By- D Shaun Angel - 24071A3221- CSBS 2nd yr

This project demonstrates how to automate data collection from **RSS feeds** and store it in **Google Sheets** using **n8n** (a workflow automation tool).

I chose this topic because:

- RSS feeds are a rich, real-time data source (news, blogs, updates).
- Google Sheets is a **familiar**, **easy-to-use platform** for storing and analyzing data.
- Automation reduces manual effort and provides a scalable solution for continuous updates.

Tools & Technologies

- $n8n \rightarrow Open$ -source workflow automation tool (running in Docker).
- Google Sheets API → To connect and write data into Sheets.
- RSS Feed → Source of structured news data (used: <u>Hacker News RSS</u>).
- **Docker Desktop** → For containerized n8n setup.
- GitHub \rightarrow To document and share the project.

Workflow Design

The workflow consists of 3 main nodes:

1. Trigger Node

- o Node: When clicking 'Execute workflow'
- o Purpose: Manual execution of the workflow for testing.

2. RSS Read Node

- o Node: RSS Read
- o Input: RSS feed URL (https://hnrss.org/frontpage).
- o Output: List of news articles with fields like title, link, pubDate.

3. Google Sheets Node

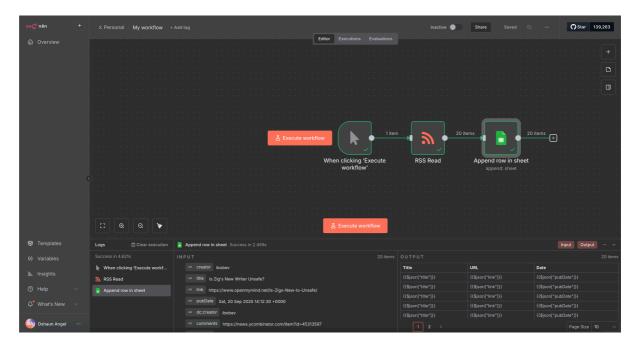
o Node: Append Row in Sheet

- o Operation: Append new rows to the sheet.
- o Mapping:
 - Title → {{\$json["title"]}}
 - $URL \rightarrow \{\{\{\text{sison}["link"]\}\}\}$
 - Date → { {\$json["pubDate"]}}

Workflow Execution

- When executed, the workflow fetches **20 items** from Hacker News RSS.
- Each item is appended as a row in **Google Sheets**, with the article's title, URL, and published date.

Workflow Screenshot:



Results

- Google Sheet automatically gets filled with fresh news headlines.
- No need for manual copy-pasting of articles.
- Can be extended to:
 - O Filter only the latest article.

- O Schedule hourly/daily updates.
- O Push data into databases or dashboards.

Future Enhancements

- Use **RSS Feed Trigger** to auto-run when a new item is published.
- Add **deduplication logic** to avoid duplicates in Sheets.
- Integrate with **Slack/Email** for real-time alerts.

Conclusion

This project shows how **automation bridges multiple services**. By combining RSS with Google Sheets in n8n, we:

- Automated real-time data collection.
- Eliminated repetitive manual work.
- Built a workflow that's easy to extend and customize.