**UI/UX Notes**

**I. Overall Design Principles**

* **Simplicity:** The user interface should be clean, uncluttered, and easy to understand, and should have only the most necessary elements on the screen.
* **Clarity:** The text and information should be clearly written and easy to understand, with simple explanations of the main purpose of the app.
* **Professionalism:** The design should look professional, avoiding overly playful styles and cartoonish designs.
* **Responsiveness:** The user interface should be usable on different devices (desktops, laptops).
* **Accessibility:** The design should follow basic accessibility guidelines, by having enough contrast, good fonts, and following standard structures.

**II. Title Page Layout**

* **Objective:** To provide a clean, introductory page for the application.
* **Elements:**
  + **Title:** A large, clear title ("Data Analyst Client Simulator" or "DACS").
  + **Description:** Short and concise explanation of the application's purpose.
  + **Call to Action:** A prominent button labeled "Generate Scenario" (or similar). This should be the primary focus of the page, and it should be placed on the center, or on the top.
  + **Visual Style:** Keep it minimalistic.
  + **Color Palette:** To be determined (for now use a simple black and white aesthetic with greyscales).
  + **Typography:** Use professional, easy to read font.
* **Layout Considerations:**
  + Center the main elements on the screen.
  + Use whitespace for clarity.
  + Make the button large enough to be easily clickable on different devices.
  + Keep all elements aligned to a horizontal or vertical line for readability.

**III. Scenario Display Area**

* **Objective:** To display the generated scenario in a clear and readable format.
* **Elements:**
  + **Text Display:** A clear, designated area (e.g., a <div>) to display the generated scenario text, using appropriate font size and style for comfortable reading.
    - Use headings to differentiate between "Client Profile", "Business Task", "Data Provided" sections.
  + **Download Link:** A clearly labeled link or button (e.g., "Download Data") for users to download the CSV dataset.
* **Layout Considerations:**
  + Display the text in a way that does not require scrolling on most common screens.
  + Make the download link clear, and easy to understand.
  + Keep elements aligned to a horizontal or vertical line for readability.

**IV. JavaScript Interaction Feedback:**

* **Objective:** Provide feedback about errors.
* **Implementation:** Use JavaScript's built-in alert() function to display error messages.
* **Error Message Structure:**
  + Keep them short and to the point.
  + Provide information that is useful to the user without displaying sensitive information.
  + Example messages: "There was an error, please try again later".

**V. Future UI/UX Considerations:**

* **Domain Selection:**
  + Consider using a dropdown menu or a list of categories for the user to choose the data domain.
  + Each item of the selection should have clear and concise text, and images that illustrate each domain in the best possible way.
  + Allow the user to select only one option at a time.
* **Dataset Size Control:**
  + A slider might be an appropriate UI element to allow the user to control the number of rows in the generated dataset.
  + Include also a number indicator to display the value of the slider.
* **Interactive AI Client:**
  + Think about how to provide a clear interface for the chat with the AI model.
  + Consider using a chat window with separated boxes for user messages and AI responses.
  + The chat should update in real time.
* **Feedback Mechanism:**
  + Think about how the AI's feedback should be displayed. Should it be inline, on a new page, or in a side panel?
* **Portfolio Building Features:**
  + Consider a space to display the project and all the work done for each different scenario.
* **Style Guide:**
  + Establish a clear color palette (limited colors for simplicity).
  + Select fonts that are readable and professional.
  + Use proper spacing between elements to avoid visual clutter.
  + You can use TailwindCSS to style the elements if you want a pre-made framework.

**VI. Wireframes/Sketches:**

* *(Include simple sketches or wireframes of the title page, the scenario display area, and the future interactive chat window. You can use a tool like Excalidraw, or just hand-drawn sketches)*.
  + A simple wireframe will be sufficient for Phase 1, since you are mostly working with a text based application.

**VII. Accessibility:**

* Ensure sufficient contrast between text and background.
* Make sure the text is easy to read for people with different visual abilities.
* Add clear alternative text to images.

**VIII. Implementation Considerations:**

* **Simplicity First:** Start with a basic UI and then add complexity in later iterations.
* **Progressive Enhancement:** Focus on making the core functions work first and then improving the user experience.
* **Mobile Responsiveness:** In the first iteration, focus on a responsive design for desktop browsers, but keep in mind that it should work properly on other devices.