

Day 16 – 18 July 2025 (Friday): Automated Search Bot Introduction

The session marked the beginning of the **final project — the Automated Search Bot**, an advanced application designed to autonomously browse the internet, gather relevant information, and summarize it using AI. We were introduced to the integration of **CrewAI** with **Playwright**, a browser automation tool capable of simulating human-like interactions such as typing, clicking, and navigating across web pages.

Our mentor explained the **core concept of autonomous agents** — systems that can perform goal-driven tasks without continuous user input. The session emphasized how the bot could mimic real search behavior, extract top results, and use language models to summarize content concisely. I explored the structure of **Playwright's workflow**, learning how it launches browsers, executes commands, and captures HTML data dynamically.

Additionally, we discussed the **ethical limitations** of web scraping, such as respecting website terms of service and ensuring that automation scripts don't overload servers. The mentor also demonstrated an example where AI processed search results to produce a clear summary of multiple sources, reducing manual research effort.

Learning

Gained hands-on experience with **browser automation, AI-driven information retrieval**, and the concept of self-operating intelligent agents. Understood the foundational principles behind data scraping, summarization, and ethical AI-assisted browsing.

Outcome: