

# Software Engineer - Coding Exercise

## Overview

Create a **production-ready** one-page web application where users input parameters to retrieve **AI-generated information**. The app should support at least **one of the following functionalities**:

- **Calorie Information** – Users input a meal or ingredients to get an AI-estimated calorie breakdown.
- **Text Translation** – Users input text in one language and get an AI-generated translation.
- **PDF Summarisation** – Users upload a PDF, and the app generates a concise AI-powered summary.

You are free to use **any programming language, third-party tools, and AI services**, but **Elixir** is preferred for the backend and **React** for the frontend. The focus is on **code quality, architecture, scalability, security, and persistence**.

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## Key Requirements

### 1. Implementation

- API based backend, in the language of your choice (Elixir or Ruby Preferred).
- Process data and generate results using a large language AI model.
- The frontend app should be a **single-page application (SPA)**, with a clean and user-friendly interface.

### 3. Product Requirements

- User authentication & persistence
- Ability for the user to provide customisation to get the information they desire. The search result should be AI generated.

- Bonus: Any additional features you may believe could benefit the user.

### **Submission Requirements:**

- Provide a GitHub (or other repo) link with the code.
- You are free to use any third party tools or services that will help you achieve the result faster. We are not looking to use a lot of your time (ideally under 4 hours), but only to see how you think and approach problems.
- If you have any questions about the exercise, please send them to Eran Peer (eran.peer@neotalent.net), with [info@neotalent.net](mailto:info@neotalent.net) in CC.