Phase 3 – Modern Chat UI Implementation

1. Introduction:

Phase 3 focused on enhancing the chat interface, making it modern, responsive, and interactive for better user experience. Key areas included UI layout, chat bubbles, animations, avatars, typing indicators, sound effects, and theme support.

2. Chat Wrapper & Layout:

- Created a centered chat container with rounded corners and shadow for visual appeal.
- Ensured flexible width with max width constraints for desktop screens.
- Included padding and spacing for readability.

3. Chat Header:

- Added a header with branding (logo + title + subtitle).
- Added action buttons: theme toggle, clear chat, and settings.
- Applied hover effects for buttons.

4. Chat Bubbles:

- User messages appear on the right; bot messages appear on the left.
- Applied gradient backgrounds for both user and bot bubbles.
- Added rounded corners and slight shadow for depth.
- Introduced micro-interactions like fade-in animations when messages appear.

5. Typing Indicator:

- Added a bot typing indicator with animated dots.
- Showed typing state whenever the bot is preparing a response.
- Designed to disappear automatically when the bot sends the message.

6. Avatars:

- Added avatar placeholders for user and bot.
- Bot avatar shows a "B" placeholder; user avatar shows "F" placeholder.
- Designed circular avatars with background colors and centered initials.

8. Sound Effects:

- Added message pop sound to improve interaction feedback.
- Audio file is loaded externally, allowing easy replacement.

9. **Auto-Scrolling & Textarea Resize:**
   - Chat auto-scrolls to the latest message.
   - User input area dynamically resizes with content for comfort.

10. **Responsiveness:** Maintains alignment, padding, and readability on various window sizes.

11. **Local Storage Integration:**
    - Saved chat history so that conversations persist across sessions.
    - Ability to clear chat history with a single action.