Local LLM Chat UI – Overview and Features

1. Project Goal

The objective was to design a responsive, interactive **chat interface** for communicating with **local LLM models**. The UI provides an intuitive layout similar to popular chat platforms, integrating session management and model selection for a smooth user experience.

2. Core Layout

The application is structured into two main sections inside a **flex container**:

- **Left Panel – Chat Session History**

    - Displays a list of previous sessions.
    - Includes a "Create New Chat" card with a **plus (+) icon**.
    - Each session card contains:
        - **Chat Icon** on the left.
        - **Title** in bold (first row).
        - **Date & Time** with **Edit, Download, Delete** icons (second row).
    - Styled with a **linear gradient background** and hover effects.
    - Scrollable for large lists of sessions.

- **Right Panel – Main Chat Area**

    - **Header Section**
        - Displays **Chat Title** (left).
        - **Menu Toggle** button to show/hide session panel.
        - **Model Selector Dropdown** (e.g., GPT-3.5, GPT-4, Local LLM).
    - **Chat Messages Section**
        - Two types of message bubbles:
            - **User Messages** (right-aligned, blue gradient).
            - **Bot Responses** (left-aligned, pink-to-red gradient).
        - Each bubble includes **icon header** and a **footer with action icons**:
            - User: Copy, Edit.
            - Bot: Copy, Like, Dislike, Speaker, Refresh.
    - **Footer Section**
        - Curved **input container** with:
            - **Microphone icon** on the left.
            - **Text area** in the center.
            - **Send button** on the right.
        - **Action bar** below with icons: Upload, Tools.

3. Visual Design Highlights

- **Background**: Applied a **linear gradient** across the entire layout.

- **Chat Session Bubbles**: Gradient backgrounds with shadows for depth.
- **Chat Messages**: Gradient bubbles, rounded corners, and subtle shadows.
- **Hover Effects**: Session cards and icons have smooth hover animations.

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4. UI/UX Features

- **Responsive Design**

  - Works seamlessly on **desktop, tablet, and mobile**.
  - History panel collapses on smaller screens.
  - Flexible containers with `flexbox` and media queries.

- **Interactivity**

  - **Session Toggle**: Collapsible chat history panel controlled by a menu icon.
  - **Dynamic Chat Rendering**: Messages are dynamically added with JavaScript.
  - **Keyboard Support**: Press **Enter** to send a message.
  - **Placeholder GPT Responses** for now (mock backend behavior).

- **Accessibility**

  - Clear icons for user and bot roles.
  - High-contrast colors and gradient backgrounds for visual clarity.

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5. Technical Stack

- **HTML5 & CSS3**: Layout and styling.
- **Bootstrap 5**: Responsive grid and utility classes.
- **Font Awesome**: Icons for actions and navigation.
- **Vanilla JavaScript**: Handles:
  - Sending messages.
  - Adding chat bubbles dynamically.
  - Toggling session panel.
  - Rendering dummy sessions.

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6. Future Enhancements

- Integrate with **Local LLM backend API** for real responses.
- Add **voice-to-text** for mic input.
- Enable **file/image uploads** via plus (+) icon.
- **Persistent sessions** using local storage or a database.
- **Theme switcher** for light/dark modes.

Summary

This UI offers a clean, modern, and user-friendly interface for LLM-based chats. It combines **aesthetic gradients**, **responsive design**, and **interactive elements** for an engaging experience, making it suitable for

both desktop and mobile users.