

# **STUDENTS PROJECT REPORT COVERAGE[V1.1]**

**The following sequence should be followed and maintained.**

- 1. Cover page, along with the title of the project and name of the candidate.**
- 2. Certificate obtained from industry (in case of the external project)**
- 3. Certificate obtained from guides ( in case of an internal project)**
- 4. Acknowledgment**
- 5. List of symbols, nomenclature, and abbreviations used**
- 6. List of Figures and Graphs**
- 7. List of Tables**
- 8. Abstract [ PURPOSE-METHODOLOGY-FINDINGS]**
- 9. Tables of Content**
- 10.Chapters organization**

**Chapter-1: Project description and outline**

**Chapter-2: Related work investigation**

**Chapter-3: Requirement Artifacts**

**Chapter-4: Design methodology and its novelty**

**Chapter-5: Technical Implementations and Analysis**

**Chapter-6: Project Outcome and Applicability**

**Chapter-7: Conclusions and Recommendation**

**References**

**Appendices (Additional Information if necessary).**



**KOTHRIKALAN, SEHORE  
MADHYA PRADESH - 466114**

OCTOBER 2022

**VIT BHOPAL UNIVERSITY, KOTHRIKALAN, SEHORE  
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**BONAFIDE CERTIFICATE**

Certified that this project report titled “**THE BLUE BIRD (A MULTIPURPOSE BOT)**” is the Bonafide work of “**Mr. Jatin Patel (21BAI10007), Mr. Pranav Pratyush (21BAI10019), Mrs. Sanskriti Jaiswal (21BAI10024), Mr. Karan Shah(21BAI10149)**” who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported at this time does not form part of any other project work based on which a degree or award was conferred on an earlier occasion on this or any other candidate.

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I would like to thank all the technical and teaching staff of the School of Computer Science and Engineering, who extended directly or indirectly all support.

Last, but not least, I am deeply indebted to my parents who have been the greatest support while I worked day and night for the project to make it a success.

## **LIST OF ABBREVIATIONS**

**NIL**

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## ABSTRACT

Bot focuses on providing ease of usage as well as entertainment, unlike most other bots it is very easy to use and has the whole command list readily available. “THE BULE BIRD” is one of the few unique bots that fetch data from Reddit and provide the users in the server with it. It fetches data from the subreddits via APIs and gives us updated and new results every 5 hours automatically. This bot is unique in purpose and has several functions as well. The bot provides us with functions such as listening music, getting notified about free courses, interacting with new mates .It also does not read any personal information from the users present in the server and only gets activated when the trigger command is used. The bot also has some witty responses for the users just to make the platform more friendly and light hearted. It allows the users to manually select the channels and information they want. . It basically is a cherry on top of a cake. Our project would be helpful for the learners around the world to get direct information about the free courses available on different platforms and would thus be helpful in saving time and efforts and developing aptitude skill for better future with some entertaining channels.

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## **RELATED WORK INVESTIGATION**

Discord is growing in popularity. As such, automated processes, such as banning inappropriate users and reacting to user requests are vital for a community to thrive and grow. Automated programs that look and act like users and automatically respond to events and commands on Discord are called bot users. Discord bot users (or just bots) have nearly unlimited applications. For example, let's say you're managing a new Discord guild and a user joins for the very first time. Excited, you may personally reach out to that user and welcome them to your community. You might also tell them about your channels or ask them to introduce themselves. The user feels welcomed and enjoys the discussions that happen in your guild and they, in turn, invite friends. Over time, your community grows so big that it's no longer feasible to personally reach out to each new member, but you still want to send them something to recognize them as a new member of the guild. With a bot, it's possible to automatically react to the new member joining your guild. You can even customize its behavior based on context and control how it interacts with each new user.

Establishing a platform where students will be informed about all the free courses from all the website like cousera, udemy etc. We will update them with the latest notification so that they can register for the free courses.

Keep individuals far from stressful situations and produce productive work by creating a musical environment which will relax their mind and make them feel positive. Boosting their energy and enthusiasm towards there career.

Providing affordable and flexible way to learn new skills and emerging topics to build a good resume and make them ready for their interviews for good placements and good lifestyles.

## REFERENCES

[https://youtube.com/playlist?list=PLW3GfRiBCHOhfVoiDZpSz8SM\\_HybXRPzZ](https://youtube.com/playlist?list=PLW3GfRiBCHOhfVoiDZpSz8SM_HybXRPzZ)

<https://medium.com/codex/learn-web-scraping-the-fun-way-with-a-discord-bot-704d3422a6a2>

<https://discord.com/developers/docs/intro>

<https://docs.pycord.dev/en/stable/ext/commands/commands.html>

<https://d1wqtxts1xzle7.cloudfront.net/67276865/CSEIT2172100-with-cover-page-v2.pdf?Expires=1664774198&Signature=DSPyBtW0xeoMvQxK3n8aNIVk1u1n8V9kLFPnDynyqoCKNE0YybGyWwSPXad9EhEfK6Sf2J3Lo3as9IGF03w9rHU3dzyHIMPoXr2PkobdZvZU7m7k8zm6ePK7YMUOipz66R7PLbY1p6~T4SzUpZY1mhb0KFBR9gYIB>

## PROJECT DESCRIPTION AND OUTLINE

### 1.1

### INTRODUCTION

Nowadays, Discord is gaining popularity & getting famous among youth, it is one of the most convenient platforms for students to take help in their academics as well as for their mental

peace and relaxation. It has some automated processes such as banning inappropriate users(accounts) which is vital for the discord community to grow. Bot users are the automated programs that look and act like users and automatically respond to events and commands on discord.

Our project is an approach to provide a server in discord named “THE BLUE BIRD”, the server will be helpful to students as we are creating different bots with various function which help in there effective learning. Each bot has its own purpose to help students in academics, mental health, Interaction, Building connection. “THE BULE BIRD” server be beneficial for engineering students in building their career in various fileds.

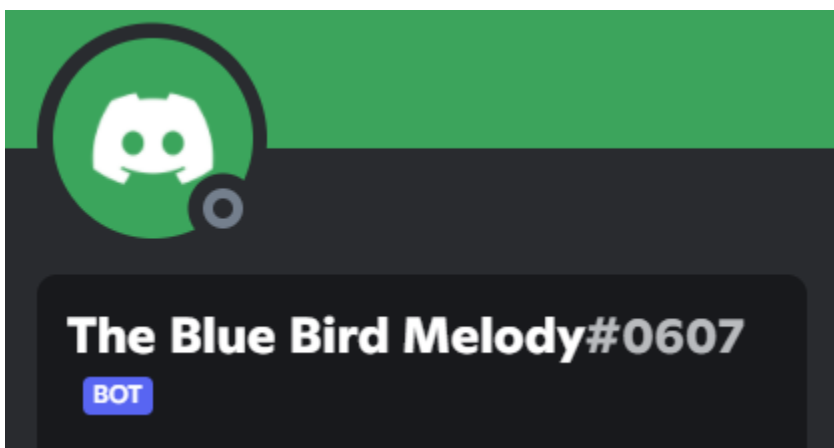
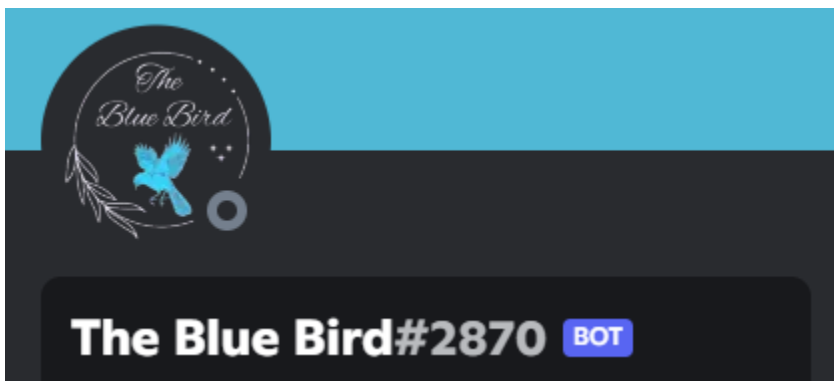
## **1.2 MOTIVATION FOR THE WORK**

Being from a science background student I observed many of my friends, seniors pursing for engineering. Observing students around my college everyone is busy is learning new skills, techniques for good placements but still many of them are struggling hard to develop good apptitue skill , lack of guidance is also stoping them from making a effective road map for overcoming this problem, We will develop a discord server that will be a real time data management with updating of all the free courses without wasting time of students on different browsers. The only significant costs will be your time and energy. While growing with these skills every individual is suffering from stressful situation in order to relax and be calm and produce productive work, We are building a music bot because music opens up a whole new world of experience that further enhances the mind, physical coordination, and expression. By joining our server students will interact with different students, seniors which will provide them a good guidance and tips.

## **1.3 TECHNIQUES INCLUDED**

The discord bot adds more functionality to the created server in the discord application. The server helps people gather into one place and facilitates a "Virtual Room" environment for people, this bot will communicate with everyone in the server using trigger commands. It will fetch responses from the database and its code to help with the same. The bot has many features

and one of its key points is fetching data from reddit website. It can get you facts, news, posts and happenings all around the world and can also engage in fun activities like poll, nicknames and greetings. The bot communicates with the server then with the database and gets the desired result through the APIs as shown in the data flow diagram. It can be further added into many servers, if necessary, hence proving to be a ready-todeploy application after its creation and testing. The maintenance is flexible and easy for us though it does require the bot to be shut down for a while. it is possible to update the bot while its active which is a plus point.



## 1.5

## PROBLEM

## STATEMENT

As we know, India is a densely populated country and every year more than 6 crores of Indian students graduate with diversity in education. Almost similar number of students enter into colleges for taking various education to help them in seeking jobs. Engineering is one of the most common career choices in India and the alarmingly high number of engineering colleges

and students is the clear indicator of that. For good placements you need to enhance your aptitude skill, connections, profile and many more, to provide all these benefits. We will develop a discord server that will be a real time data management with updating of all the free courses without wasting time of students on different browsers. The only significant costs will be your time and energy. While growing with these skills every individual is suffering from stressful situation in order to relax and be calm and produce productive work, We are building a music bot because music opens up a whole new world of experience that further enhances the mind, physical coordination, and expression. By joining our server students will interact with different students, seniors which will provide them a good guidance and tips.

## **1.6 OBJECTIVE OF THE WORK**

Establishing a platform where students will be informed about all the free courses from all the website like coursera, udemy etc. We will update them with the latest notification so that they can register for the free courses. Keep individuals far from stressful situations and produce productive work by creating a musical environment which will relax their mind and make them feel positive. Boosting their energy and enthusiasm towards their career. Providing affordable and flexible way to learn new skills and emerging topics to build a good resume and make them ready for their interviews for good placements and good lifestyles.

## **1.7 ORGANIZATION OF THE PROJECT**

In order to complete the work efficiently and in the given time frame, we divided the workload equally. One member was supposed to read the research papers and was provided with documentation work. Second member was created the server, made various channels, added the bot. Other two members worked on the coding part.

## **1.8 SUMMARY**

Discord gives you the power to create your own place to belong. Your Discord server is your home, shared with only the special people you invite. Discord is a VoIP, instant messaging and digital

distribution platform designed for creating communities. Users communicate with voice calls, video calls, text messaging, media and files in private chats or as part of communities called “servers”. Servers are a collection of persistent chat rooms and voice chat channels. Discord runs on Windows, macOS, Android, iOS, Linux, and in web browsers. As of August 15, 2022, there are over 250 million users of this software. Currently Discord is one of the most used VoIP’s in the world, the pandemic has only helped it become even more successful and it's ever-improving nature makes this platform unbeatable. With Discord we are providing engineering's students a platform to grow and learn in their college years to achieve a good placement and along with that we will create a musical environment in “THE BLUE BIRD” to avoid stressful situation among youth.

## **2. RELATED WORK INVESTIGATION**

### **2.1 Introduction**

Discord bots are AI-driven tools that can help you automate tasks on your Discord server. They make it a lot easier to build a community that is truly engaged and can be used to moderate your server, welcome new members, or even ban people who are creating a bad environment for everyone else. Aside from moderation features, Discord bots let you and users add games, music, memes, and other fun, engaging, and entertaining content.

### **2.2 Core area of the project**

Our project focuses on providing users with Free Courses from various sites such as Coursevania, Coursera & Udemy. Apart from providing Free Courses it also focuses on providing the users with a chill environment. Overall our bot is a friendly bot that mostly targets the Students who want free courses & want a chill environment or we would say learn & fun.

### **2.3 Existing Approaches/Methods**

In order to complete the work efficiently and in the given time frame, we divided the workload equally. One member was supposed to read the research papers and was provided with documentation work. Second member was created the server, made various channels, added the bot Other two members worked on the coding part.

## 2.4 Pros and cons of the stated Approaches/Methods

Pros:

1. Work was completed in 15 days of time. 2. Majority of the things were working as they were supposed to be. 3. Workload was equally distributed among all the members.

Cons:

1. Combining all of the work was difficult. 2. It was time consuming and was a long process.

## 3. REQUIREMENT ARTIFACTS

### 3.1 Introduction

There aren't much requirements for setting up a discord server & a bot. The requirements are quiet basic to setup a server & to create a Bot.

### 3.2 Hardware and Software requirements

	MINIMUM REQUIREMENTS	RECOMMENDED REQUIREMENTS
OPERATING SYSTEM	Windows 7,8 or 10	Windows8,10 or 11
PROCESSOR	Intel Pentium4 2Ghz	Intel Core2 Duo
MEMORY	2GB	4GB
GRAPHICS	64MB	256MB
STORAGE	200MB	250MB

### 3.3 Specific Project requirements

Discord Web Application/App

Discord developer Tools

Compiler or Notepad++

Python modules and libraries.

Discord API



GitHub

### **3.3.1 Data requirement**

All the data is Fetched directly from the Web through Web Scrapping from several websites like Coursevania , Udemy , Coursera etc.

### **3.3.2 Functions requirement**

The function requirements for the bot we have created are listed below :

For Main Bot:

>hi

>hello

>Yo

>Aye

>clr

>kick

>ban

>unban

>\$search javascript

>\$search python

>\$search c++

>\$search c

>\$search Web Development

### **3.3.3 Performance and security requirement**

The Performance should be optimal to make & function a Discord Bot.

The security Requirements are as Follows :

--> Web Captcha(HCaptcha)

--> Captcha

-->One-Click Verification

Doing Server Scan such as :

- ☐Anti Nuke Settings.
- ☐Anti Raid Settings.
- ☐Verification Settings.
- ☐Roles with Administrator permission.
- ☐Not-Punishable Roles.
- ☐Dangerous Bot Roles.

### **3.3.4 Look and Feel Requirement**

There aren't much look & feel requirements for Discord Server. It can be plain & basic but can be changed tastefully as per the requirements & one's choice. Although we should try to make our server as much attractive as possible so more people get attracted & return to the server.

## **3.4 Summary**

Overall, we can conclude that the requirements aren't much and it's easy to setup a server, but making a bot and making it function can be tough as not much resources are available. You need to search through entire internet, YouTube as well as explore GitHub to find some resources & even if you find the resources it still might not be easy to make a bot. Sometimes the codes won't work, the bots may not respond to the commands, continuous updating in libraries. Hence, overall, it isn't easy to make a bot, especially when there are limited resources.

## **4. DESIGN METHODOLOGY AND ITS NOVELTY**

### **4.1 METHODOLOGY AND GOAL**

Bot focuses on providing ease of usage as well as entertainment, unlike most other bots it is very easy to use and has the whole command list readily available. "THE BLUE BIRD" is one of the few unique bots that fetch data from Reddit and provide the users in the server with it. It fetches data from the subreddits via APIs and gives us updated and new results every 5 hours automatically. This bot is unique in purpose and has several functions as well. The bot provides us with functions such

as listening music, getting notified about free courses, interacting with new mates .It also does not read any personal information from the users present in the server and only gets activated when the trigger command is used. The bot also has some witty responses for the users just to make the platform more friendly and light hearted. It allows the users to manually select the channels and information they want. . It basically is a cherry on top of a cake. Our project would be helpful for the learners around the world to get direct information about the free courses available on different platforms and would thus be helpful in saving time and efforts and developing aptitude skill for better future with some entertaining channels.

## 4.2 FUNCTIONAL MODULE DESIGN AND ANALYSIS

**1. Pycord** offers a lower-level aspect on interacting with Discord. Often times, the library is used for the creation of bots.

However, this task can be daunting and confusing to get correctly the first time. Many times, there comes a repetition in creating a bot command framework that is extensible, flexible, and powerful.

For this reason, discord.py comes with an extension library that handles this for you.

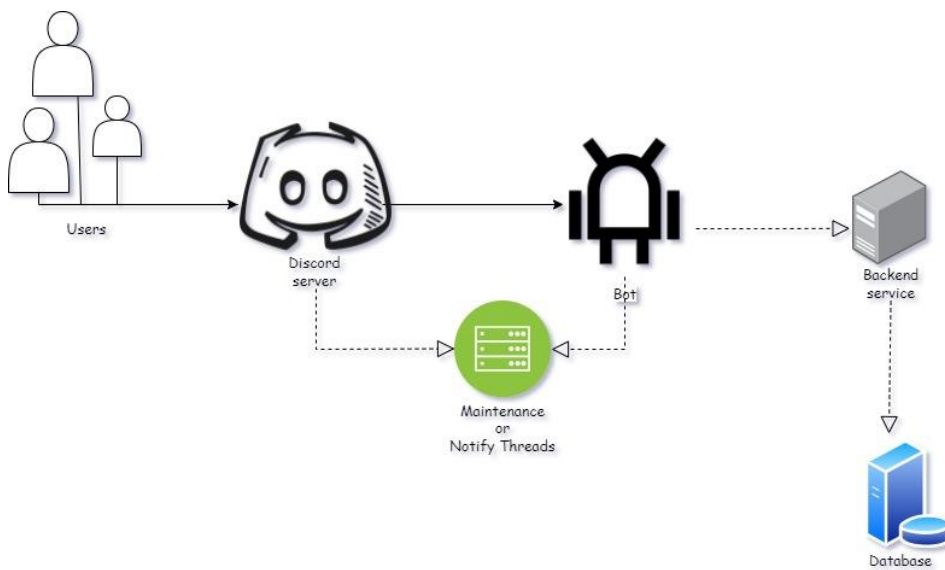
**2. Python Random module** is an in-built module of Python which is used to generate random numbers. These are pseudo-random numbers means these are not truly random.

This module can be used to perform random actions such as generating random numbers, print random a value for a list or string, etc.

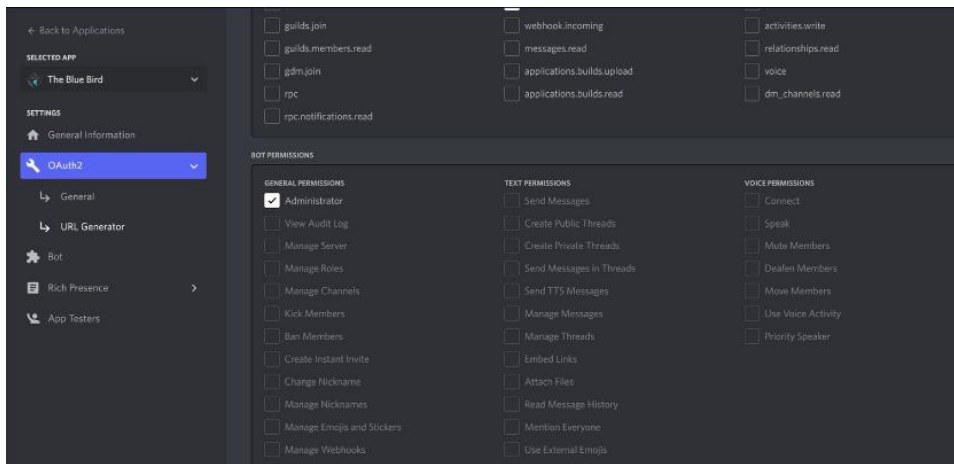
**3. Itertools** is a module in Python, it is used to iterate over data structures that can be stepped over using a for-loop. This module works as a fast, memory-efficient tool that is used either by themselves or in combination to form iterator algebra.

**4. Webscraper2** is a python file that is coded for web scraping functionality that uses the URL provided to it and fetch all the data from that webpage.

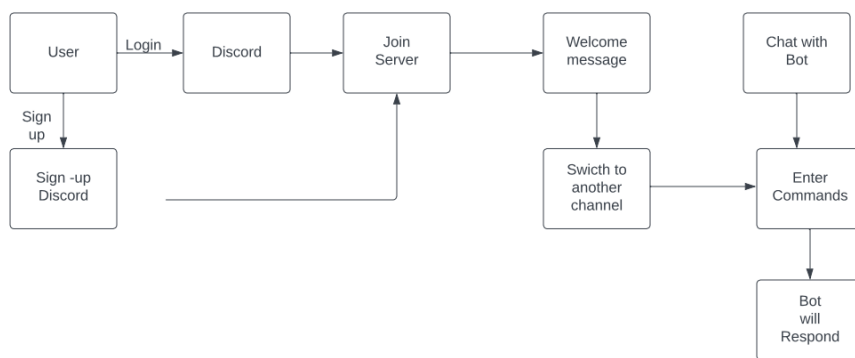
### 4.3 SOFTWARE ARCHICECTURAL DIAGRAM



### 4.4 SUBSYSTEM SERVICES



## 4.5 USER INTERFACE DESIGN



## 5. TECHNICAL IMPLEMENATATION & ANALYSIS

### 5.1 OUTLINE

The discord bot adds more functionality to the created server in the discord application. . It will fetch responses from the database and its code to help with the same. The bot has many features and one of its key points is fetching data from reddit website. The bot communicates with the server then with the database and gets the desired result through the APIs as shown in the data flow diagram. It can be further added into many servers, if necessary, hence proving to be a ready-todeploy application after its creation and testing. The maintenance is flexible and easy for us though it does

require the bot to be shut down for a while. it is possible to update the bot while its active which is a plus point.

## **5.2 TECHICAL CODING AND CODE SOLUTION**

### **5.2.1 MAIN CODE**

```
import discord
```

```
from discord.ext import commands, tasks
```

```
import random
```

```
import os
```

```
from itertools import cycle
```

```
intents = discord.Intents.default()
```

```
intents.message_content = True
```

```
bot = commands.Bot(command_prefix=">", intents=intents)
```

```
Status = cycle(['Welcome to the The Blue Bird','Share our server link with your friends','HAvе a  
great time here'])
```

```
token = "MTAxMzcxNTAyOTk4OTc5Mzg2Mg.G-  
0pF5.amtTtJdT3sfTU7_sr5mC3TbCx46v2kTiqOXTjY"
```

```
Course = file3.FreeCourse()
```

```
intents = discord.Intents.default()
```

```
intents.message_content = True
```

```
bot = commands.Bot(command_prefix=">", intents=intents)
```

```
token =
```

```
"MTAxMzcxNTAyOTk4OTc5Mzg2Mg.G0pF5.amtTtJdT3sfTU7_sr5mC3TbCx46v2kTiqOXTjY"
```

```
#no result message
```

```
no_result_message = '''Sorry, we can\'t find what you are searching for. We may not  
have written anything about it yet,
```

```
but you can subscribe to our news letter for updates of our newest content'''
```

```
@bot.event
```

```
async def on_ready():
```

```
    change_status.start()
```

```
    print("BOT IS ONLINE!!")
```

```
@bot.event
```

```
async def on_message(message):
```

```
    if message.author == bot.user:
```

```
        return
```

```
    # lower case message
```

```
    message_content = message.content.lower()
```

```
    if f'$search' in message_content:
```

```
        key_words, search_words = Course.key_words_search_words(message_content)
```

```
        result_links = Course.search(key_words)
```

```
        links = Course.send_link(result_links, search_words)
```

```
    If len(links) > 0:
```

```
        for link in links:
```

```
            await message.channel.send(link)
```

```
    else:
```

```
        await message.channel.send(no_result_message)
```



```
@tasks.loop(seconds = 5)
```

```
async def change_status():
```

```
    await bot.change_presence(activity=discord.Game(next(Status)))
```

```
@bot.event
```

```
async def on_command_error(ctx,error):
```

```
    if isinstance(error,commands.CommandNotFound):
```

```
        await ctx.send("Invalid command used")
```

```
@bot.event
```

```
async def on_member_join(member):
```

```
    print(f'{member} has joined a server')
```

```
@bot.event
```

```
async def on_member_remove(member):
```

```
    print(f'{member} has been removed form server')
```

```
#Greeting to bot
```

```
@bot.command(aliases=['hi','hello','Yo','Aye'])
```

```
async def greet(ctx):
```

```
    responses = ["Long time no see",
```

```
                "hello mate!!!",
```

```
                "welcome",
```

```
                "Its good to see you again!!"]
```

```
    await ctx.send(random.choice(responses))
```

```
#clear messages
```

```
@bot.command()
```

```
async def clr(ctx,amount : int):
```

```
    await ctx.channel.purge(limit=amount)
```

```
@clr.error
```

```
async def clr_error(ctx,error):
```

```
    if isinstance(error,commands.MissingRequiredArgument):
```

```
        await ctx.send("Please specify an amount of messages to delete")
```

#kicking/banning members

@bot.command()

async def kick(ctx, member : discord.Member, \*, reason=None):

await member.kick(reason=reason)

@bot.command()

async def ban(ctx, member : discord.Member, \*, reason=None):

await member.ban(reason=reason)

await ctx.send(f'Banned {member.mention}')

#unbanning member

@bot.command()

async def unban(ctx, \*, member):

banned\_users = await ctx.guild.bans()

member\_name, member\_tag = member.split('#')

```

for ban_entry in banned_users:

    user = ban_entry.user

    if (user.name, user.tag) == (member_name,member_tag):

        await ctx.guild.unban(user)

        await ctx.send(f'Unbanned {user.mention}')

    return

bot.run(token)

```

## 5.2.2 MUSIC BOT CODE

### MAIN CODE

```

import discord

from discord.ext import commands

import os

#import all of the cogs

from help_cog import help_cog

from music_cog import music_cog

bot = commands.Bot(command_prefix='/')

```

#remove the default help command so that we can write our own

```
bot.remove_command('help')
```

#register the class with the bot

```
bot.add_cog(help_cog(bot))
```

```
bot.add_cog(music_cog(bot))
```

```
tk = 'MTAxNDc5MjQ1NzM3ODc5MA.GA5VQ2.-  
5iXhiSFuwDMGJ818eWp4UBbvjcgjVIJcA1Adw'
```

#start the bot with our token

```
bot.run()
```

## **CODE\_py**

```
from ast import alias
```

```
import discord
```

```
from discord.ext import commands
```

```
from youtube_dl import YoutubeDL
```

```
class music_cog(commands.Cog):
```

```
    def __init__(self, bot):
```

```
self.bot = bot
```

```
#all the music related stuff
```

```
self.is_playing = False
```

```
self.is_paused = False
```

```
# 2d array containing [song, channel]
```

```
self.music_queue = []
```

```
self.YDL_OPTIONS = {'format': 'bestaudio', 'noplaylist': 'True'}
```

```
self.FFMPEG_OPTIONS = {'before_options': '-reconnect 1 -reconnect_streamed 1 -  
reconnect_delay_max 5', 'options': '-vn'}
```

```
self.vc = None
```

```
#searching the item on youtube
```

```
def search_yt(self, item):
```

```
    with YoutubeDL(self.YDL_OPTIONS) as ydl:
```

```
        try:
```

```
            info = ydl.extract_info("ytsearch:%s" % item, download=False)['entries'][0]
```

```
except Exception:
```

```
    return False
```

```
    return {'source': info['formats'][0]['url'], 'title': info['title']}
```

```
def play_next(self):
```

```
    if len(self.music_queue) > 0:
```

```
        self.is_playing = True
```

```
        #get the first url
```

```
        m_url = self.music_queue[0][0]['source']
```

```
        #remove the first element as you are currently playing it
```

```
        self.music_queue.pop(0)
```

```
        self.vc.play(discord.FFmpegPCMAudio(m_url, **self.FFMPEG_OPTIONS), after=lambda  
e: self.play_next())
```

```
    else:
```

```
        self.is_playing = False
```

```
# infinite loop checking
```

```
async def play_music(self, ctx):
```

```
    if len(self.music_queue) > 0:
```

```
        self.is_playing = True
```

```
        m_url = self.music_queue[0][0]['source']
```

```
        #try to connect to voice channel if you are not already connected
```

```
        if self.vc == None or not self.vc.is_connected():
```

```
            self.vc = await self.music_queue[0][1].connect()
```

```
            #in case we fail to connect
```

```
            if self.vc == None:
```

```
                await ctx.send("Could not connect to the voice channel")
```

```
            return
```

```
        else:
```

```
            await self.vc.move_to(self.music_queue[0][1])
```



```
#remove the first element as you are currently playing it
```

```
self.music_queue.pop(0)
```

```
self.vc.play(discord.FFmpegPCMAudio(m_url, **self.FFMPEG_OPTIONS), after=lambda  
e: self.play_next())
```

```
else:
```

```
self.is_playing = False
```

```
@commands.command(name="play", aliases=["p","playing"], help="Plays a selected song from  
youtube")
```

```
async def play(self, ctx, *args):
```

```
    query = " ".join(args)
```

```
    voice_channel = ctx.author.voice.channel
```

```
    if voice_channel is None:
```

```
        #you need to be connected so that the bot knows where to go
```

```
        await ctx.send("Connect to a voice channel!")
```

```
    elif self.is_paused:
```

```
        self.vc.resume()
```

```
    else:
```

```
song = self.search_yt(query)
```

```
if type(song) == type(True):
```

```
    await ctx.send("Could not download the song. Incorrect format try another keyword. This  
could be due to playlist or a livestream format.")
```

```
else:
```

```
    await ctx.send("Song added to the queue")
```

```
    self.music_queue.append([song, voice_channel])
```

```
if self.is_playing == False:
```

```
    await self.play_music(ctx)
```

```
@commands.command(name="pause", help="Pauses the current song being played")
```

```
async def pause(self, ctx, *args):
```

```
    if self.is_playing:
```

```
        self.is_playing = False
```

```
        self.is_paused = True
```

```
        self.vc.pause()
```

```
    elif self.is_paused:
```

```
        self.is_paused = False
```

```
#self.is_playing = True
```

```
self.vc.resume()
```

```
@commands.command(name = "resume", aliases=["r"], help="Resumes playing with the discord bot")
```

```
async def resume(self, ctx, *args):
```

```
    if self.is_paused:
```

```
        self.is_paused = False
```

```
#self.is_playing = True
```

```
self.vc.resume()
```

```
@commands.command(name="skip", aliases=["s"], help="Skips the current song being played")
```

```
async def skip(self, ctx):
```

```
    if self.vc != None and self.vc:
```

```
        self.vc.stop()
```

```
        #try to play next in the queue if it exists
```

```
        await self.play_music(ctx)
```

```
@commands.command(name="queue", aliases=["q"], help="Displays the current songs in queue")
```

```
async def queue(self, ctx):
```

```
    retval = ""
```

```
    for i in range(0, len(self.music_queue)):
```

```
        # display a max of 5 songs in the current queue
```

```
        if (i > 4): break
```

```
        retval += self.music_queue[i][0]['title'] + "\n"
```

```
    if retval != "":
```

```
        await ctx.send(retval)
```

```
    else:
```

```
        await ctx.send("No music in queue")
```

```
@commands.command(name="clear", aliases=["c", "bin"], help="Stops the music and clears the queue")
```

```
async def clear(self, ctx):
```

```
    if self.vc != None and self.is_playing:
```

```
        self.vc.stop()
```

```
    self.music_queue = []
```

```
await ctx.send("Music queue cleared")
```

```
@commands.command(name="leave", aliases=["disconnect", "l", "d"], help="Kick the bot from VC")
```

```
async def dc(self, ctx):
```

```
    self.is_playing = False
```

```
    self.is_paused = False
```

```
    await self.vc.disconnect()
```

## **HELP COMMANDS**

```
import discord
```

```
from discord.ext import commands
```

```
class help_cog(commands.Cog):
```

```
    def __init__(self, bot):
```

```
        self.bot = bot
```

```
        self.help_message = ""
```

```
    ...
```

General commands:

/help - displays all the available commands

/p <keywords> - finds the song on youtube and plays it in your current channel. Will resume playing the current song if it was paused

/q - displays the current music queue

/skip - skips the current song being played

/clear - Stops the music and clears the queue

/leave - Disconnects the bot from the voice channel

/pause - pauses the current song being played or resumes if already paused

/resume - resumes playing the current song

'''

'''

```
self.text_channel_list = []
```

```
#some debug info so that we know the bot has started
```

```
@commands.Cog.listener()
```

```
async def on_ready(self):
```

```
    for guild in self.bot.guilds:
```

```
        for channel in guild.text_channels:
```

```
            self.text_channel_list.append(channel)
```

```
await self.send_to_all(self.help_message)
```

```
@commands.command(name="help", help="Displays all the available commands")
```

```
async def help(self, ctx):
```

```
    await ctx.send(self.help_message)
```

```
async def send_to_all(self, msg):
```

```
    for text_channel in self.text_channel_list:
```

```
        await text_channel.send(msg)
```

### **5.2.3 FREE COURSES BOT CODE**

```
import requests
```

```
from bs4 import BeautifulSoup
```

```
class FreeCourse:
```

```
def __init__(self):
```

```
    self.headers = {'User-Agent': 'Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/88.0.4324.150 Safari/537.3'}
```

```
    self.url = 'https://coursevania.com/courses/?search='
```

```
def key_words_search_words(self, user_message):
```

```
    words = user_message.split()[1:]
```

```
    keywords = '%20'.join(words)
```

```
    search_words = ' '.join(words)
```

```
    return keywords, search_words
```

```
def search(self, keywords):
```

```
    response = requests.get(self.url+keywords, headers = self.headers)
```

```
    content = response.content
```

```
    soup = BeautifulSoup(content, 'html.parser')
```

```
    result_links = soup.findAll('a')
```

```
    return result_links
```

```
def send_link(self, result_links, search_words):
```



```

send_link = set()

for link in result_links:

    text = link.text.lower()

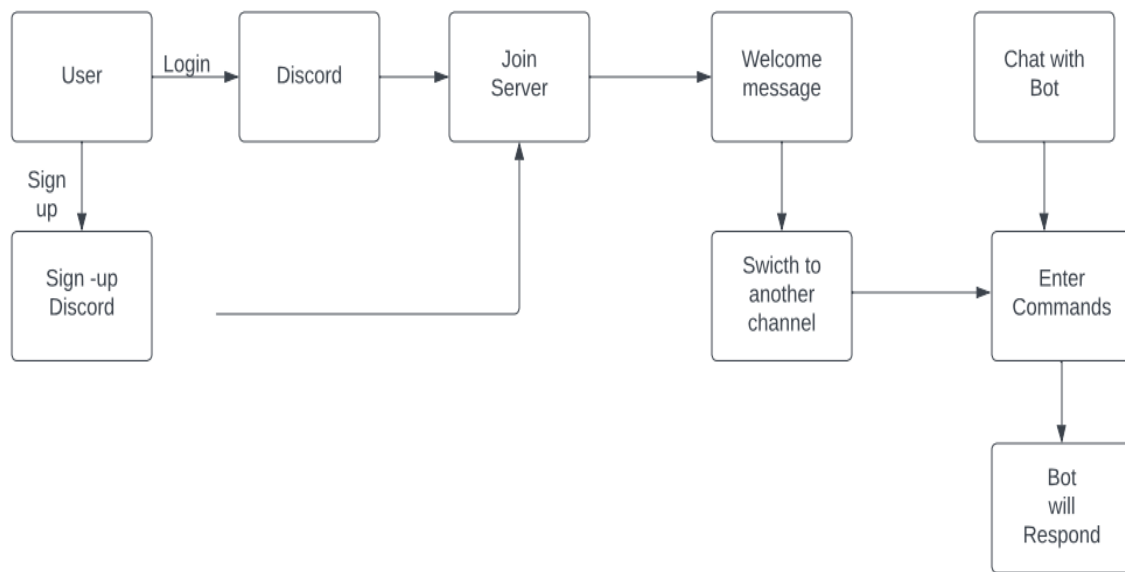
    if search_words in text:

        send_link.add(link.get('href'))

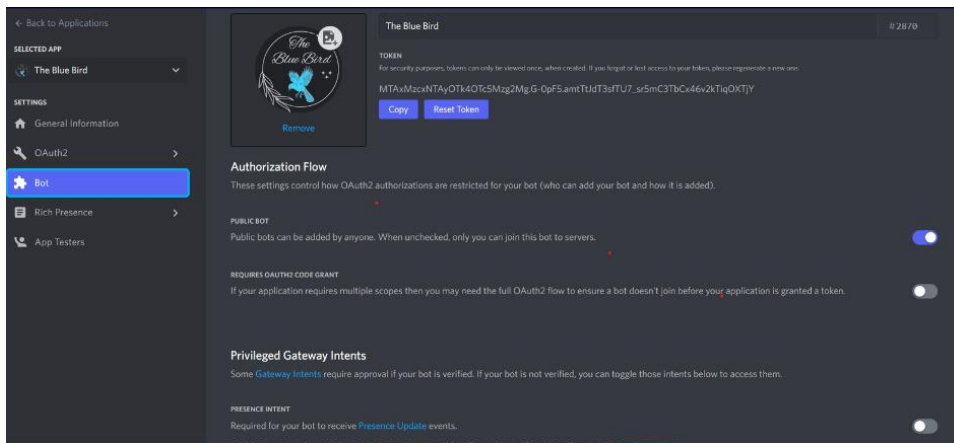
return send_link

```

## 5.3 WORKING LAYOUTS OF FORMS



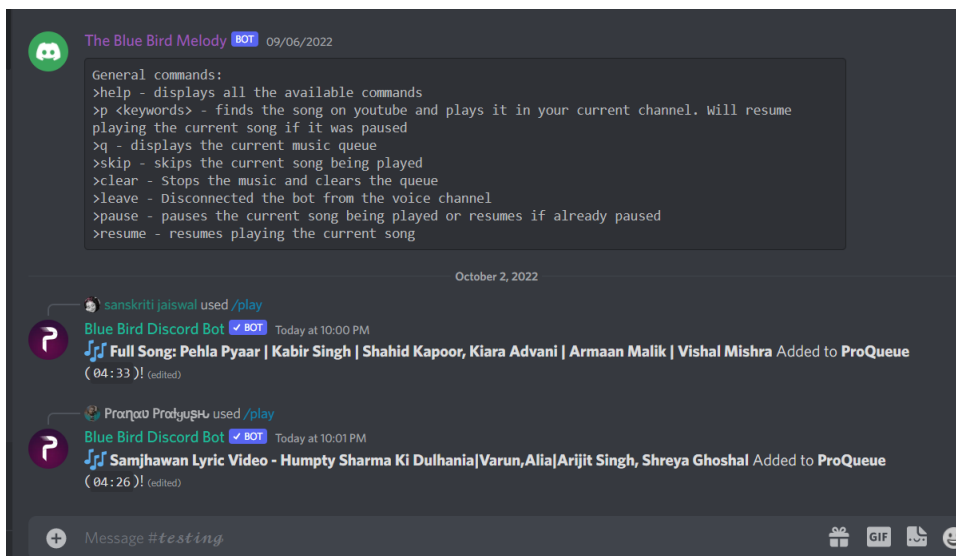
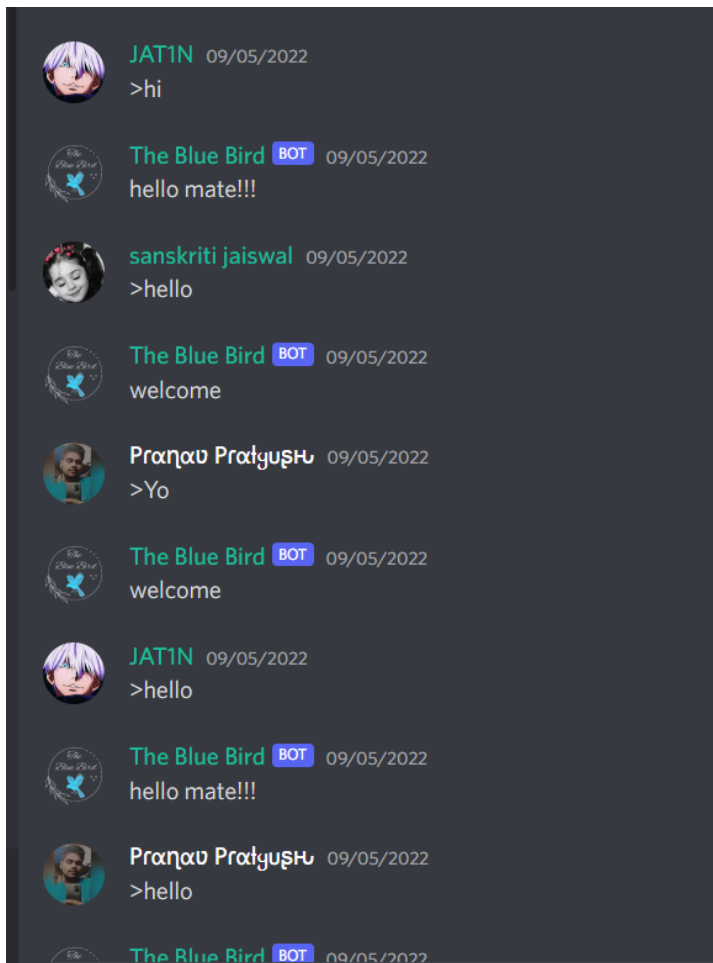
## 5.4 PROTOTYPE SUBMISSION

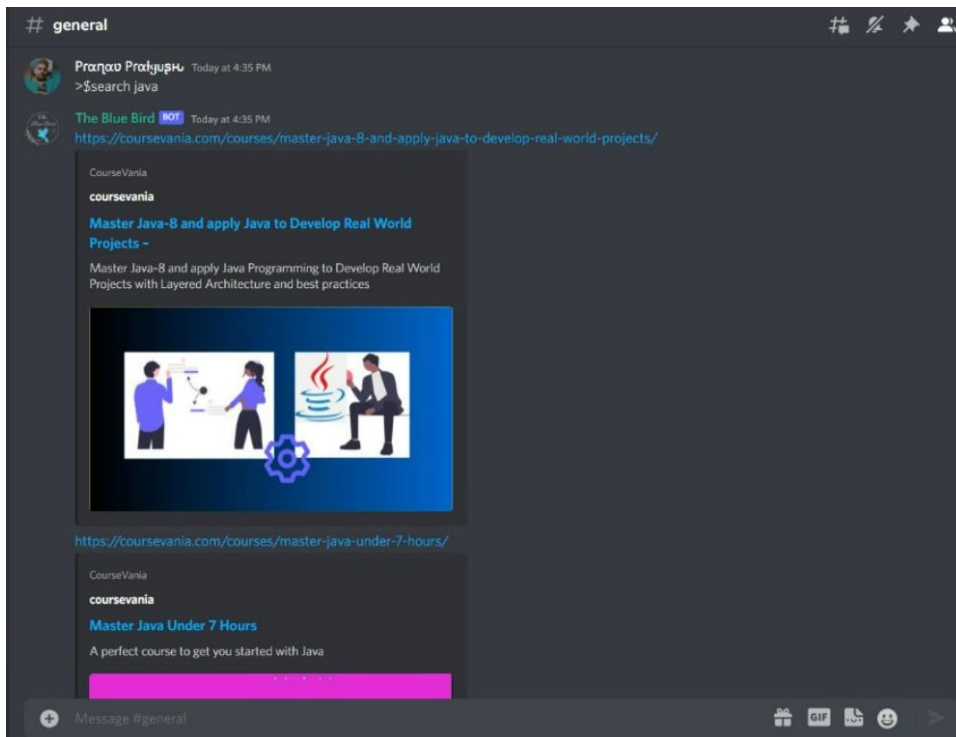


## 5.5 TEST AND VALIDATION



## 5.6 PERFORMANCE ANALYSIS





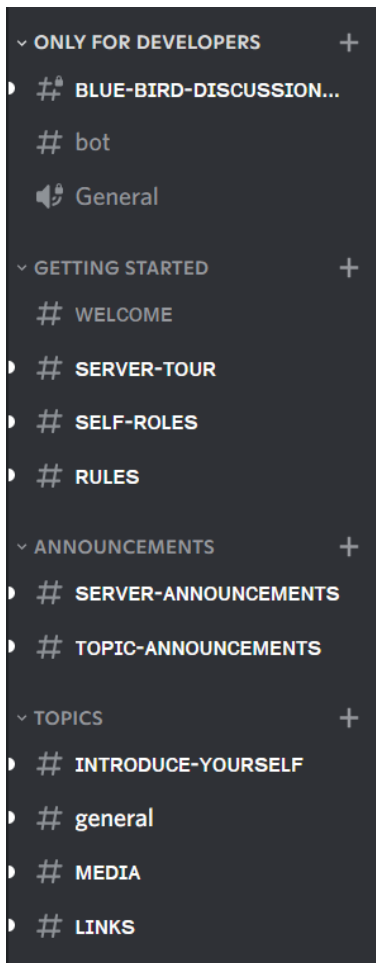
## 5.7 SUMMARY

All the implantations and code are shared.

## 6. PROJECT OUTCOME AND APPLICABILITY

### 6.1 Outline

In the server, we have various channel for different purpose. By joining the channel you can use “THE BLUE BIRD “bot.



## 6.2 Key implementations outline of the System

The bot is online and added to the server

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
Windows PowerShell
Copyright (c) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadline for compatibility purposes. If you want to re-enable it, run
'Import-Module PSReadline'.

PS C:\Users\VP\Documents\VS Codes files\TheBlueBird> python -u "c:\Users\VP\Documents\VS Codes files\TheBlueBird\Main_bot_Code.py"
bot is online
```

### **6.3 Significant project outcomes**

Bot is responding in the channels. We can chat with bot, command bot to play music and search about the courses.

### **6.4 Project applicability on Real-world applications**

This project would be helpful for the learners around the world to get direct information about the free courses available on different platforms and would thus be helpful in saving time and efforts.

Our project would be also helpful in building connections. Keep individuals away from stressful situations and making them work productively by providing some sort of entertainment.

### **6.4 Inference**

## **7. CONCLUSIONS AND RECOMMENDATION**

### **7.1 Outline**

Our bot is made for the students in which we provide them free courses link for their skill development and also an interactive chatbot with which they can talk. Also, we made a discord music bot that plays the music of choice. It helps in relaxation and to keep the mind calm. With this, we conclude that with the hard work of our team members and

continuous guidance of our supervisor, we have created this project which is fully functioning despite some bugs here and there.

## 7.2 Limitation/Constraints of the System

There are certain limitations of our system:-

The discord-specific python libraries have frequent updates which lead to inconsistencies.

Currently, the courses are provided only from one source because of the high complexity of the code.

## 7.3

## Future

## Enhancements

In near future, with the updation of python code, our bot servers would be able to provide free courses from multiple sites like Coursera, Udemy, and many more. Also, there will be a webpage fully focused on the same.

Our discord bot also known as the Blue Bird bot is a the universal tool that can be used by anyone that uses discord as a platform. It allows people to fetch data from coursevania and other sites, providing them with information, entertainment, and better accessibility. The bot can be deployed on any server and can setup itself as long as the admin gives it enough rights. The it sets up are all optional and can be selected or deselected as per choice. There are no restrictions on the number of servers it can join or on the number of people it can respond to. It can further in the future be enhanced for more activities and responses thereby allowing better personalization for each individual server. The discord bots do not interfere with the regular working of a server and are secure. They

increase interactivity and provide a better experience for all the users. Updates can be constant

and will reflect on all the servers no heavy maintenance is required hence making it very robust.

The discord bots can change the whole platform and can bring several enhancements while offering ease of use. They are viable and easy to maintain.

## **7.4 Inference**

Recent research signifies Discord is growing in popularity. Bots are everywhere on discord but every bot on discord is made for a very specific reason “THE BLUE BIRD” A multipurpose bot , is providing the students a platform with facilities like free courses, chat with friends, listening music . We successfully implemented all the knowledge and fulfilled all the functions of bot .