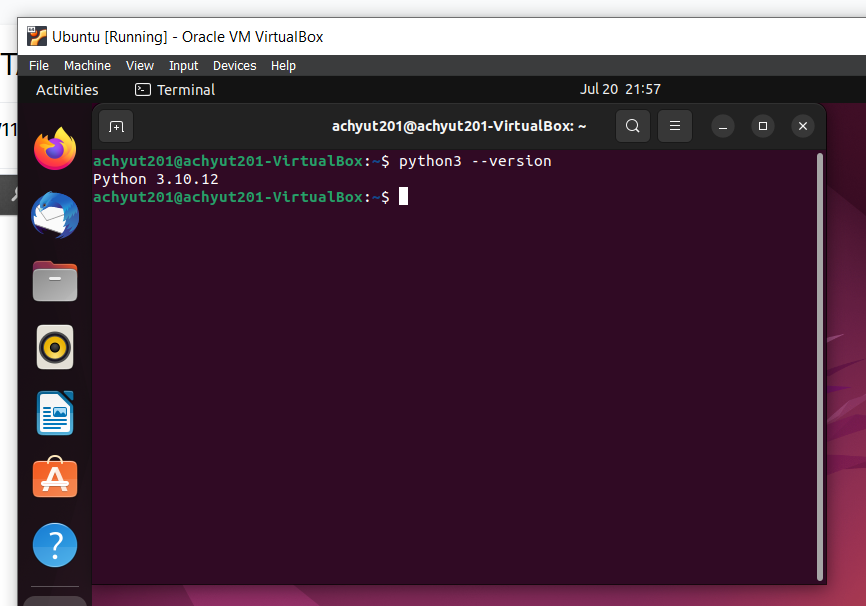
Description automatically generated

1. Set up Visual Studio code on Ubuntu VM.

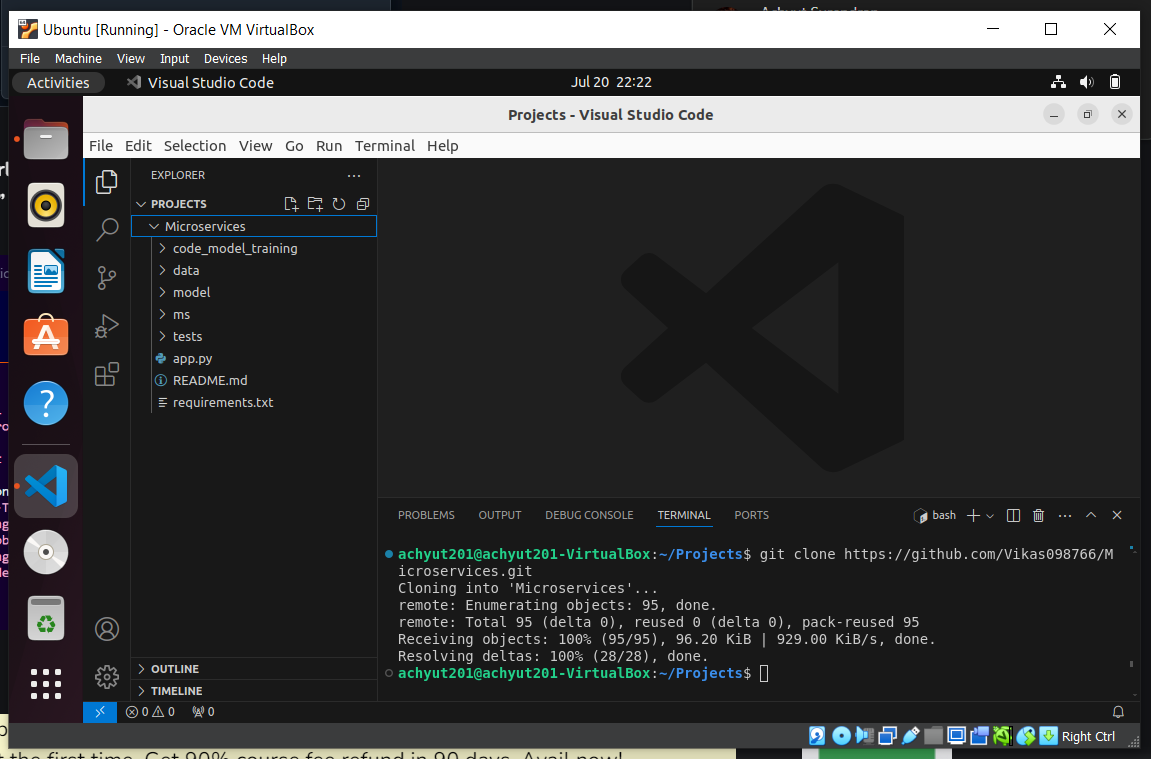
A screenshot of a computer

Description automatically generated

1. Set up Python.



1. Clone Github repository



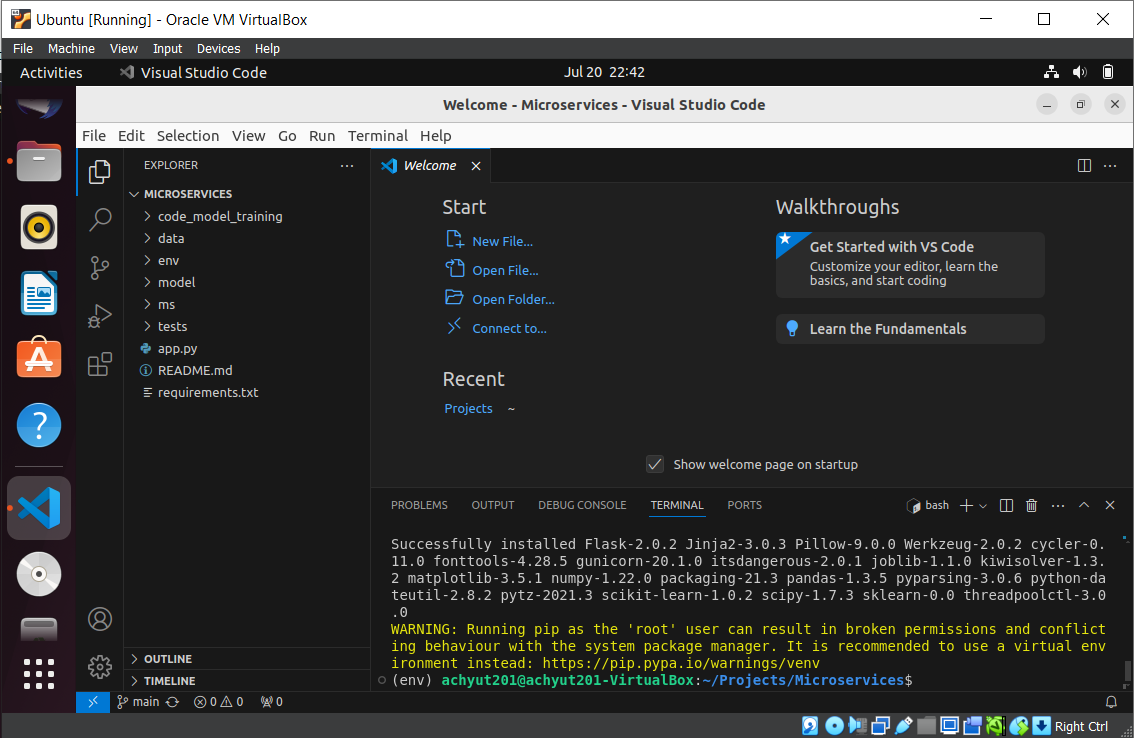
1. Create a Virtual Environment.

A screenshot of a computer

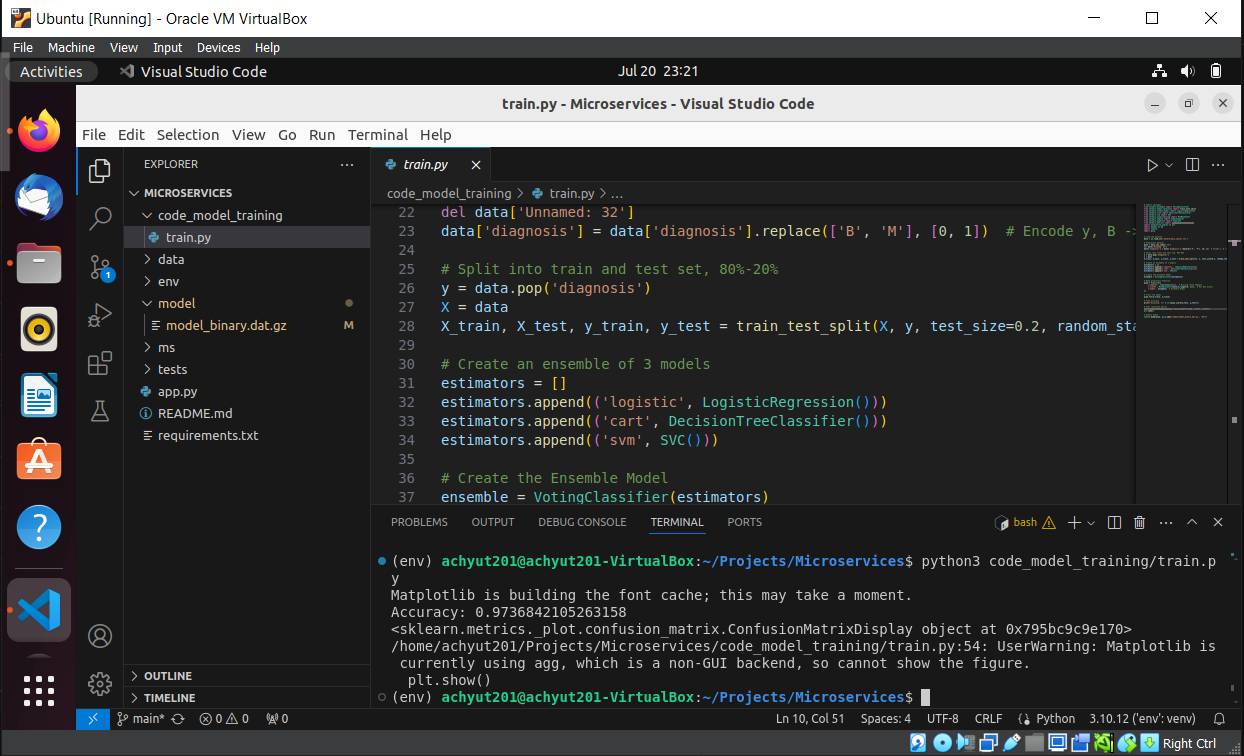
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1. Install the dependencies from requirements.txt file.

Sudo pip3 install -r requirements.txt



1. Train and save the model.



1. Test the Flask web application.

A computer screen shot of a computer

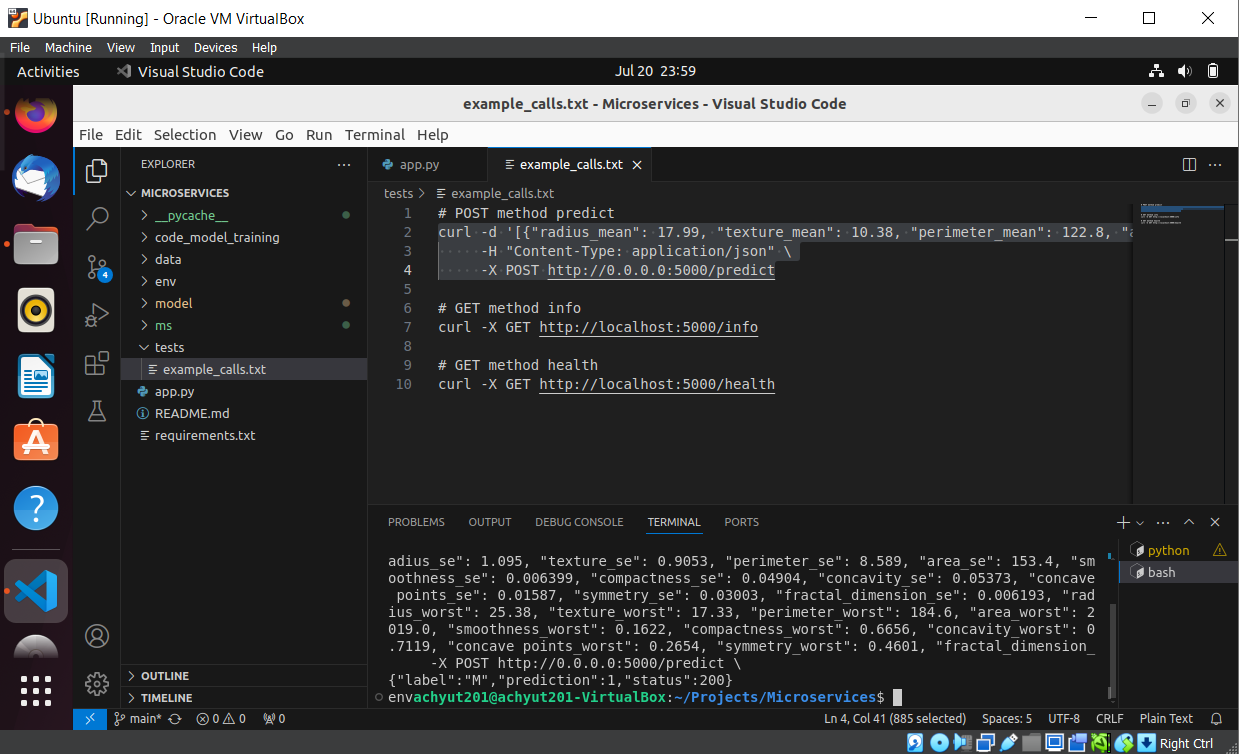
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A screenshot of a computer

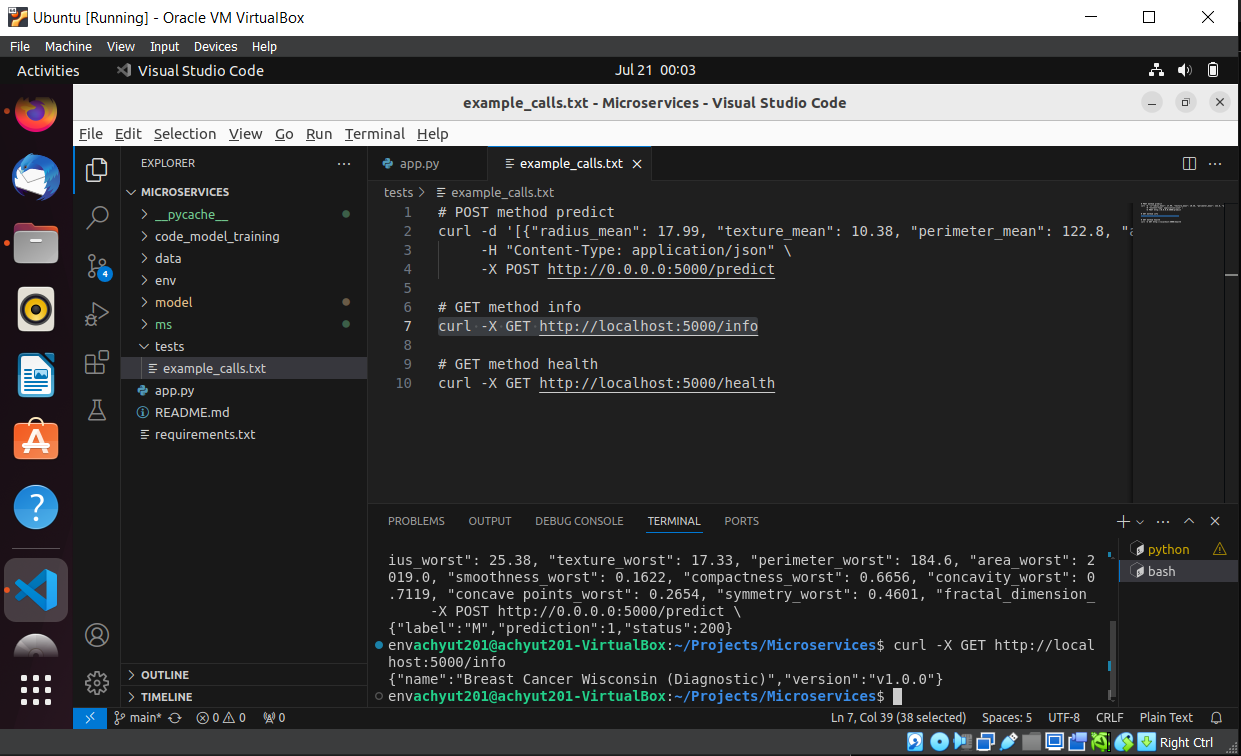
Description automatically generated

1. Test the application and make predictions using the example calls available in the folder /tests.

/predict



/info



/health

A screenshot of a computer

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1. Create a docker image containing everything needed to run the application.

Dockerfile

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docker build -t pbm4docker .

A screen shot of a computer

Description automatically generated

Upload to docker hub

A screenshot of a computer program

Description automatically generated

A screenshot of a computer

Description automatically generated

**achyut201/pbm4docker**

<https://hub.docker.com/r/achyut201/pbm4docker>

1. Run the containerized application as a prediction service and test it locally by passing some example calls and get the prediction.

docker run achyut201/pbm4docker

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