

# Candidate Assessment Document (To Send via Email or PDF)

## AI Engineer Technical Assessment

Objective: Evaluate your ability to design, build, and deliver an AI-powered tool that involves web scraping, component detection, and functional delivery.

---

### Task Overview

Your task is to build a small application that demonstrates your ability to:

- Scrape and analyze website markup.
  - Identify authentication components in web pages.
  - Handle input dynamically and return structured results.
- 

### Requirements

#### 1. Web Scraper:

- Create a script or application that scrapes five different websites (e.g., news, e-commerce, SaaS, blogs, etc.).
- Extract the HTML markup for each site.
- Search the HTML to locate the Username and Password authentication section (e.g., `<input type="password">`, `<form>` tags, login divs, etc.).

#### 2. Dynamic Input Functionality:

- Your solution should allow us to input any website URL (UI).
- When provided with a URL, the program should return the scraped authentication component (or state that none was found).

#### 3. Output:

- **The output should display or return the HTML snippet that contains the login form or related authentication component.**

#### **4. Deployment (Optional but Preferred):**

- **If possible, deploy your application on a free hosting platform like Vercel, Heroku, or GitHub Pages.**
- **This will allow our team to interact with the application directly.**
- **If deployment is not possible, ensure the GitHub repository includes clear setup instructions.**