# Current Product Specification Document

## Overview

The code implements a conversational web application with persistent chat history. Users can have multiple conversations with different AI models.

## Key Components

- \*\*Backend\*\* Flask server, handles API routes and OpenAI requests
- \*\*Frontend\*\* HTML, CSS, JS, implements UI and client-side logic
- \*\*Database\*\* Stores conversation data like message history

## Main Files

- \*\*app.py\*\* Flask server code
- API routes for conversations, chat endpoints
- Makes requests to OpenAI API
- Manages conversation state and history
- \*\*static/js/main.js\*\* Client-side JS
- Makes API calls to backend to load conversations, submit input
- Displays UI elements like messages, chat box, conversation list
- Handles user interactions like sending messages
- \*\*templates/chat.html\*\* Conversational web app UI

- Renders chat log, composer, conversation list
- Dynamic elements updated by main.js
- \*\*Additional Files\*\*
- \*\*static/css/styles.css\*\* CSS styling
- \*\*static/js/prism.js\*\* Syntax highlighting
- \*\*static/js/marked.min.js\*\* Markdown rendering

## ## Key Functionality

- \*\*Persisted conversations\*\* Chat sessions saved in database
- \*\*Real-time chat\*\* User messages sent to AI, responses in real-time
- \*\*Conversation management\*\* CRUD operations
- \*\*Multiple AI models\*\* Switch between different assistants
- \*\*Message history\*\* Entire chat logs available
- \*\*Interactive UI\*\* Chat box, messaging, conversational flow

## ## Key Functions

- \*\*app.py\*\*
- `home()` Renders chat interface
- `chat()` Handles chat logic and OpenAI requests
- `get\_conversations()` Fetches all conversations
- `get\_conversation()` Fetches single conversation
- `update\_conversation\_title()` Updates title of conversation
- `delete\_conversation()` Deletes a conversation

- \*\*main.js\*\*
- `updateConversationList()` Loads conversation list
- `loadConversation()` Loads a specific conversation
- `showConversationControls()` Shows conversation controls
- `modelNameMapping()` Maps model names to display text
- `sendMessage()` Sends user message
- `renderOpenAI()` The OpenAI Playground accent for UI modifications.
- \*\*Additional\*\*
- `generate\_summary()` Generates conversation title