Project ID: 14

Project Title
Automated Reporting And Insight Generation Tool

Client Name
Sam Sabharwal

Group Capacity
4 groups

Project Background
Many UNSW units rely on monthly reporting for operational and strategic planning. This project aims to streamline the reporting process by automating data extraction, analysis, and report generation, while also surfacing key insights to support decision-making.

Project Scope
The project involves developing a Python-based tool that automates the generation of monthly reports from structured data sources. The tool should support data cleaning, analysis, and visualisation, and deliver reports via email or a lightweight dashboard.

Project Requirements
- Ingest data from spreadsheets
- Perform data cleaning and transformation
- Generate visual and textual summaries (e.g., trends, anomalies)
- Export reports in PDF/HTML format
- Automate delivery via email or dashboard
- Optional: Incorporate natural language summaries using NLP

Required Skills
- Python (Pandas, NumPy, Matplotlib/Seaborn)
- Data analysis and visualisation (Power BI)
- Report generation (e.g., PDF, HTML)
- Optional: NLP or ML for insight generation

Expected Outcomes
- Functional prototype
- Source code repository
- User documentation and deployment guide
- Sample reports

Disciplines

Software Development;Artificial Intelligence (Machine/Deep Learning, NLP);Big data Analytics and Visualization;

Other Resources

Sample data and key reporting metrics can be provided prior to the project.