Intro

Sudo will be a Discord bot that keeps your community engaged and safe with fun and moderation. This will also help to administrating discord guild/server when server's owner is away or offline. This bot will also help in controlling level of spam in messages and perform multiple activities like server moderation, playing music, or providing information of server or user.

Problem statement

As Discord is being so popular for VoIP, instant messaging and digital distribution platform for community, Self-Managing server and self-moderating is being complex for server owner and server moderators while there is lots of user in server. even though there are bots which have been already developed with many functionalities pricing is very high and in order to use all functionality free, we need to add many bots for different works.

objectives

So main objective of this project is to provide multiple bot activities in one, like chatbots moderation bots music bots all for free of cost. And another objective of this project is to implement decision tree algorithm.

methodology

I am going to use DevOps methodology while building the bot. The reasons why I chose this model is because: It suits small-medium size project, with rapidly changes in the requirements as user is involved during each phase, which helps in minimizing risk because of flexible change process. Very limited planning is required to get started with the project. It helps the us in saving time and money. And also help in Fast release of the first product version.

Existing system

For developing bot I have studied in various other bots like MEE6 , Rythm Bot, meme bot, Groovy Bot and others, so I am trying to bring various feature like theirs on my project and some their features are like managing guilds or server , banning troublemakers , kicking users , giving new roles to users and many other moderation

Requirement

There are two requirements functional and non-functional

Functional requirement

System will allow to store login information to database, and add bot to their server. And allows bot to monitor chats for moderation

None-Functional requirement

System will be available online and System will be designed for smooth performance with optimization and good response

Feasibility study

Technical

- it uses off-self and existing technologies, software and hardware and no extra equipment is needed to build this project. Which makes it technically feasible

Operational

- it will able be used by anybody with basic knowledge of how to use Discord and it will also be able to use by any new user in discord too. which makes it operationally feasible.

Economical

- The system does not require any extra hardware, though it is made for discord extra software is not so compulsory and There is no recurring cost than just the internet connection. So, it is economically feasible

High level design

This is my system flowchart in this diagram I have shown how exactly my bot works in step by step after adding bot to your discord server

Algorithm

For developing Discord bot, I am using Decision tree algorithm, in Decision tree algorithm I am going to use categorial variable decision tree. A categorical variables decision tree includes categorial target that are divided into categories. For example, the categories can be yes or no.

I am using this algorithm because

- Setup is easy and quick and my bot is Rule based bot

Benefit of using this bot is

- It is Easy to read and interpret
- It is Easy to prepare
- And Less data cleaning is required

So here is my project timeline

Expected outcomes

My expected outcome in this project is

User will be able to add bot in server and interact with them and bot will be able to do moderation works like kicking/ banning / muting / controlling level of spam / giving certain roles to users.

user will also be able to listen music using voice chats with the help automated music players