

--- AccountBoundary.py ---

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

```
from control.AccountControl import AccountControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        self.control = AccountControl() # Initialize control object
```

```
    @commands.command(name="fetch_all_accounts")
```

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

```
        await ctx.send("Command recognized, passing data to control.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        result = self.control.receive_command(command)
```

```
        # Send the result (prepared by control) back to the user
```

```
        await ctx.send(result)
```

```
    @commands.command(name="fetch_account_by_website")
```

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

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
command = list[0] # First element is the command
```

```
website = list[1] # Second element is the URL
```

```
await ctx.send(f"Command recognized, passing data to control for website {website}.")
```

```
result = self.control.receive_command(command, website)
```

```
# Send the result (prepared by control) back to the user
```

```
await ctx.send(result)
```

```
@commands.command(name="add_account")
```

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

```
    await ctx.send("Command recognized, passing data to control.")
```

```
    list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
    command = list[0] # First element is the command
```

```
    username = list[1] # Second element is the username
```

```
    password = list[2] # Third element is the password
```

```
    website = list[3] # Third element is the website
```

```
    result = self.control.receive_command(command, username, password, website)
```

```
# Send the result (prepared by control) back to the user
```

```
    await ctx.send(result)
```

```
@commands.command(name="delete_account")
```

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

```
    list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
    command = list[0] # First element is the command
```

```
    account_id = list[1] # Second element is the account_id
```

```
    await ctx.send(f"Command recognized, passing data to control to delete account with ID  
{account_id}.")
```

```
    result = self.control.receive_command(command, account_id)
```

```
    # Send the result (prepared by control) back to the user
```

```
    await ctx.send(result)
```

```
--- AvailabilityBoundary.py ---
```

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

```
from control.AvailabilityControl import AvailabilityControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        # Initialize control objects directly
```

```
self.availability_control = AvailabilityControl()
```

```
@commands.command(name="check_availability")
```

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

```
    await ctx.send("Command recognized, passing data to control.")
```

```
    list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
    command = list[0] # First element is the command
```

```
    url = list[1] # Second element is the URL
```

```
    date_str = list[2] # Third element is the date
```

```
    # Pass the command and data to the control layer using receive_command
```

```
    result = await self.availability_control.receive_command(command, url, date_str)
```

```
    # Send the result back to the user
```

```
    await ctx.send(result)
```

```
@commands.command(name="start_monitoring_availability")
```

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

```
    await ctx.send("Command recognized, passing data to control.")
```

```
    list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
command = list[0] # First element is the command
url = list[1] # Second element is the URL
date_str = list[2] # Third element is the date
frequency = list[3] # Fourth element is the frequency
```

```
response = await self.availability_control.receive_command(command, url, date_str, frequency)
```

```
# Send the result back to the user
await ctx.send(response)
```

```
@commands.command(name='stop_monitoring_availability')
```

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

```
    """Command to stop monitoring the price."""
```

```
    await ctx.send("Command recognized, passing data to control.")
```

```
list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into
command and up to 6 variables
```

```
command = list[0] # First element is the command
```

```
response = await self.availability_control.receive_command(command) # Pass the
command to the control layer
await ctx.send(response)
```

```
--- BrowserBoundary.py ---
```

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

```
from control.BrowserControl import BrowserControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        self.browser_control = BrowserControl() # Initialize the control object
```

```
    @commands.command(name='launch_browser')
```

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

```
        await ctx.send(f"Command recognized, passing to control object.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        result = self.browser_control.receive_command(command) # Pass the updated  
user_message to the control object
```

```
        await ctx.send(result) # Send the result back to the user
```

```
    @commands.command(name="close_browser")
```

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

```
        await ctx.send(f"Command recognized, passing to control object.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
command = list[0] # First element is the command
```

```
result = self.browser_control.receive_command(command)
```

```
await ctx.send(result)
```

```
--- HelpBoundary.py ---
```

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

```
from control.HelpControl import HelpControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        self.control = HelpControl() # Initialize control object
```

```
    @commands.command(name="project_help")
```

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

```
        await ctx.send("Command recognized, passing data to control.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        response = self.control.receive_command(command)
```

```
        # Send the response back to the user
```

```
        await ctx.send(response)
```

--- LoginBoundary.py ---

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

```
from control.LoginControl import LoginControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        self.login_control = LoginControl()
```

```
    @commands.command(name='login')
```

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

```
        await ctx.send("Command recognized, passing data to control.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        website = list[1]
```

```
        result = await self.login_control.receive_command(command, website)
```

```
        # Send the result back to the user
```

```
        await ctx.send(result)
```

--- NavigationBoundary.py ---


```

from discord.ext import commands

from control.NavigationControl import NavigationControl

from DataObjects.global_vars import GlobalState


class NavigationBoundary(commands.Cog):

    def __init__(self):

        self.navigation_control = NavigationControl()           # Initialize the control object

    @commands.command(name='navigate_to_website')

    async def navigate_to_website(self, ctx):

        await ctx.send("Command recognized, passing the data to control object.")    # Inform the
user that the command is recognized

        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into
command and up to 6 variables

        command = list[0] # First element is the command

        website = list[1] # Second element is the URL

        result = self.navigation_control.receive_command(command, website) # Pass the parsed
variables to the control object

        await ctx.send(result)                                     # Send the result back to the user


--- PriceBoundary.py ---

from discord.ext import commands

```

```
from control.PriceControl import PriceControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        # Initialize control objects directly
```

```
        self.price_control = PriceControl()
```

```
    @commands.command(name='get_price')
```

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

```
        """Command to get the price from the given URL."""
```

```
        await ctx.send("Command recognized, passing data to control.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        website = list[1] # Second element is the URL
```

```
        result = await self.price_control.receive_command(command, website) # Pass the command to  
the control layer
```

```
        await ctx.send(f"Price found: {result}")
```

```
    @commands.command(name='start_monitoring_price')
```

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

```
        """Command to monitor price at given frequency."""
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into
```

command and up to 6 variables

```
command = list[0] # First element is the command
```

```
website = list[1] # Second element is the URL
```

```
frequency = list[2]
```

```
await ctx.send(f"Command recognized, starting price monitoring at {website} every {frequency}  
second(s).")
```

```
response = await self.price_control.receive_command(command, website, frequency)
```

```
await ctx.send(response)
```

```
@commands.command(name='stop_monitoring_price')
```

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

```
    """Command to stop monitoring the price."""
```

```
    await ctx.send("Command recognized, passing data to control.")
```

```
list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
command = list[0] # First element is the command
```

```
response = await self.price_control.receive_command(command) # Pass the command  
to the control layer
```

```
await ctx.send(response)
```

--- StopBoundary.py ---

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

```
from control.StopControl import StopControl
```

```
from DataObjects.global_vars import GlobalState
```

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

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

```
        self.control = StopControl() # Initialize control object
```

```
    @commands.command(name="stop_bot")
```

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

```
        await ctx.send("Command recognized, passing data to control.")
```

```
        list = GlobalState.parse_user_message(GlobalState.user_message) # Parse the message into  
command and up to 6 variables
```

```
        command = list[0] # First element is the command
```

```
        result = await self.control.receive_command(command, ctx)
```

```
        print(result) # Send the result back to the Terminal. since the bot is shut down, it won't be able  
to send the message back to the user.
```

--- __init__.py ---

```
#empty init file
```