Golden Gate Ventures AI Assistant: Comprehensive User Guide

1. Introduction

1.1 Purpose of the Application

The Golden Gate Ventures AI Assistant is an advanced internal knowledge management platform designed to: - Provide quick access to company knowledge - Facilitate seamless information retrieval - Enable intelligent conversational interactions - Support efficient knowledge sharing across the organization

1.2 Key Technologies

- RAG (Retrieval-Augmented Generation): Combines AI with company-specific knowledge base
- Pinecone: Vector database for semantic search
- Streamlit: Web application framework
- Neon Database: Backend data management

2. System Architecture

2.1 Components

- Frontend: Streamlit web interface
- Backend:
 - Neon PostgreSQL database
 - Pinecone vector database
 - RAG (Retrieval-Augmented Generation) system
- Authentication: Multi-tier user management

2.2 Data Flow

- 1. User sends a query
- 2. Query is semantically embedded
- 3. Relevant documents are retrieved from Pinecone
- 4. AI generates context-aware response
- 5. Response is logged in Neon database

3. Access and Authentication

3.1 Login Mechanisms

3.1.1 Regular User Login

- Process:
 - 1. Navigate to https://goldengatebot.streamlit.app/
 - 2. Enter company email

- 3. No password required for non-admin accounts
- 4. Click "Login"

3.1.2 Admin User Login

- Process:
 - 1. Check "I am an admin" checkbox
 - 2. Enter email and password
 - 3. Requires additional authentication

3.2 User Roles and Permissions

Regular Users

- Capabilities:
 - Create and manage personal conversations
 - Ask questions to AI
 - View conversation history
 - Rename conversations
 - Delete personal conversations

Administrators

- Additional Capabilities:
 - All regular user permissions
 - User management
 - API key management
 - Knowledge base administration
 - View all user conversations
 - Set global system configurations

4. Conversation Interface

4.1 Chat Window Components

- Conversation Title: Editable, unique identifier
- Message History: Scrollable chat log
- User Avatar: for user messages
- AI Avatar: for AI responses
- Chat Input: Bottom of the screen

4.2 Interaction Workflow

- 1. Type your query in the chat input
- 2. Press Enter or click send
- 3. AI processes the query
- 4. "Thinking..." indicator appears
- 5. Streaming response is generated

6. Optional source references displayed

4.3 Advanced Interaction Features

- Conversation Renaming:
 - Click on current title
 - Edit directly in-place
 - Automatically saves changes
- Conversation Management:
 - Create new chats instantly
 - View chat history in sidebar
 - Delete conversations with single click

4.4 Source References

- After AI response, click "Sources" expander
- Shows knowledge sources used
- Helps verify AI-generated information
- Transparency in information retrieval

5. Pinecone Index Management

5.1 Index Selection Process

- First-time login requires index selection
- Admins can set default index for all users
- Supports multiple vector indexes

5.2 Configuration Options

- Custom index names
- Environment selection
- API key management
- Index reset capabilities

6. Administrator Dashboard

6.1 User Management Tab

- User Registration:
 - Add new users
 - Set admin privileges
 - Configure API keys
- User List:
 - View all registered users
 - See login history
 - Monitor account status

6.2 API Key Management

- Update Pinecone API keys
- Manage Cohere embedding keys
- Secure key rotation
- Per-user key configuration

6.3 Knowledge Base Management

- File Upload:
 - Markdown (.md) files only
 - Automatic content parsing
 - Semantic embedding generation

• Pinecone Index:

- Initialize new indexes
- Reset existing indexes
- Monitor embedding progress

6.4 Conversation Tracking

- View all organizational conversations
- Cross-user conversation monitoring
- Deletion and management capabilities

7. Technical Specifications

7.1 Supported File Types

- Markdown (.md)
- Recommended: Structured documentation files

7.2 Embedding Configuration

- 768-dimensional embeddings
- Cosine similarity metric
- Batch processing support

8. Performance and Limitations

8.1 Response Characteristics

- Near real-time responses
- Context-aware generation
- Sources-backed information

8.2 Known Limitations

• Depends on uploaded knowledge base

- May not have real-time external data
- Responses based on semantic similarity

9. Security and Compliance

9.1 Data Protection

- Encrypted database connections
- Role-based access control
- Conversation logging
- Strict authentication

9.2 Compliance Features

- Granular user permissions
- Audit trail of interactions
- Secure API key management

10. Troubleshooting Guide

10.1 Common Issues

- Login Problems:
 - Verify email
 - Check admin status
 - Contact IT support

• Chat Malfunctions:

- Refresh page
- Start new conversation
- Clear browser cache

10.2 Support Channels

- Internal IT Support
- Administrator assistance
- Dedicated support email

11. Future Roadmap

- Enhanced AI models
- More granular permissions
- Expanded knowledge base
- Improved source referencing

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