

## Front-End Case Study: Social Support Application with AI Assistance

### 1. Background

You are building a **new front-end** for a government social support portal. The portal must allow citizens to apply for financial assistance easily, quickly, and with smart help.

You will design a **multi-step form wizard** and integrate the **OpenAI GPT API** to assist users in writing certain text fields.

### 2. What You Need to Build

A **3-Step Application Form Wizard**:

Step	Section	Fields	AI Assistance
1	Personal Information	Name, National ID, Date of Birth, Gender, Address, City, State, Country, Phone, Email	No
2	Family & Financial Info	Marital Status, Dependents, Employment Status, Monthly Income, Housing Status	No
3	Situation Descriptions	1. Current Financial Situation 2. Employment Circumstances 3. Reason for Applying	Yes (Help Me Write button)

#### Main Features:

- Multi-step form with progress bar.
- Responsive (mobile, tablet, desktop).
- English + Arabic (RTL) language support.
- Accessibility friendly (basic ARIA roles, keyboard navigation).
- Save progress locally (e.g., LocalStorage).
- Submit data (mock API call).

#### AI Integration:

- Add a **"Help Me Write"** button near the 3 textarea fields in Step 3.
- Clicking the button sends a request to OpenAI GPT API to generate a text suggestion.
- Show the suggestion in a popup where the user can **Accept**, **Edit**, or **Discard**.
- Handle errors gracefully (timeout, failure).

### 3. Tech Stack (Recommended)

- **Framework:** React.js (preferred) / Vue 3 / Angular
- **UI Library:** Material UI / Ant Design / Tailwind CSS
- **Form Handling:** React Hook Form / VeeValidate
- **State Management:** Context API / Redux Toolkit

- **API Calls:** Axios / Fetch
- **Internationalization:** React-i18next / Vue I18n
- **Routing:** React Router / Vue Router
- **Optional Testing:** Jest, Testing Library

#### 4. OpenAI API Details

- **Endpoint:** <https://api.openai.com/v1/chat/completions>
- **Model:** gpt-3.5-turbo
- **Prompt Example:**

"I am unemployed with no income. Help me describe my financial hardship."

#### 5. Deliverables

- Full source code
- A README.md explaining:
  - How to run the project
  - How to set up the OpenAI API Key
- (Optional) Short document or comments explaining architecture, decisions, and improvements.

#### 6. Evaluation Focus

- Form flow and validations
- OpenAI integration (correct usage, error handling)
- UI/UX (mobile-friendly, clean design)
- Accessibility basics
- Code structure and readability
- Documentation quality

#### 7. Timeframe

- Complete within **5 days**.
- Follow-up 1-hour live walkthrough depends on source code