

# Chatbot Application README

## Description

This Chatbot Application offers real-time communication between users and an AI-powered chatbot. The project is structured into two main components: a Node.js backend and a React frontend.

## Features

- Real-time chat interaction with an AI chatbot.
- User authentication system including signup and login.
- Persistent chat history stored in a MongoDB database.
- Responsive and interactive UI built with React.

## Technology Stack

- **Backend:** Node.js, Express, MongoDB, Mongoose, Socket.IO, Passport.js
- **Frontend:** React, React Router, Socket.IO-Client
- **Other Dependencies:** dotenv for environment variable management, bcrypt for password hashing, axios for HTTP requests.

## Getting Started

### Prerequisites

- Node.js
- MongoDB
- npm or yarn

### Installation

#### 1. Clone the repository:

```
git clone https://github.com/your-username/your-repository.git
cd your-repository
```

#### 2. Install backend dependencies:

```
npm install
```

#### 3. Set up environment variables:

- Create a `.env` file in the root directory.
  - Add the following variables:
- ```
MONGO_URI=<your_mongodb_uri>
OPENAI_API_KEY=<your_openai_api_key>
```

#### 4. Install frontend dependencies:

```
""  
cd client  
npm install  
""
```

5. **\*\*Start the backend and frontend servers:\*\***

- In the root directory, start the backend server:

```
""  
npm start  
""
```

- In a new terminal, go to the `client` directory and start the React development server:

```
""  
npm start  
""
```

## Usage

After starting the servers, access the application through `http://localhost:3000` on your browser.

## License

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## Contact

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Project Link: [https://github.com/vinayshivaram30/AI\\_Chatbot](https://github.com/vinayshivaram30/AI_Chatbot)