



Robotic Process Automation

NewsNow: Automated News Retrieval System

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Abstract

- The "**Smart News Retrieval and Delivery Bot**" automates the process of retrieving the latest news and delivering it to users based on their chosen topics. Using Robotic Process Automation (RPA) and UiPath, the system performs a Google search for recent news articles, filters them to include only the most recent ones, and sends the headline and link to the user's email. This project is designed to save time and effort, ensuring users stay updated on their topics of interest effortlessly.



Need for the Proposed System

- In today's fast-paced digital age, manually searching for relevant and recent news can be time-consuming. Traditional methods often fail to ensure timely and personalized updates. This bot solves this problem by automating the entire process, delivering real-time, topic-specific news directly to the user's inbox.



NEED

Advantages of the Proposed System

- Fully automated, saving time and effort.
- Filters outdated content, ensuring only recent news is retrieved.
- Delivers news directly via email, improving accessibility.



Literature Survey

1. "Robotic Process Automation: A Systematic Literature Review"

- **Source:** Springer
- **Link:** <https://link.springer.com/article/10.1007/s12525-019-00365-8>
- **Advantage:** Automates repetitive, rule-based tasks, reducing human errors.
- **Disadvantage:** Less effective in unstructured environments due to dependence on structured inputs.

2. "Robotic Process Automation: In-Depth Analysis of Advanced Automation Techniques and Technologies"

- **Source:** IEEE Xplore
- **Link:** <https://ieeexplore.ieee.org/document/10649336>
- **Advantage:** Demonstrates how RPA improves operational efficiency by automating repetitive, rule-based tasks.
- **Disadvantage:** Highlights scalability challenges when implementing RPA in complex systems.

Main Objective

- To provide an automated, efficient, and user-friendly system for retrieving and delivering the most recent news on user-specified topics.

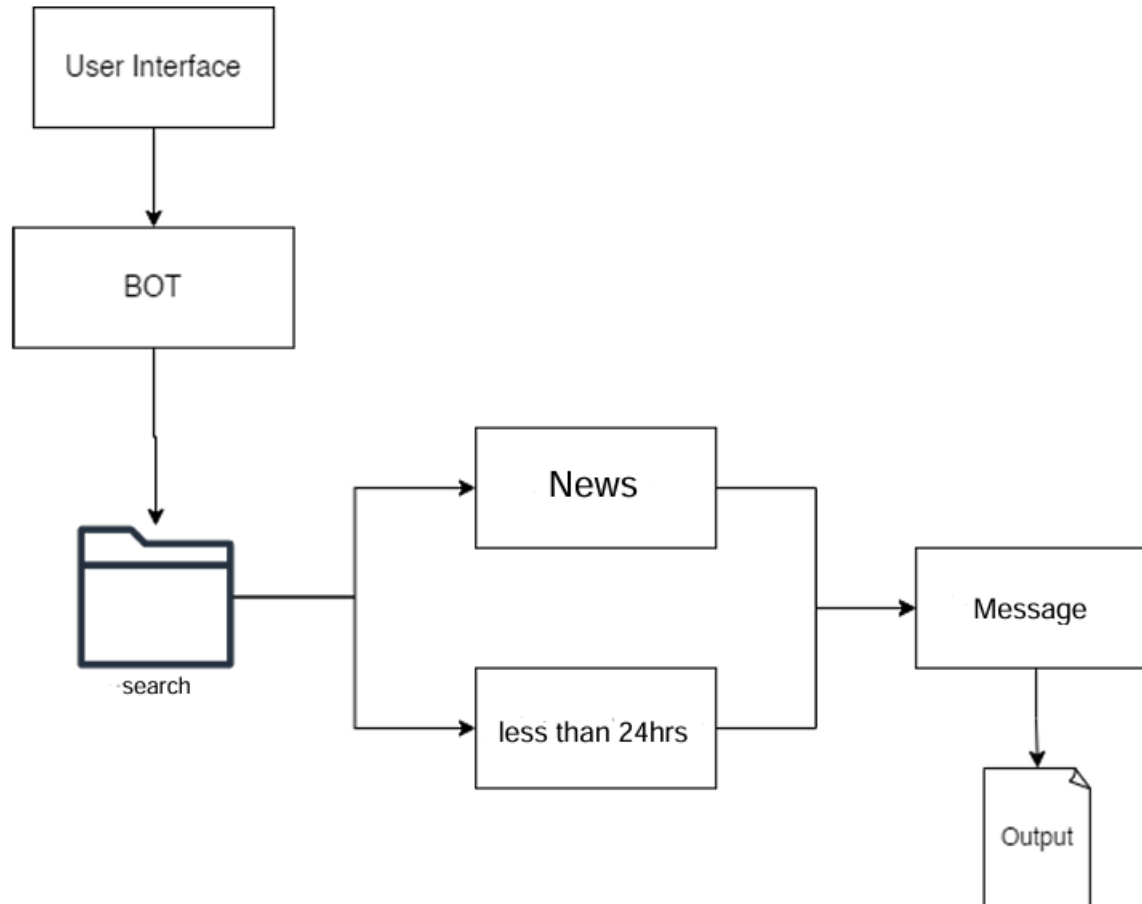


Architecture

- The system consists of:

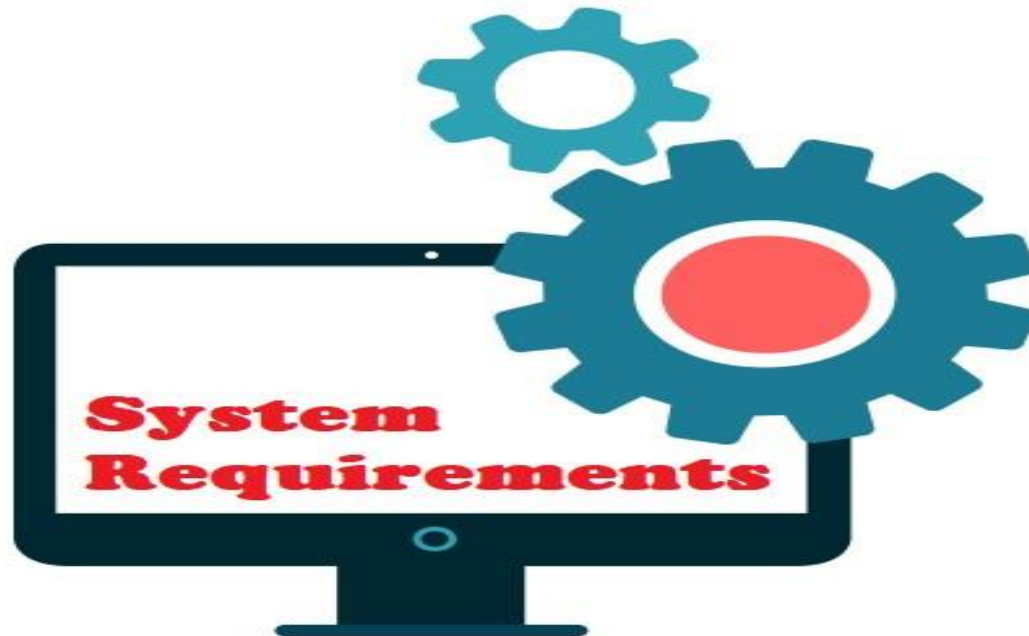
- 1. Input Module:** Accepts the topic and email address from the user.
- 2. Search Module:** Performs a Google search for the latest news.
- 3. Filter Module:** Identifies recent articles with the "hours ago" timestamp.
- 4. Delivery Module:** Sends the headline and link to the user's email.

ARCHITECTURE



System Requirements

- **Hardware:** PC or Laptop with UiPath Studio installed.
- **Software:** UiPath Studio, Email API/SMTP settings.



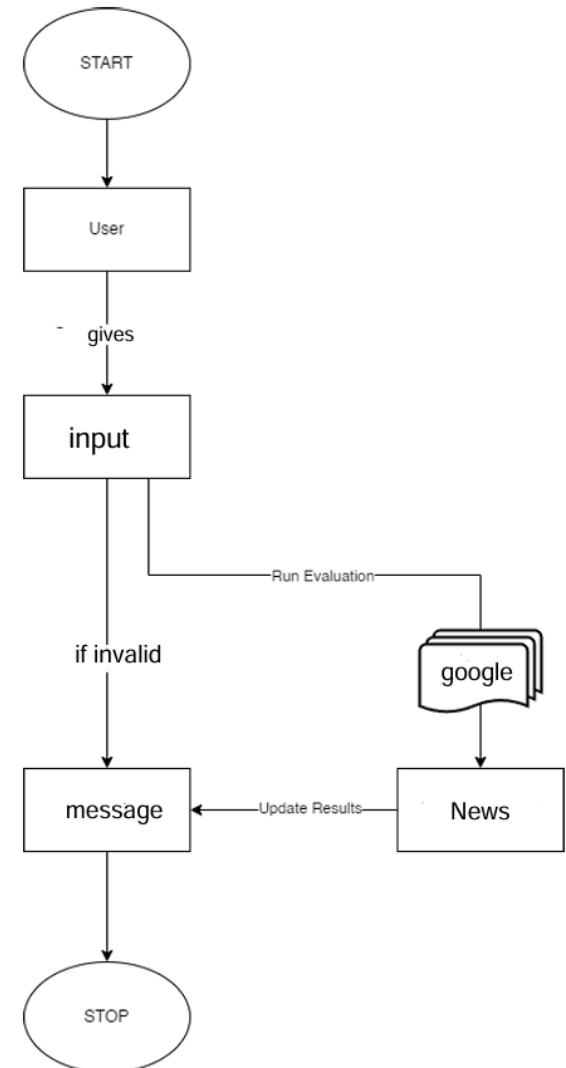
Functional Description

■ Module 1: Input Handling

- Accepts the topic and email via a dialog box.

■ Module 2: Search and Delivery

- Automates Google search, filters results, and



Process Design

- **User Input Handling**

- Collects the topic and email address via a dialog box.
- Ensures both fields are filled before proceeding.

- **News Search**

- Performs an automated Google search based on the given topic.

- **Filtering News Articles**

- Selects only articles with “hours ago” timestamps for recency.

- **Headline and URL Extraction**

- Extracts the headline and link of the latest relevant article.

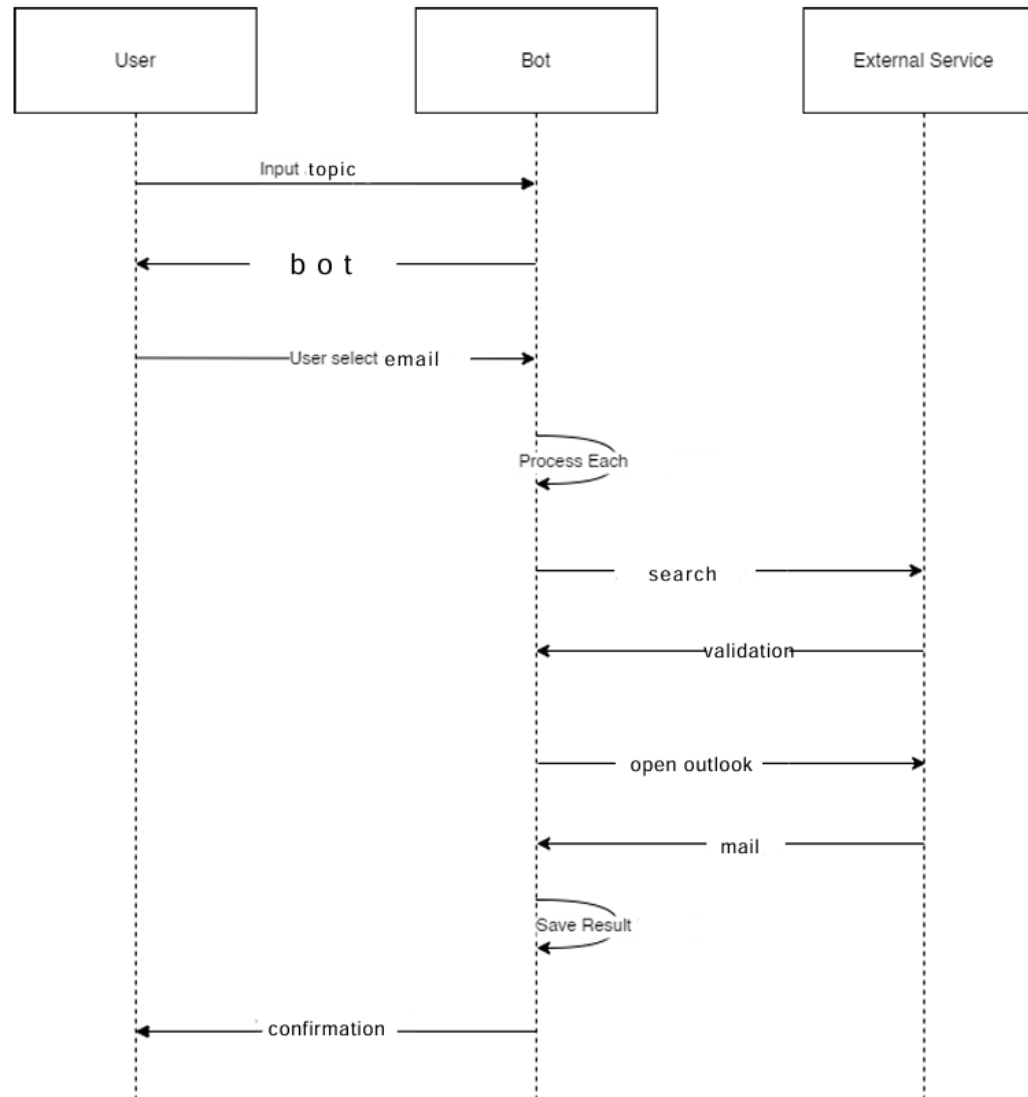
- **Email Delivery**

- Sends the headline and article link to the user’s email.

- **Error Handling**

- Handles issues like invalid input, no recent news, or connectivity problems.

SEQUENCE



Testing

- Test case: Verifying input handling, accurate filtering, and email delivery.
- Screenshots:

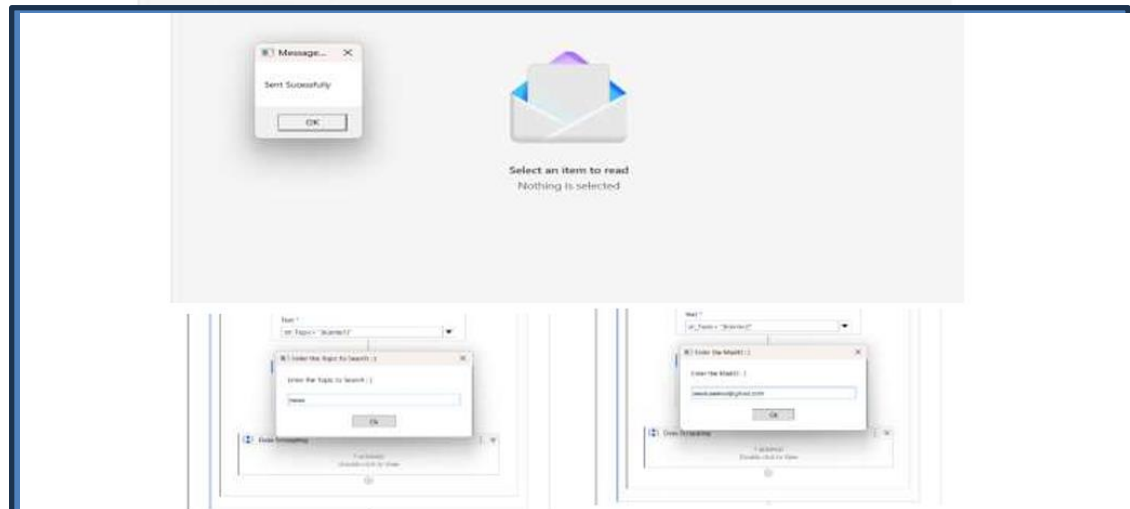
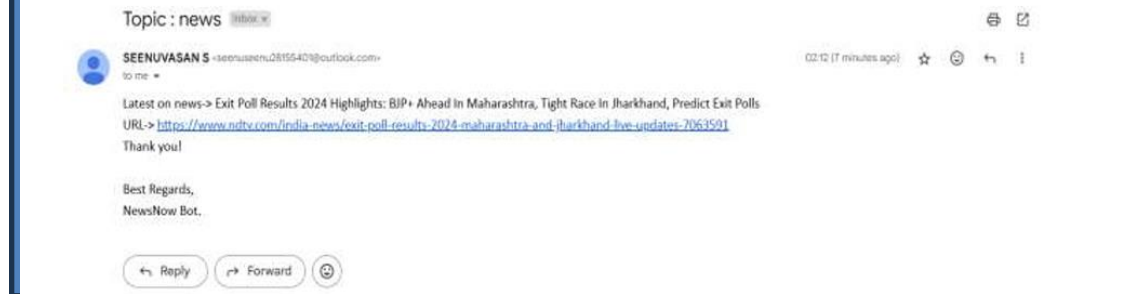


Fig 5.1 – Input Dialog

Fig 5.2



Conclusions

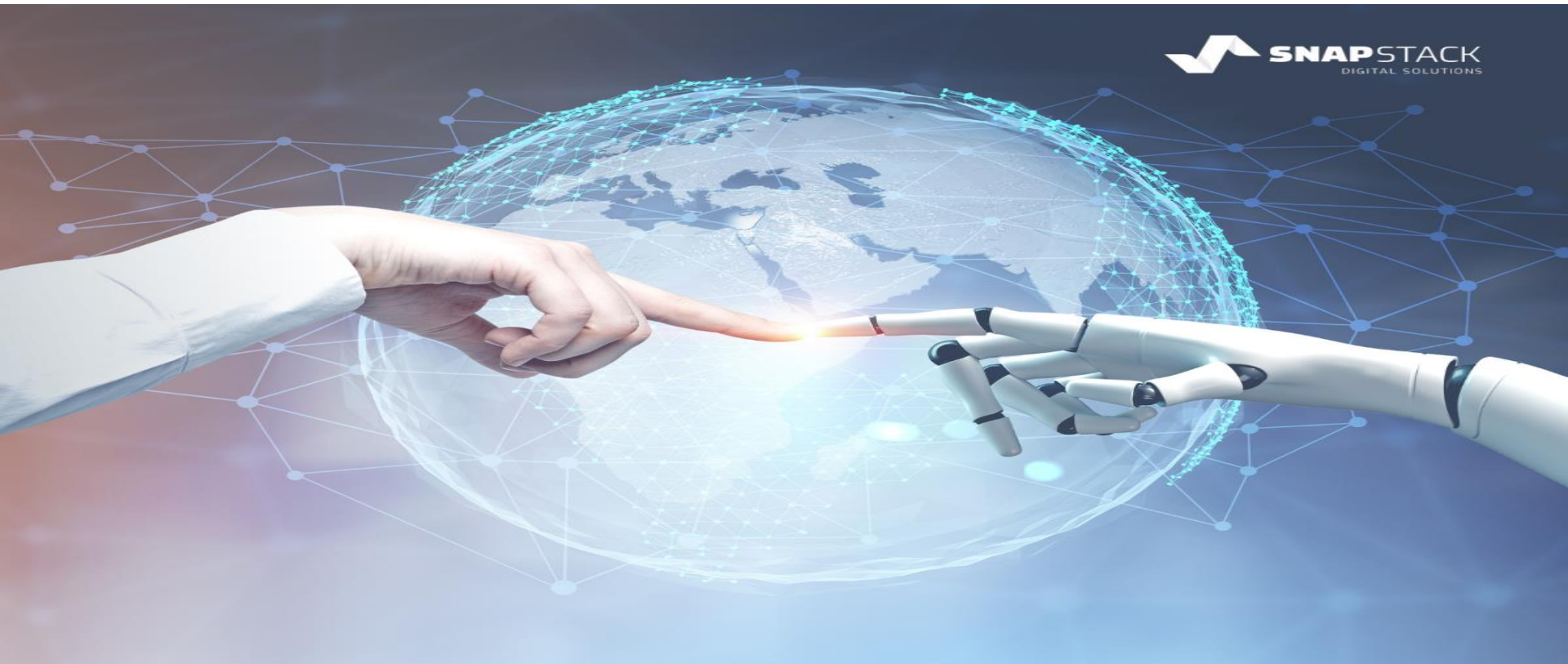
- The project successfully automates news retrieval and delivery, offering a practical solution to save users time and effort while ensuring they stay updated with the latest information.

CONCLUSION



Future Enhancement

1. Retrieve multiple headlines at once.
2. Integrate advanced filtering options like news source preferences.



IEEE Paper

1. "Robotic Process Automation: In-Depth Analysis of Advanced Automation Techniques and Technologies"

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References

- [1] Kuppusamy, Palanivel & Joseph K, Suresh. (2020). [Robotic Process Automation to Smart Education](#). 3775.
- [2] Patil, Dr & Mane, Vinod & Patil, Dr. (2019). [Social Innovation in Education System by using Robotic Process Automation](#) (Rpa). International Journal of Innovative Technology and Exploring Engineering. 8. 3757-3760. 10.35940/ijitee.K2148.0981119.
- [3] Elkhatat, A.M., Elsaid, K. & Almeer, S. [Evaluating the efficacy of AI content detection tools in differentiating between human and AI-generated text](#). *Int J Educ Integr* **19**, 17 (2023).
<https://doi.org/10.1007/s40979-023-00140-5>

Queries

Demonstration

Thank You