Department of Computer Engineering

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UNIVERSITY OF MUMBAI

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A Project Report on

College Enquiry Chatbot On AWS

Submitted in partial fulfillment of the requirement of
University of Mumbai for the Course
in
Computer Engineering (VIII SEM)

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1.Project Conception and Initiation

Abstract

- A chatbot is a software that is used to interact between a computer and a human in natural language.
- The College Enquiry chatbot on AWS application helps the students to access the university related information from anywhere with internet connection.
- All the information related to the college will be present in the cloud such faculty, information related to events and activities, timings of college, courses offered etc.
- This chatbot reduces the management effort, provides necessary details to the student and parents online.
- This application can be a way of creating a situation of delight for parents and student with extra technical support.

Problem Definition

- Create a chatbot using Artificial Intelligence (AI) and Natural Language Processing (NLP).
- Deploy the chatbot on cloud services.
- A chatbot will respond to student’s questions about college at any time of day.

Objectives

- To create an interactive chatbot using Natural Language Processing (NLP) in Artificial Intelligence (AI).
- To create a EC2 instance on AWS and deploy chatbot on it.
- To provide 24/7 assistance for student’s queries.

Introduction

Students are the important part of any organization. Many people will be having doubts related to the college when they want to join or if they have already joined. The College Enquiry Chatbot on AWS application is an application that will allow the user to query about the college related activities with great ease. Any doubts related to college can be easily solved using this application. Students can rely on this application with great ease and without any difficulty. This system uses artificial intelligence to answer the query of the students. The answers are appropriate to the user’s queries. The Model is deployed on AWS and can be accessed from anywhere with internet connection.

Technology stack

Software's Used:

- Anaconda
- Visual Studio Code

Algorithms:

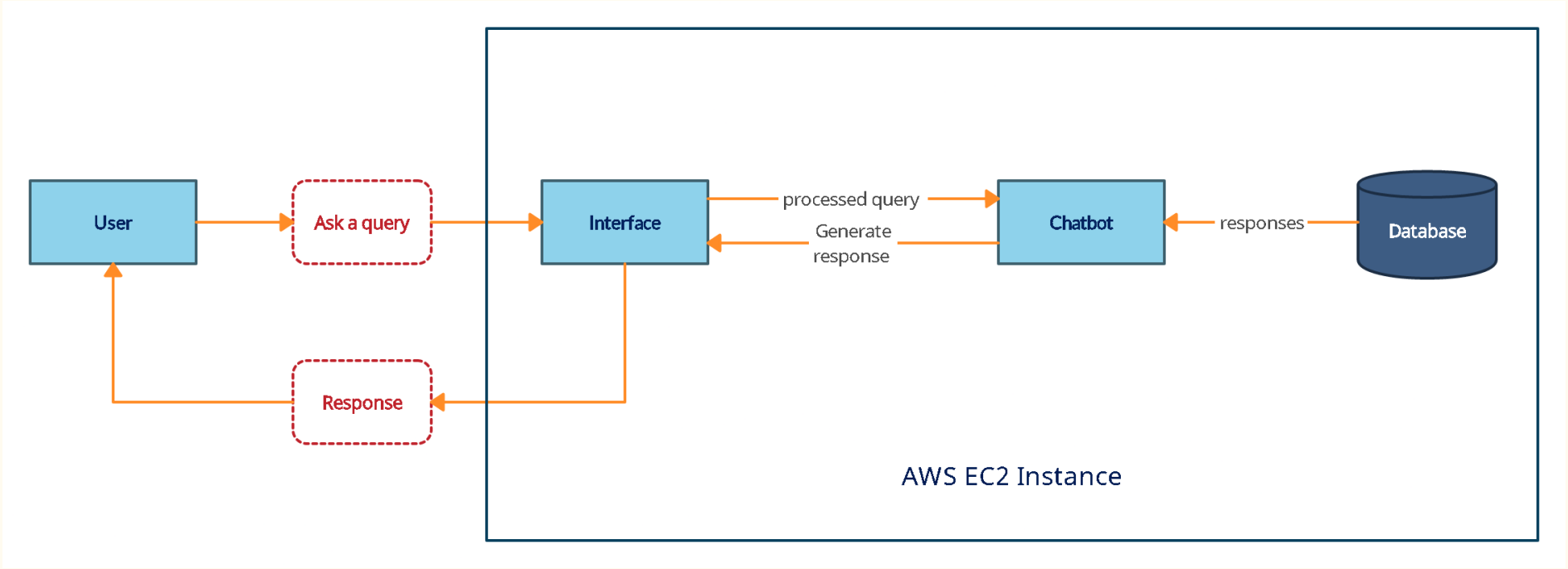
- Natural Language Processing (NLP)

Cloud Platform:

- Amazon Web Services (AWS)

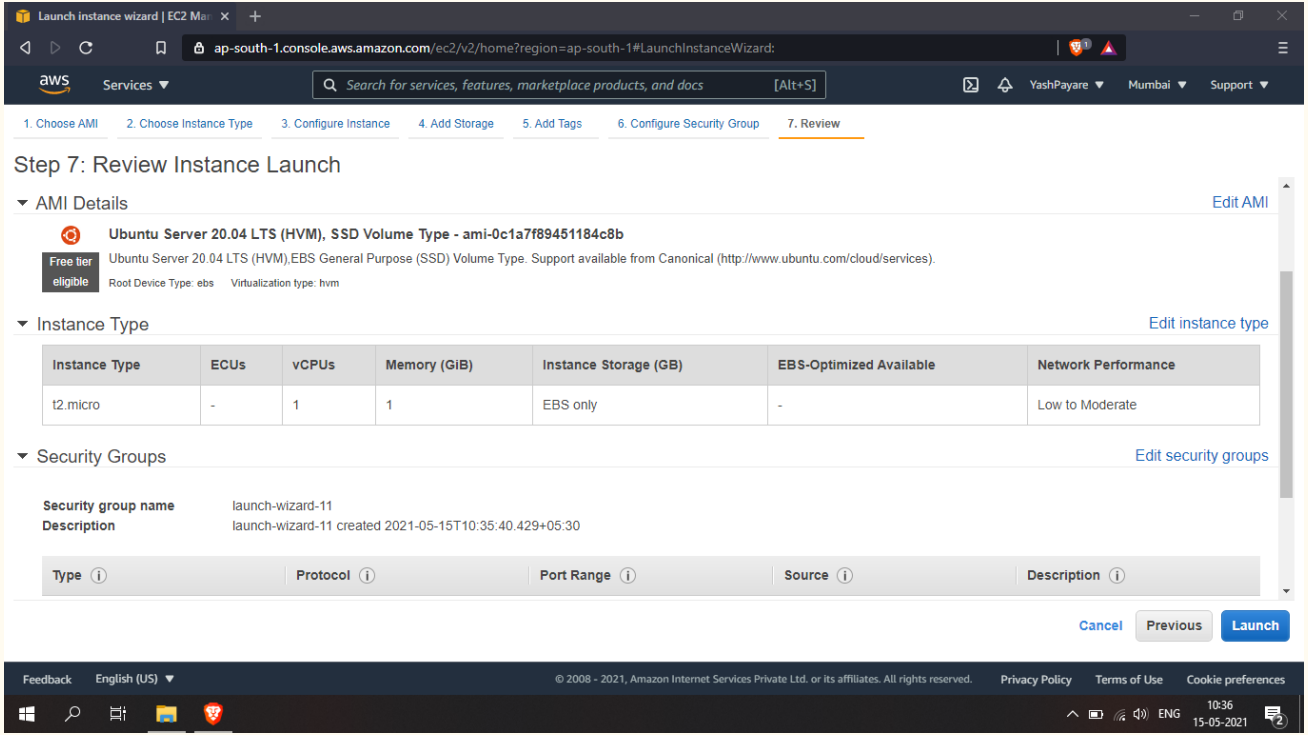
2. Project Design

Design(Flow Of Modules)

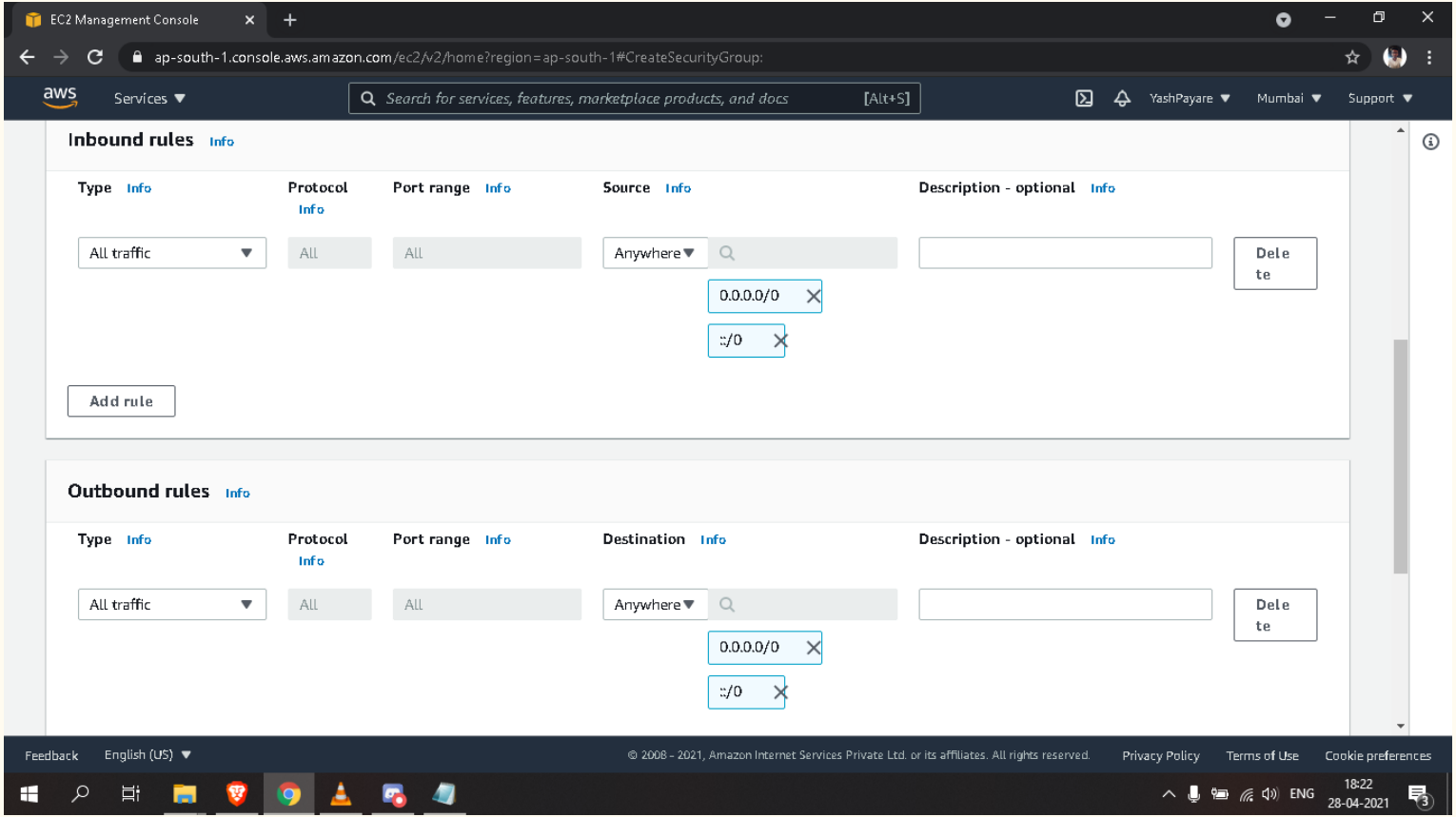


Implementation

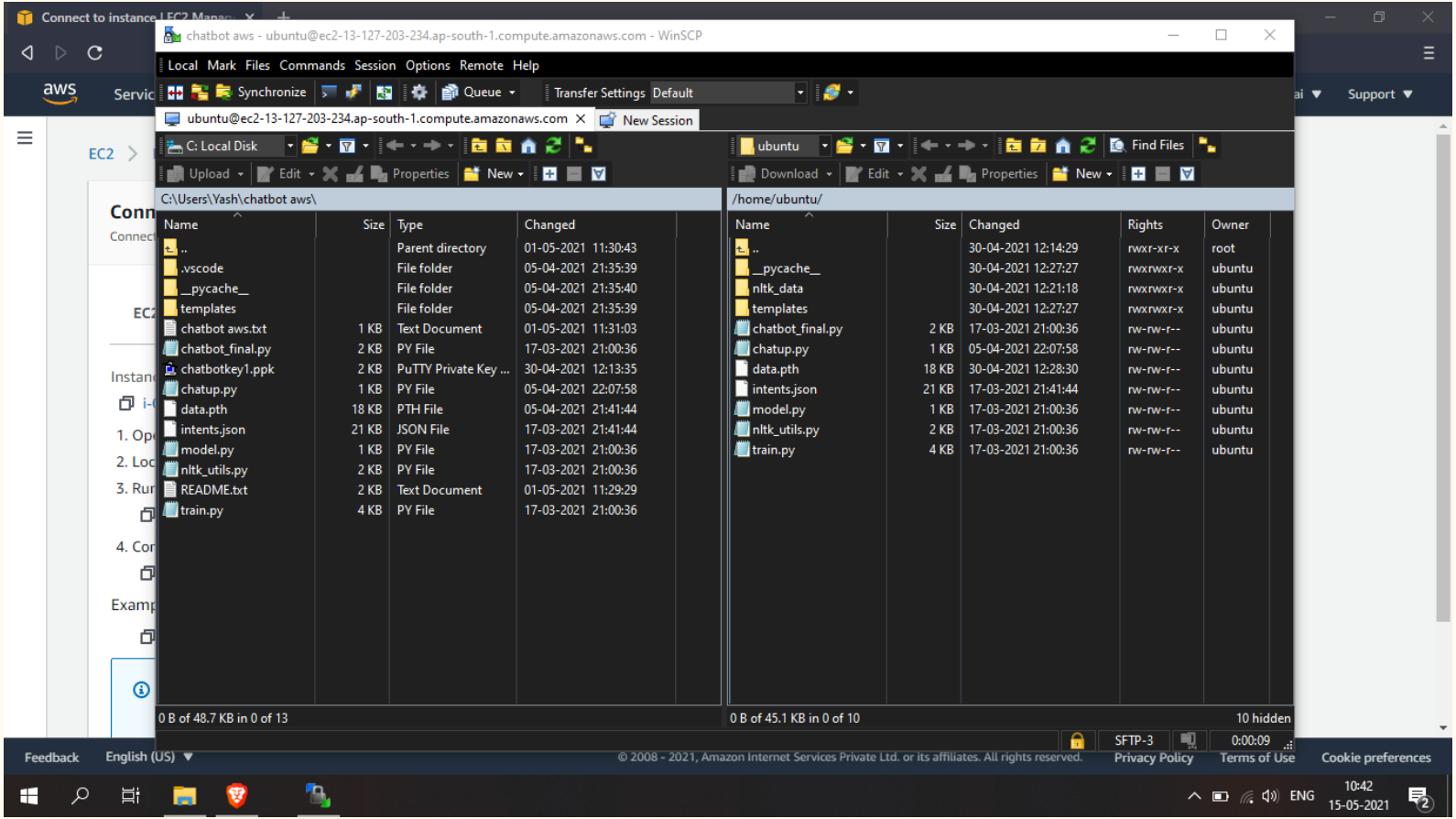
Step 1: Create an EC2 instance and select preferred OS.



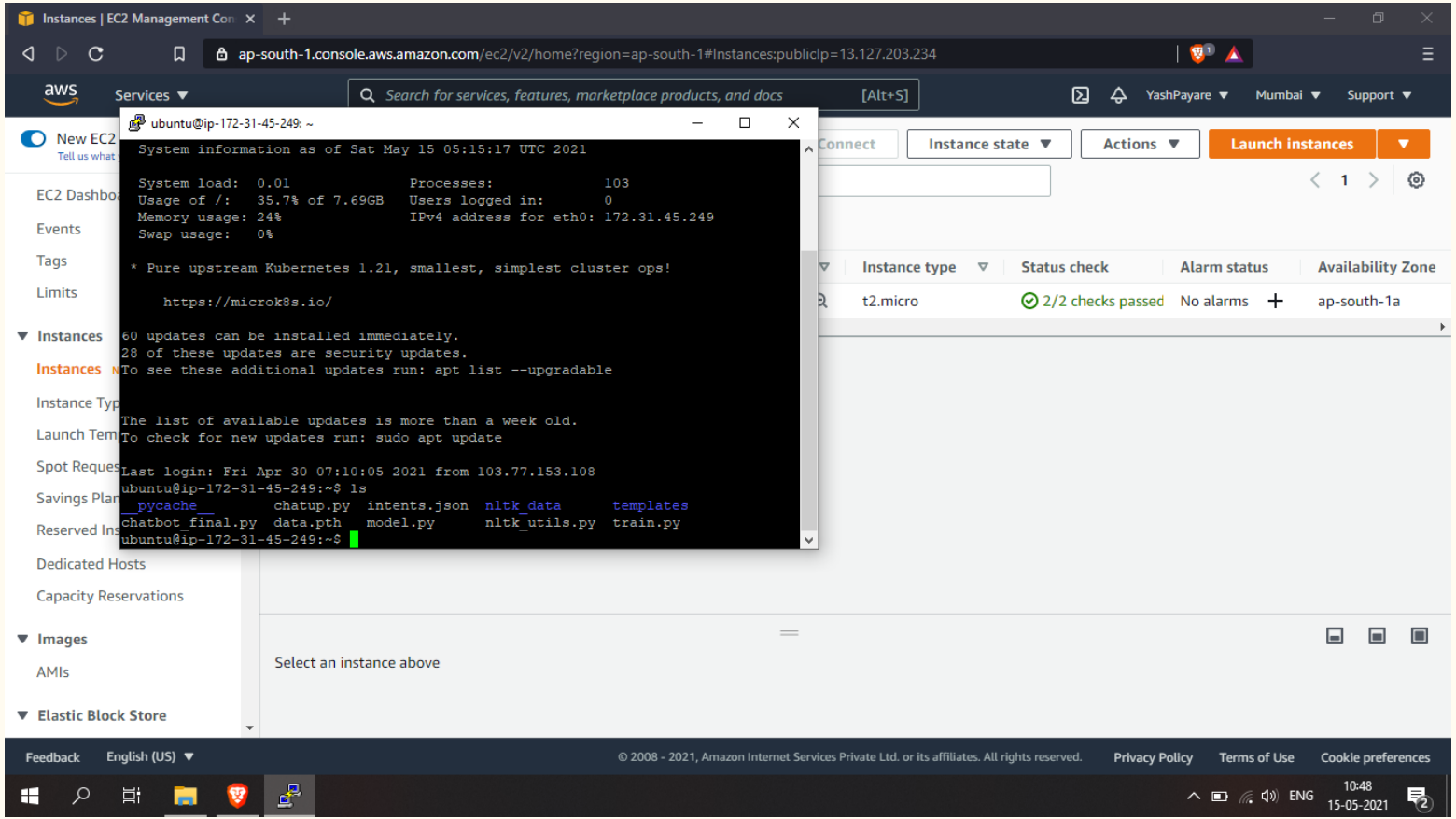
Step 2: Create a Security group so the instance can be accessed from anywhere.



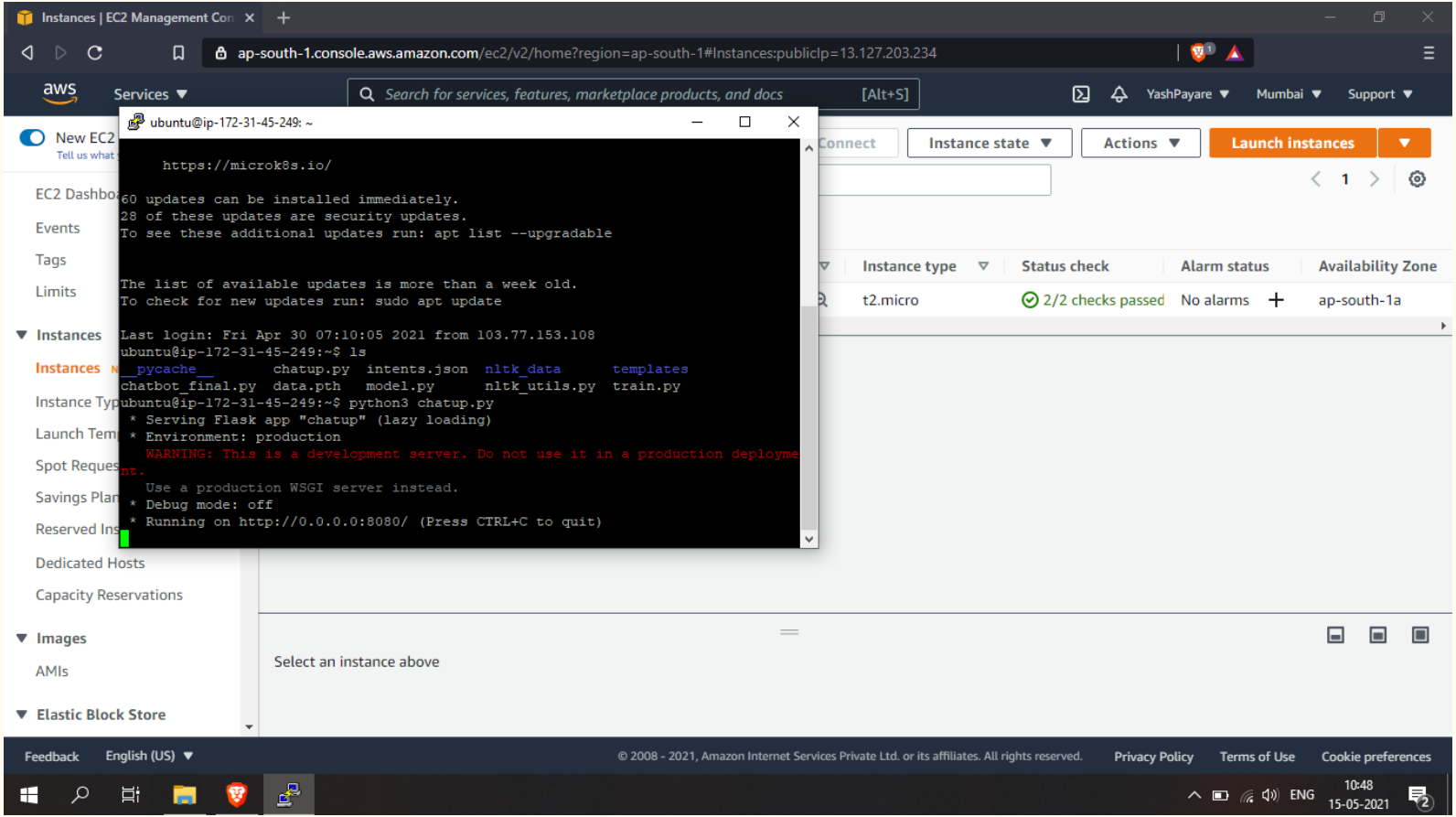
Step 3: Use WinSCP to transfer chatbot files to the instance.



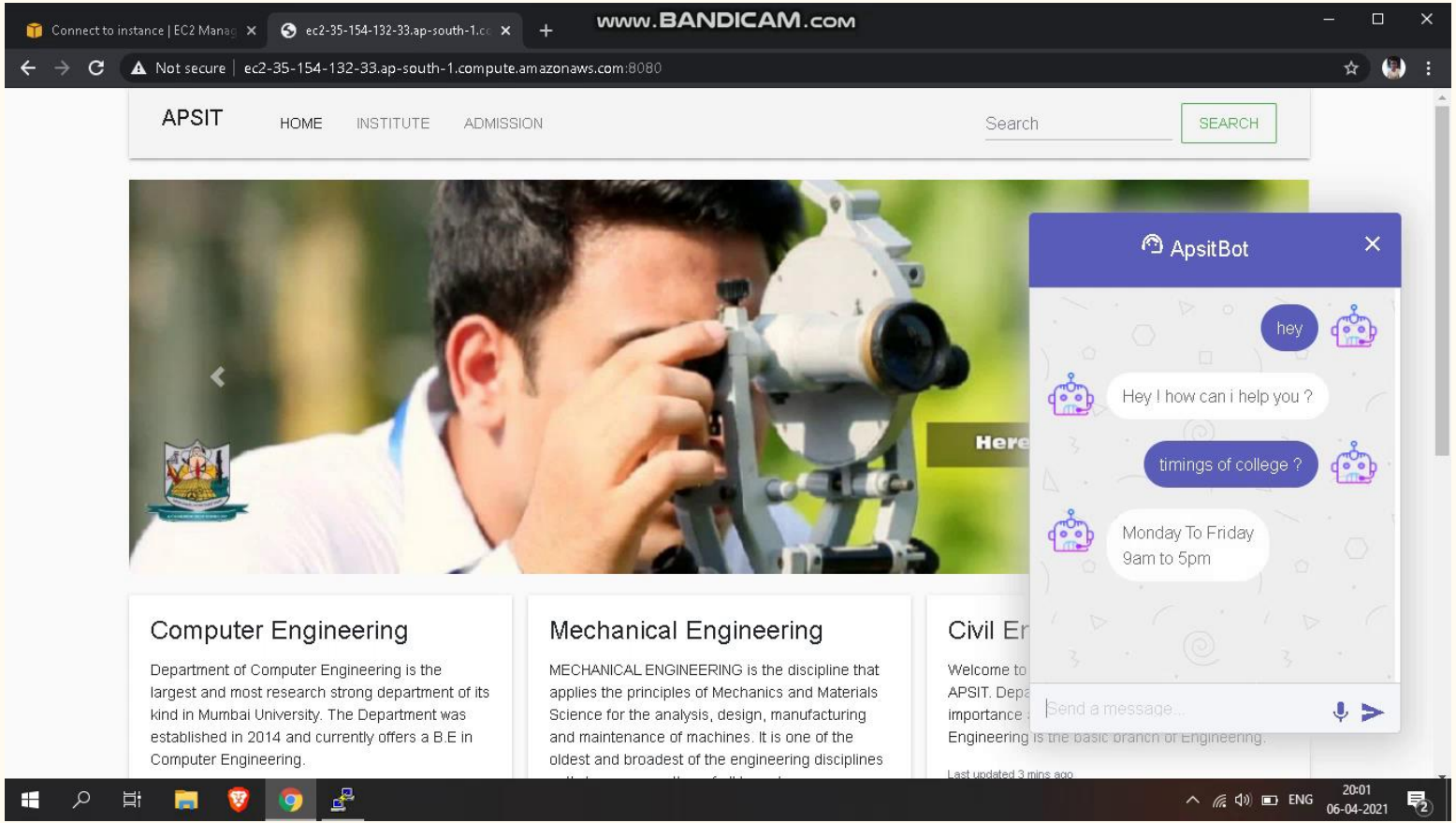
Step 4: Connect to the instance using private key with the help of putty and install all required packages



step 5: Deploy the Chatbot on running server application.



Step 6: Open browser and use public DNS with port 8080 to open the Chatbot.



3. Conclusion and Future Scope

Conclusion

In this way, we have successfully deployed the AI chatbot on AWS which can answer to student’s queries. We have used AWS EC2 instance which is a free tier service. The Chatbot will assist students with their questions at any time of day. It eliminates the need for students to travel to colleges and collect relevant information. A chatbot is the best tool which provides quick way to interact with the users.

Future Scope

- In future we can include voice-based queries.
- Accuracy can be increased by providing more data to the database and training the neural model.
- we can implement the chatbot in other domains like medical, forensic, sports, etc.
- FAQ system can be implemented in chatbot to make it more user-friendly.
- A portal can be made to add new data to the database.

Thank You