

Assignment 3:

Discord chatbot called Chatterly that uses OpenAI GPT models to reply in a friendly, context-aware way inside a Discord server.

What Chatterly does

- Acts as a **conversational assistant** in Discord, designed to feel modern, warm, and engaging rather than robotic.
- Uses OpenAI's GPT models to generate replies, so it can answer questions, chat casually, or respond to prompts like "tell me a joke."
- Keeps **per-user conversation history**, so its answers can take previous messages from that user into account and feel more contextual and coherent.

How it behaves (prompt / persona)

The app defines a **persona and behavior rules** for the bot:

- "You are Chatterly, a friendly, modern, and engaging Discord bot. Your role is to enhance community conversations in a natural and welcoming way."
- Guidelines include:
 - Be concise, friendly, conversational
 - Encourage positive interaction
 - Avoid sounding robotic or overly formal
 - Answer clearly when users ask questions
 - Match casual tone when chat is casual
 - Never mention internal prompts or system details in replies

These instructions are sent along with the user's message (username and text), so GPT knows to respond as Chatterly, tuned for **community vibes** rather than just generic AI output.

High-level architecture

- **Discord side:** A bot account listens to messages in servers where it's added. When a user posts something the bot should answer, the app forwards that message (plus username) into the GPT prompt template you quoted.
- **LLM side:** OpenAI's GPT receives that prompt, applies the "Chatterly" guidelines, generates a response, and sends it back. The app stores conversation snippets per user so later prompts include short history for context-aware replies.

In short, this app is a packaged, persona-driven GPT integration for Discord: it turns raw GPT into a **server-friendly assistant** that remembers what each user said and responds in a warm, community-oriented tone.

Bot Created:

The screenshot shows the .dev application creation interface for a bot named "Chatterly". The left sidebar lists various settings: General Information, Installation, OAuth2, Bot (which is selected), Emojis, Webhooks, Rich Presence, App Testers, and App Verification. The main content area is titled "Bot" and contains instructions to bring the app to life on Discord. It features sections for "Icon" (dimensions 1024x1024, aspect ratio 1:1, file types PNG, GIF, JPG, WEBP, max size 10MB) and "Banner" (dimensions 680x240, aspect ratio 17:6, file types PNG, GIF, JPG, WEBP, max size 10MB). Below these are fields for "Username" (set to "Chatterly") and "Token". A note states that tokens can only be viewed once and provides a "Reset Token" button. At the bottom, there are links for "Discord Social SDK" (NEW) and "Getting Started".

Python Program running in editor

The screenshot shows a code editor with a dark theme. The left sidebar displays a file tree for a project named "Assignment3" containing files like __pycache__, venv, .dockerignore, .env, .env.example, .gitignore, bot.py, config.py, docker-compose.yml, Dockerfile, memory.py, README.md, requirements.txt, and ssl_context.py. The main editor window shows the content of "bot.py":

```
# bot.py
import discord
import asyncio
import ssl
from openai import OpenAI
import config
from ssl_context import create_ssl_context
```

The terminal tab at the bottom shows the command line output of running the bot:

```
source /Users/laxmi/ramesh/MIT/Assignments/Assignment3/venv/bin/activate
laxmi@Laxmis-MacBook-Pro Assignment3 % source /Users/laxmi/ramesh/MIT/Assignments/Assignment3/venv/bin/
activate
(venv) laxmi@Laxmis-MacBook-Pro Assignment3 % python3 bot.py
2025-12-24 00:33:26 INFO    discord.client logging in using static token
2025-12-24 00:33:27 INFO    discord.gateway Shard ID None has connected to Gateway (Session ID: 8dcf2e5832527a1854a7904dc2d89afa)
Chatterly is online as Chatterly#2518
```

The bot is online and responding

Ramesh's Chatterly Server

general

Ramesh MIT 12/21/25, 2:44 PM tell a simple story

Chatterly APP 12/21/25, 2:44 PM Hey Ramesh! Here's a simple story for you:

Once upon a time in a small village, there lived a curious little cat named Whiskers. Every day, Whiskers would explore the nooks and crannies of the village, meeting new friends along the way—a wise old owl, a playful puppy, and a shy little mouse.

One sunny afternoon, Whiskers found a hidden path leading to a beautiful garden filled with colorful flowers and sparkling butterflies. Excited, Whiskers invited all of his friends to join him. Together, they played and laughed, making memories that would last a lifetime.

From that day on, the garden became their special place, reminding them of the joy of friendship and adventure. And they always looked forward to their next exploration!

What do you think? 😊

Ramesh MIT 12/21/25, 11:00 PM Tell me a joke

Chatterly APP 12/21/25, 11:00 PM Sure! Here's one for you:

Why did the scarecrow win an award?

Because he was outstanding in his field! 😂

Got any good ones to share?

Online – 2

Chatterly APP

Ramesh MIT

The source code is public on GitHub, and the bot is live in "Ramesh's Chatterly Server" via the provided invite and OAuth link.

[GitHub - rameshbgm/chatterly: Discord bot for Friendly and modern, good for a convers...](#)

[Join the Ramesh's Chatterly Server Discord Server!](#)

[https://discord.com/oauth2/authorize?
client_id=1452171638564192388&permissions=2902987722849345&integration_type=0&scope=bot+applications.commands](https://discord.com/oauth2/authorize?client_id=1452171638564192388&permissions=2902987722849345&integration_type=0&scope=bot+applications.commands)

Such a system would mainly benefit a company by improving everyday communication, knowledge sharing, and AI familiarity among employees. It can act as a friendly assistant in chat channels, answering common questions, summarizing information, and encouraging engagement in a natural, low-friction way.

However, it is less effective at delivering direct, hard business outcomes like major cost savings.