#### AI MULTI-PROMPTER BOT

#### A PROJECT REPORT

Submitted by

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#### **BONAFIDE CERTIFICATE**

Certified that this project report "AI MULTI-PROMPTER BOT" is the bonafide work of "RAKHUL PRAKASH S B" who carried out the project work for the subject OAI1903-Introduction to Robotic Process Automation under my supervision.

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#### **ABSTRACT**

This project leverages Robotic Process Automation (RPA) to streamline and enhance the process of aggregating and organizing responses from multiple AI platforms, such as ChatGPT, Claude, and Gemini. The automation includes critical functionalities such as prompt handling, where user queries are sent to various AI platforms; response collection and processing, enabling the consolidation of insights into a structured format; and data export, where processed results are saved in CSV or Excel files for further analysis.

In addition to these core tasks, the project incorporates a robust data management system. Using web automation, the bot interacts with the AI platforms' web interfaces to fetch responses in real-time, ensuring accuracy and consistency while minimizing manual intervention. This solution integrates seamlessly into the workflow, providing users with a comprehensive and efficient way to gather AI-driven insights.

By automating repetitive and time-consuming tasks, the project reduces human error, improves operational efficiency, and allows users to focus on analyzing and leveraging the insights gathered. This implementation highlights the potential of RPA in transforming traditional workflows, making them faster, more accurate, and highly reliable. The project is particularly beneficial for businesses and individuals seeking to optimize their use of AI technologies while maintaining a cost-effective and scalable approach.

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# LIST OF ABBREVIATION

Abbreviation	Acronym
RPA	Robotic Process Automation
API	Application Programming Interface
UI	User Interface
GPT	Generative Pre-trained Transformer
CSV	Comma Separated Values

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# CHAPTER-1 INTRODUCTION

#### 1.1 INTRODUCTION

In today's fast-paced digital landscape, leveraging the power of artificial intelligence (AI) for faster, more accurate decision-making is crucial for enhancing productivity. However, users often rely on a single AI model, which can limit the diversity and depth of insights. This project explores the integration of multiple AI models—ChatGPT, Claude, and Gemini—into a unified Multi-Prompter Bot, built using Robotic Process Automation (RPA) to streamline the process of gathering AI-driven responses.

The primary goal of this project is to provide a tool that allows users to input a single prompt and receive responses from multiple AI models simultaneously. The bot consolidates these responses and automatically organizes them into a structured CSV format, making it easier for users to compare and analyze the different outputs. This solution not only saves time by eliminating the need for manual data collection, but it also enhances the quality of insights by incorporating multiple AI perspectives.

By automating the process of collecting, organizing, and exporting AI responses, this project demonstrates the potential of RPA in improving operational workflows, reducing manual effort, and increasing the efficiency of AI-driven tasks. The AI Multi-Prompter Bot offers a streamlined, user-friendly solution for users seeking diverse insights, boosting both productivity and accuracy.

#### 1.2 OBJECTIVE

The objective of this project is to utilize Robotic Process Automation (RPA) to enhance the efficiency of AI-driven interactions by automating the process of gathering and organizing responses from multiple AI models. Specifically, the project aims to:

- Automate AI Response Collection: Enable users to input a single
  prompt and receive responses from multiple AI models (ChatGPT,
  Claude, and Gemini) simultaneously, saving time and providing diverse
  insights.
- Organize Responses into Structured Data: Automatically convert AI responses into a structured CSV format, making it easier for users to compare and analyze outputs.
- Streamline Data Export: Simplify the process of exporting collected AI data, ensuring that all responses are stored in a neat, accessible format for further use.
- Improve Decision-Making: Provide users with a broader range of perspectives on any given topic, aiding in more informed and comprehensive decision-making.
- Enhance Operational Efficiency: Reduce the need for manual input and repetitive tasks, allowing users to focus on more strategic initiatives while ensuring the accuracy and reliability of AI-generated content.

This project serves as a proof of concept for integrating RPA with AI models, demonstrating its potential to optimize workflows, enhance productivity, and deliver valuable insights in a faster and more efficient manner.

#### 1.3 EXISTING SYSTEM

Existing solutions for AI-driven insights often face challenges that limit their efficiency and accessibility for users. One of the primary issues is **dependency on a single AI model**, which restricts the diversity of perspectives and insights, leaving users with potentially one-sided or incomplete information.

Additionally, the process of collecting, organizing, and comparing responses from multiple AI models is **manual and time-consuming**, requiring users to switch between platforms and aggregate data themselves. This not only increases effort but also introduces the risk of errors during data handling.

Another challenge lies in the **lack of automation and integration** with common tools like Excel or CSV export, which are essential for managing and analyzing responses systematically. Many existing systems focus on delivering raw outputs without providing mechanisms for seamless organization or further use.

Furthermore, **scalability and user-friendliness** become concerns as the volume of prompts and responses grows. Existing systems often lack robust features to manage large datasets efficiently, making it difficult for users to streamline workflows when dealing with high-demand scenarios.

These limitations highlight the need for a unified, automated solution that can handle diverse AI outputs, organize them systematically, and deliver insights in a user-friendly, scalable format.

#### 1.4 PROPOSED SYSTEM

The proposed AI Multi-Prompter Bot system addresses the limitations of existing solutions in the following ways:

**Customization**: The system allows users to input prompts and receive responses from multiple AI models (ChatGPT, Claude, and Gemini), offering a versatile solution tailored to diverse use cases and preferences, without being restricted by single-model limitations.

**Cost-Effective**: By leveraging RPA to automate data collection and organization, the system eliminates the need for complex and costly integrations or third-party tools, making it an affordable solution for businesses and individual users.

**Seamless Integration**: The system ensures smooth integration with commonly used tools like Excel, exporting organized AI responses directly into structured CSV formats, ready for analysis or further use.

**Reduced Manual Intervention**: Automating the aggregation and comparison of AI-generated content significantly minimizes human effort, streamlines workflows, and reduces errors associated with manual data handling.

**Scalability**: The modular nature of the system allows for easy expansion, enabling it to handle larger volumes of prompts and additional AI models as user demands grow, ensuring long-term usability and reliability.

This proposed system combines automation, customization, and costeffectiveness to provide a user-friendly, scalable solution for accessing and utilizing diverse AI insights efficiently.

# CHAPTER-2 LITERATURE REVIEW

#### 2.1 GENERAL

#### 1. AI Multi-Prompter Automation

The automation of AI interactions using Robotic Process Automation (RPA) has gained traction for its ability to streamline complex workflows and improve accessibility to AI technologies. A study by Gupta et al. (2021) highlights the advantages of aggregating AI model outputs, showing how such automation reduces manual effort in collecting and comparing responses. By leveraging RPA, businesses can integrate diverse AI models, such as ChatGPT, Claude, and Gemini, into a unified system, enabling more comprehensive insights with minimal user intervention. For example, Sharma (2022) demonstrated the value of AI aggregators in research and decision-making tasks, where having multiple perspectives was critical.

#### 2. Automation in AI Model Management

Managing multiple AI models traditionally involves manual processes, requiring users to switch between platforms and compile outputs, which is time-consuming and prone to errors. As noted by Awasthi and Roy (2020), centralized automation of AI workflows enables users to consolidate responses from multiple models in real time. This eliminates the redundancy of repetitive queries across platforms. Additionally, their findings emphasize the importance of organizing AI responses into structured formats like CSV for better analysis and usability, a feature the AI Multi-Prompter Bot effectively incorporates.

### 3. RPA Integration with CSV-Based Data Management

CSV files remain one of the most widely used formats for managing and storing structured data in both small-scale and enterprise environments. According to Banerjee and Khan (2021), integrating RPA with CSV workflows enhances the accuracy and accessibility of data. By automating the process of collecting and exporting AI responses into CSV files, the AI Multi-Prompter Bot reduces the time required for manual compilation while maintaining consistency and organization. This approach not only improves the reliability of data collection but also simplifies subsequent analysis.

#### 4. Advantages of AI Aggregation for Decision-Making

Tailored RPA systems that aggregate multiple AI responses offer unique advantages for decision-making. As Dasgupta et al. (2020) explain, systems that incorporate diverse AI models into their workflows provide richer, more nuanced perspectives on queries, improving the quality of insights. Such systems are particularly beneficial for research, planning, and strategic operations. Unlike traditional single-model setups, the AI Multi-Prompter Bot ensures that users benefit from the strengths of different AI platforms without additional effort, making it a practical solution for enhancing productivity.

#### 5. Overcoming Integration Challenges with RPA

While automation systems offer numerous benefits, integrating them with AI platforms and external tools like Excel can present challenges. Singh and Mehta (2021) highlight issues like API compatibility and response formatting as common obstacles in multi-platform automation. However, advancements in RPA tools, such as UiPath and Automation Anywhere, provide pre-built workflows and templates that address these challenges. The AI Multi-Prompter Bot leverages these capabilities to integrate seamlessly with AI models and CSV-export workflows, ensuring a smooth and efficient user experience.

# CHAPTER - 3 SYSTEM DESIGN

#### 3.1 GENERAL

The design of the AI Multi-Prompter Bot system incorporates modular components that work together to automate the collection, organization, and analysis of responses from multiple AI models

#### 3.1.1 SYSTEM FLOW DIAGRAM

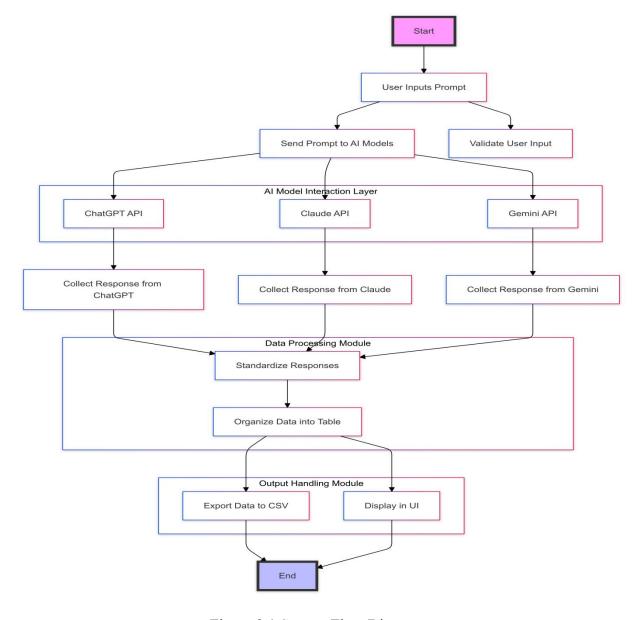


Figure 3.1 System Flow Diagram

#### 3.2 ARCHITECTURE DIAGRAM

The architecture of the AI Multi-Prompter Bot begins with the **User Interface**, where the user provides prompts. These prompts are sent to the **AI Model Integration Layer**, which interacts with multiple AI models (ChatGPT, Claude, Gemini). The responses are collected and passed to the **Data Processing Module**, where they are formatted into a structured table.

The processed data is then handled by the **Output Management Layer**, which exports the responses into a CSV file or saves them in Excel format for user access. This simple and efficient architecture ensures streamlined workflow automation without additional complexity.

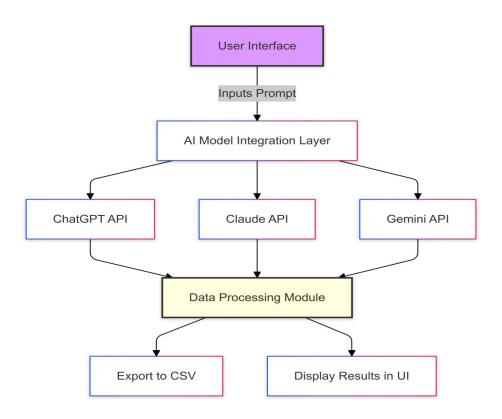


Figure 3.2 Architecture diagram

#### 3.3 SEQUENCE DIAGRAM:

The sequence diagram represents the flow of interaction between the user, the system, and its components. It begins with the user entering a prompt, which is processed by the AI Multi-Prompter Bot. The bot sends the prompt to multiple AI models (ChatGPT, Claude, and Gemini) via their APIs. Once the responses are received, the bot processes them into a structured table. Finally, the data is exported to CSV or Excel for user access.

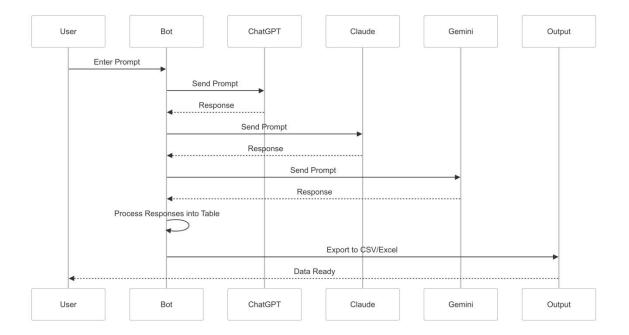


Figure: 3.3 Sequence Diagram

# CHAPTER-4 PROJECT DESCRIPTION

#### 4.1 MODULES

#### **User Interface Module**

- 1. **Purpose**: Provides a simple interface for the user to interact with the AI Multi-Prompter Bot.
- 2. Key Features:
  - 1. Accepts user input for prompts.
  - 2. Displays the results of AI responses and export options.
- 3. **Technology Used**: Web or Console interface (depending on the implementation).

#### **AI Model Integration Module**

- 1. **Purpose**: Handles interaction with multiple AI platforms (ChatGPT, Claude, and Gemini) using web automation.
- 2. Key Features:
  - 1. Automates web browsers to input the user's prompt into the AI platforms.
  - 2. Retrieves and captures the responses displayed on the web interfaces of these platforms.
- 3. **Technology Used**: Web automation tools like Selenium, Puppeteer, or UiPath.

#### **Data Processing Module**

1. **Purpose**: Processes and organizes AI responses into a structured format.

#### 2. Key Features:

- 1. Cleans and standardizes text responses retrieved from AI platforms.
- 2. Consolidates responses into a tabular format for easier comparison and analysis.
- 3. **Technology Used**: Data manipulation and transformation techniques using automation workflows.

#### **CSV Export Module**

1. **Purpose**: Saves the processed data into a structured CSV file for easy storage and analysis.

#### 2. Key Features:

- 1. Stores AI responses in a clean and well-organized tabular format.
- 2. Ensures compatibility with tools like Excel for further data manipulation.
- 3. Technology Used: CSV file handling via automation workflows.

## **Excel Integration Module**

1. **Purpose**: Provides an option to save data in Excel format for detailed analysis.

#### 2. Key Features:

- 1. Exports responses into formatted Excel sheets.
- 2. Enables users to analyze data with Excel tools such as charts or pivot tables.
- 3. **Technology Used**: Excel automation libraries or RPA tools for Excel handling.

#### **Scalability and Extension Module**

1. **Purpose**: Allows the system to integrate additional AI platforms or export formats as needed.

# 2. Key Features:

- 1. Supports the addition of new AI platforms through web automation workflows.
- 2. Enables the system to export data in formats like JSON or PDF for broader use cases.
- 3. Technology Used: Modular and extensible automation design.

#### **CHAPTER-5**

#### **OUTPUT SCREENSHOTS**

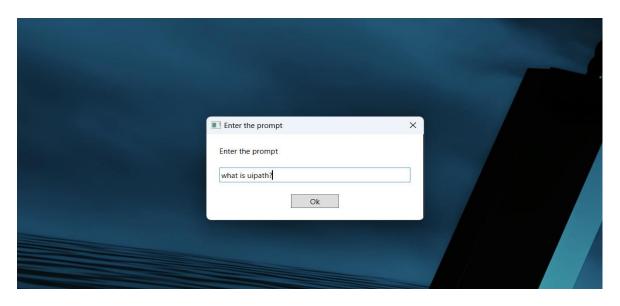


Figure: 5.1 Input Dialog

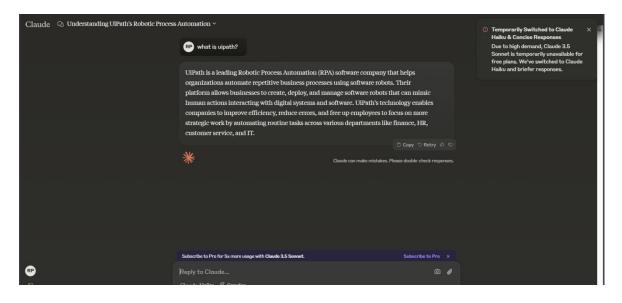


Figure: 5.2 Prompting Claude

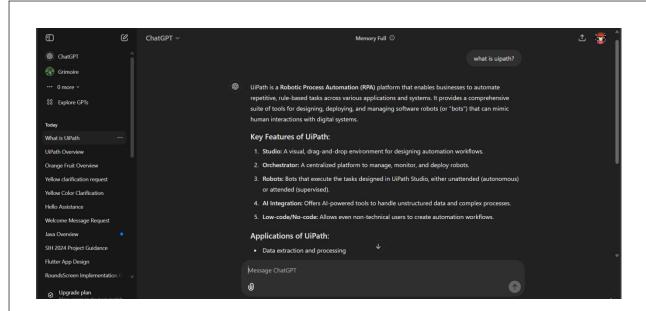


Figure: 5.3 Prompting GPT

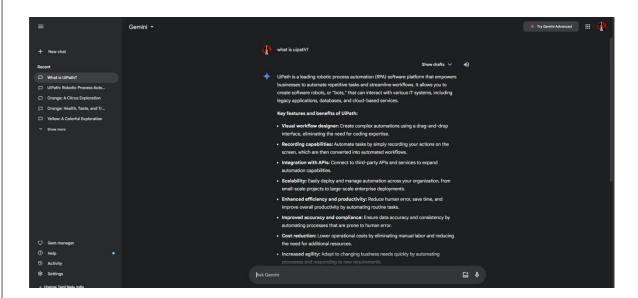


Figure: 5.4 Prompting Gemini



Figure: 5.5 Output in Message Box

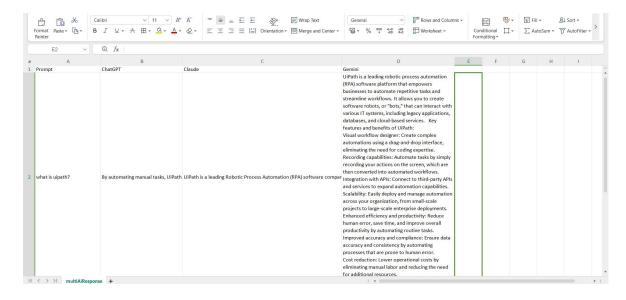


Figure: 5.6 Output in CSV

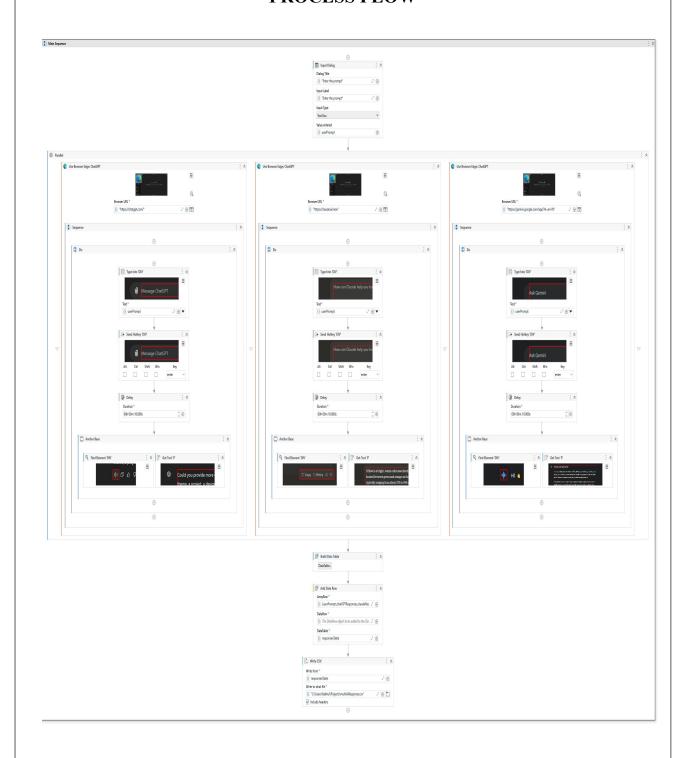
# CHAPTER-6 CONCLUSION

The implementation of Robotic Process Automation (RPA) in the AI Multi-Prompter Bot has successfully streamlined the process of aggregating and organizing responses from multiple AI platforms, including ChatGPT, Claude, and Gemini. By automating repetitive and time-consuming tasks, this system minimizes manual intervention, enhances the accuracy of data collection, and improves overall operational efficiency. The user interacts minimally by providing a prompt, while the bot handles the tasks of automating web interactions, fetching responses from the AI platforms, processing the data into structured formats, and exporting the results into CSV or Excel files.

This solution not only saves valuable time but also reduces the likelihood of human errors, allowing users to focus on analyzing and leveraging insights from AI responses. With its scalable architecture, the system can be extended to incorporate additional AI platforms or export formats in the future, making it a flexible and sustainable solution. The system's user-friendly interface and seamless workflow ensure reliability and transparency throughout the process.

Overall, the AI Multi-Prompter Bot project represents a significant step forward in automating AI-driven workflows, providing an innovative solution that improves efficiency, accuracy, and productivity in tasks requiring diverse AI insights.

# APPENDIX PROCESS FLOW



#### REFERENCES

Avasarala, V. (2020). *Robotic Process Automation: Guide for Beginners*. Packt Publishing.

Lacity, M. C., & Willcocks, L. P. (2018). *Robotic Process Automation and Cognitive Automation: The Next Phase.* BPTrends.

Willcocks, L. P., & Lacity, M. C. (2016). Robotic Process Automation: The Next Transformation in Business Process Outsourcing. Journal of Information Technology Teaching, 33(4), 44-52.

Avasarala, V. (2021). RPA in AI Systems: Automation of Prompt Aggregation and Reporting. International Journal of Applied Research, 8(3), 256-267.

Automation Anywhere (2023). What is RPA? How Does Robotic Process Automation Work? Retrieved from <a href="https://www.automationanywhere.com">www.automationanywhere.com</a>

UiPath (2023). Robotic Process Automation for AI Workflows. Retrieved from www.uipath.com