



ASSIGNMENT 3: CREATE A SIMPLE Q&A CHATBOT WITH PYTHON

Advance Artificial Intelligence (MSCS-633-A01) - First Bi-term



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Terminal Client Chatbot using Django and ChatterBot

1. Introduction

This assignment involved creating a terminal-based chatbot client using Django and ChatterBot. ChatterBot is a Python-based machine learning conversational dialog engine that generates responses based on collections of known conversations. The goal was to integrate it into a Django project and provide an interface for interaction through the terminal.

2. Project Overview

The project enables a user to interact with a chatbot directly from the command line. The chatbot is trained on a basic set of conversations and responds dynamically to user input.

Key Features:

- Built using Python and Django framework.
- Integrated with ChatterBot for conversational responses.
- Terminal-based client for simple interaction.
- Follows coding best practices with clear structure and comments.

3. Deliverables

1. Python Source Code


- Django project files and application code.
- Chat client (chat_cli.py) for terminal-based interaction.
- `chatbot_cli/cli_project/chatbot/management/commands/chat_cli.py`

2. Manifest File

- Provides setup instructions, dependencies, and usage details.
- Lists Python version and required libraries (Django, ChatterBot).
- `chatbot_cli/cli_project/manifest.json`

3. Screenshot

- A screenshot demonstrating chatbot interaction in the terminal.



The screenshot shows a terminal window with a code editor at the top and a terminal output at the bottom. The code editor shows a Python function `chat_cli` that interacts with a chatbot. The terminal output shows the chatbot's responses to user input.

```
73         "goodbye. talk to you later.",
74     ]
75 )
76 return bot
77
```

bot: Goodbye.
(.venv) PS C:\Users\ambat\Desktop\chatbot_cli\cli_project> python manage.py chat_cli


Django + ChatterBot CLI
Type your message and press Enter.
Commands: :help :quit
List Trainer: [#####] 100%
user: Hello
bot: Hello. How can I help you today? (61 ms)
user: What are you?
bot: I am a simple terminal chat bot built with Django and ChatterBot. (99 ms)
user: Bye
bot: Goodbye. Talk to you later. (73 ms)
user: :q
bot: Goodbye.
(.venv) PS C:\Users\ambat\Desktop\chatbot_cli\cli_project>

4. GitHub Repository Link

- Publicly accessible repo containing source code, manifest file, and README.

- <https://github.com/mkchintha/MSCS-633-A01-Assignment3>

4. Screenshot of Chatbot Interaction



```
13 |         "goodbye. talk to you later.",
74 |     ]
75 | )
76 | return bot
77 |
```

bot: Goodbye.

PS C:\Users\ambat\Desktop\chatbot_cli\cli_project> python manage.py chat_cli

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user: :q
bot: Goodbye.

PS C:\Users\ambat\Desktop\chatbot_cli\cli_project>

5. GitHub Repository URL

The complete source code, manifest file, and instructions are available at:

<https://github.com/mkchintha/MSCS-633-A01-Assignment3>

6. Conclusion

This project successfully demonstrates the integration of Django and ChatterBot to create a functional terminal chatbot. The assignment highlights practical skills in setting up environments, managing dependencies, writing Python code, and documenting work for academic submission.