

Smart Support Application

The Smart Support Application is a comprehensive, user-friendly platform designed to enhance customer support services through efficient communication and effective issue resolution. The application comprises two main sections: the Customer Section and the Administrative Section. The Customer Section features live chat, support ticket management, contact messaging, and an FAQ module, allowing users to communicate with support teams and access vital information seamlessly. The Administrative Section offers a robust dashboard, chat management, ticket handling, contact message management, analytics, settings, and profile management, equipping administrators with tools to streamline operations and provide high-quality support.

This project report outlines the development and functionality of the application, inspired by leading social media and support applications. Extensive user testing and feedback sessions demonstrated high user satisfaction and ease of use, while performance and security testing confirmed the application's robustness and security. The application efficiently handles high loads and ensures the protection of user data, meeting the demands of both customers and administrators.

The report also highlights potential future enhancements, including advanced AI integration, mobile application development, and improved analytics and security measures. By continuously refining and expanding its capabilities, the Smart Support Application aims to remain a cutting-edge solution for modern customer support needs.

Architecture Overview

The Smart Support Chat Application is designed with a modular architecture, ensuring scalability, maintainability, and flexibility. The system is divided into two main sections: the Customer Section and the Administrative Section. Each section contains specific modules that handle various functionalities.

* Customer Section

1. Live Chat

- **Real-Time Text Messaging:** Allows customers to communicate instantly with support agents.
- **Voice Messaging:** Enables customers to send voice messages.
- **File Attachments:** Supports sending images, videos, PDFs, and other documents.

- **Chatbot Integration:** Provides automated responses for common queries.
- 2. **Support Ticket**
 - **Ticket Creation:** Customers can create tickets with details such as name, category, email, phone, subject, and description.
 - **Status Tracking:** Allows customers to monitor the status of their tickets.
 - **Admin Remarks:** Displays remarks and updates from the admin.
 - **File Attachments:** Supports attaching files to tickets.
- 3. **Contact Message**
 - **Message Form:** Customers can send messages to the admin with details such as name, email, phone, subject, and description.
- 4. **FAQ**
 - **Searchable Database:** Customers can search for answers to common questions.
 - **Categories:** FAQs are categorized for easy navigation.

* Administrative Section

1. **Dashboard**
 - **Overview Metrics:** Displays total chat conversations, new tickets, closed tickets, and received contact messages for the day.
2. **Chat Management**
 - **Conversation List:** Admin can view and join customer conversations.
 - **Actions:** Options to mute, close, or archive conversations.
 - **Search and Filter:** Allows admin to search and filter conversations.
3. **Ticket Management**
 - **Ticket List:** Displays all customer tickets.
 - **Ticket Details:** Admin can view and investigate ticket details.
 - **Remarks and Updates:** Admin can add remarks and send updates to customers.
 - **Status Management:** Options to close or reopen tickets.
 - **Communication:** Admin can send external emails and SMS to ticket owners.
 - **Search and Filter:** Allows admin to search and filter tickets.
4. **Contact Message Management**
 - **Message List:** Displays all customer contact messages.
 - **Message Details:** Admin can view message details and customer information.
 - **Actions:** Options to star important messages and remove messages.
 - **Search and Filter:** Allows admin to filter by starred and new messages.
5. **Analytics**
 - **Ticket Analytics:** Graphs showing yearly and monthly ticket trends.
 - **Contact Message Analytics:** Graphs showing yearly and monthly message trends.
 - **Chat Analytics:** Graphs showing yearly and monthly conversation trends.
6. **Settings**

- **Chatbot Settings:** Customizes chat widget settings such as name, voice input, attachment options, and notification settings.
- **Chat Templates:** Admin can set predefined chat templates for quick responses.
- **Automated Chat Flows:** Admin can configure automated chat message sequences.
- **Category Settings:** Admin can manage categories for tickets and FAQs.
- **FAQ Management:** Admin can create, update, and delete FAQs.
- **Team Management:** Admin can manage team members, including creating, updating, and deleting admin profiles.

7. Profile

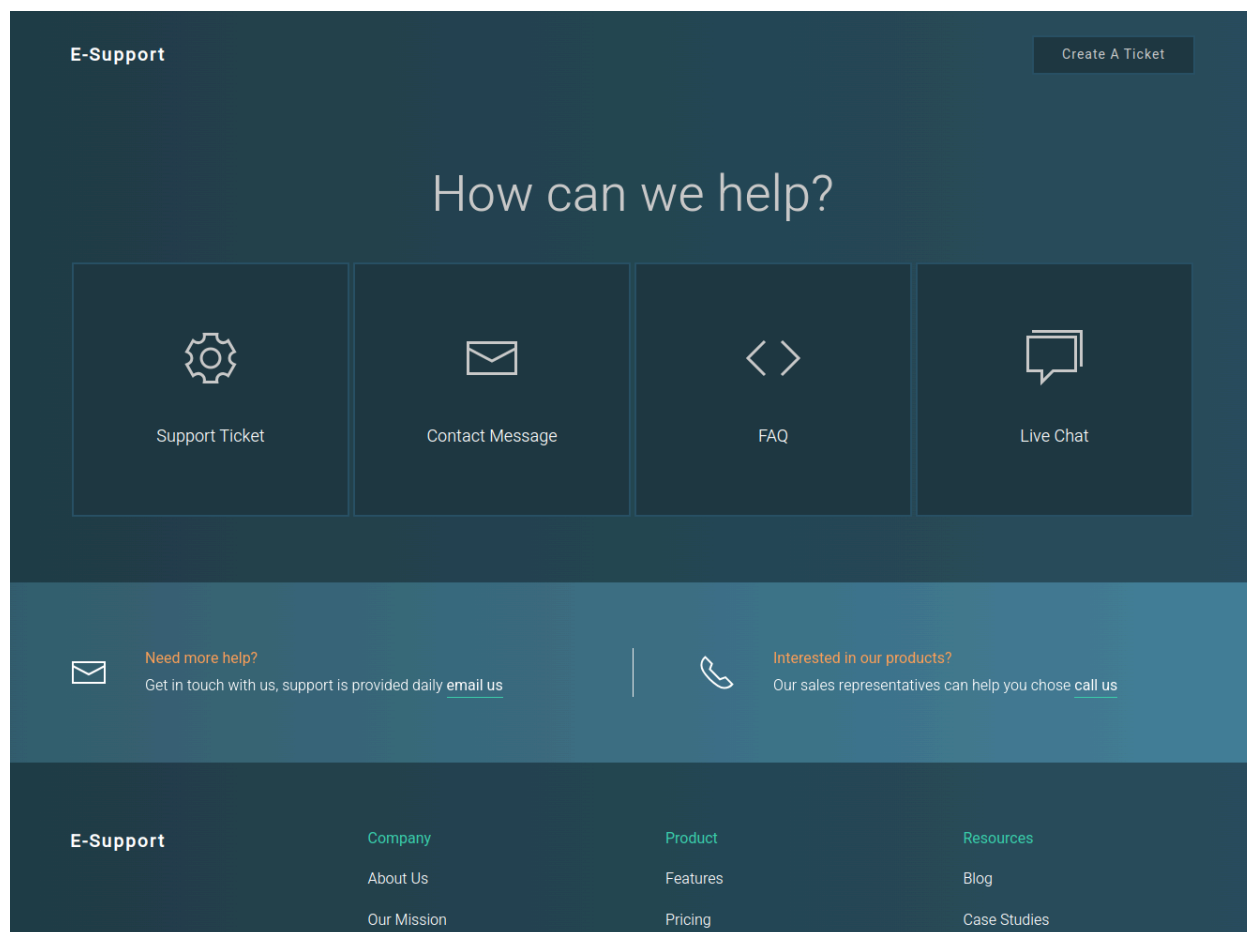
- **Profile Information:** Admin can view and update their profile information.
- **Password Management:** Admin can change their password.

Modules And Services

The Smart Support Chat Application is designed to enhance customer support efficiency by integrating a wide range of features and functionalities. This chapter delves into the modules and services provided in both the Customer and Administrative sections, highlighting the capabilities and benefits of each.

* Customer Section

The Customer Section is designed to facilitate seamless and effective communication between customers and the support team. It includes four primary modules:



Live Chat:

Features:

- **Real-time Messaging:** Customers can engage in instant text-based conversations with support agents.
- **Voice Messages:** Allows customers to record and send voice messages for more detailed explanations or when typing is inconvenient.
- **File Attachments:** Supports sending various file types (images, videos, PDFs, documents) to provide additional context or evidence for support queries.
- **Chatbot Integration:** Provides an option to chat with a live bot for instant responses to common queries, reducing wait times.

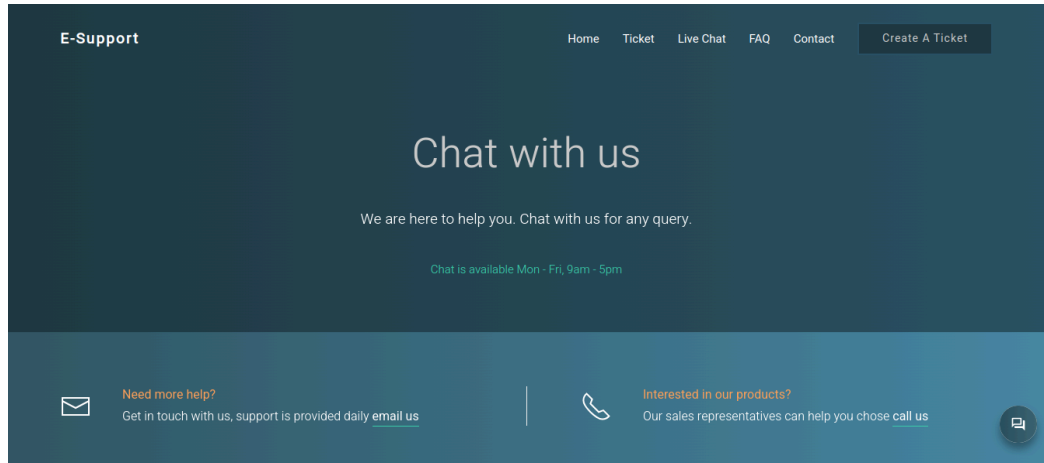


Figure 5. Live Chat Page

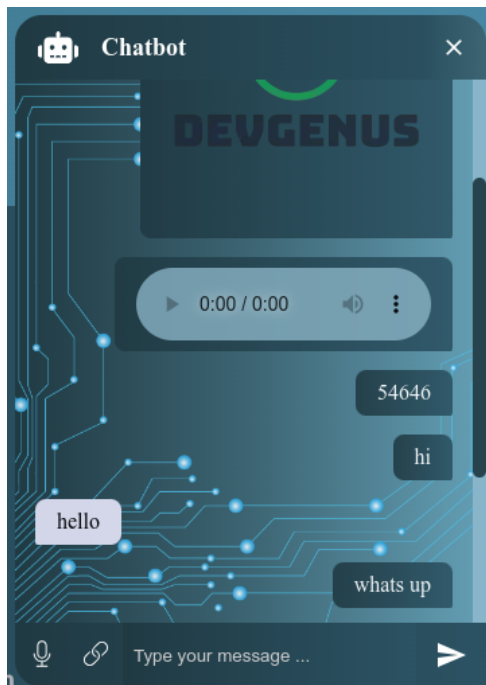


Figure 6. Live Chat Widget

Functionality:

- Enhances real-time interaction, leading to quicker resolution of customer issues.
- Facilitates a multimedia communication approach, catering to diverse customer needs.

*** Support Ticket:**

Features:

- **Ticket Creation:** Customers can create support tickets by providing their name, selecting a ticket category, entering their email, phone number, subject, and a detailed description of their issue.

Create New Ticket

Support is provided Mon - Fri, we aim to reply within 1 business day, but occasionally it may take longer.

Select category

Full Name

Email

Phone (Optional)

Subject

Description

Attach file (optional)

I agree to the systems policy and terms of service

Create Ticket

Instructions to follow:

- Select the appropriate category that best describes your issue from the provided options.
- Provide a clear and concise title summarizing the issue.
- Include detailed steps to reproduce the problem, if applicable.
- Specify any error messages or codes received.
- Mention any recent changes or updates made to the system.
- Attach relevant screenshot or file to illustrate the issue.
- Provide your contact information for follow-up.
- Avoid including sensitive or confidential information in the ticket description.

Figure 7. Ticket Create Form

- **Attachment Support:** Customers can attach files to tickets, offering visual or documented evidence of their problems.
- **Status Tracking:** Customers can check the status of their tickets and view remarks made by the support team.

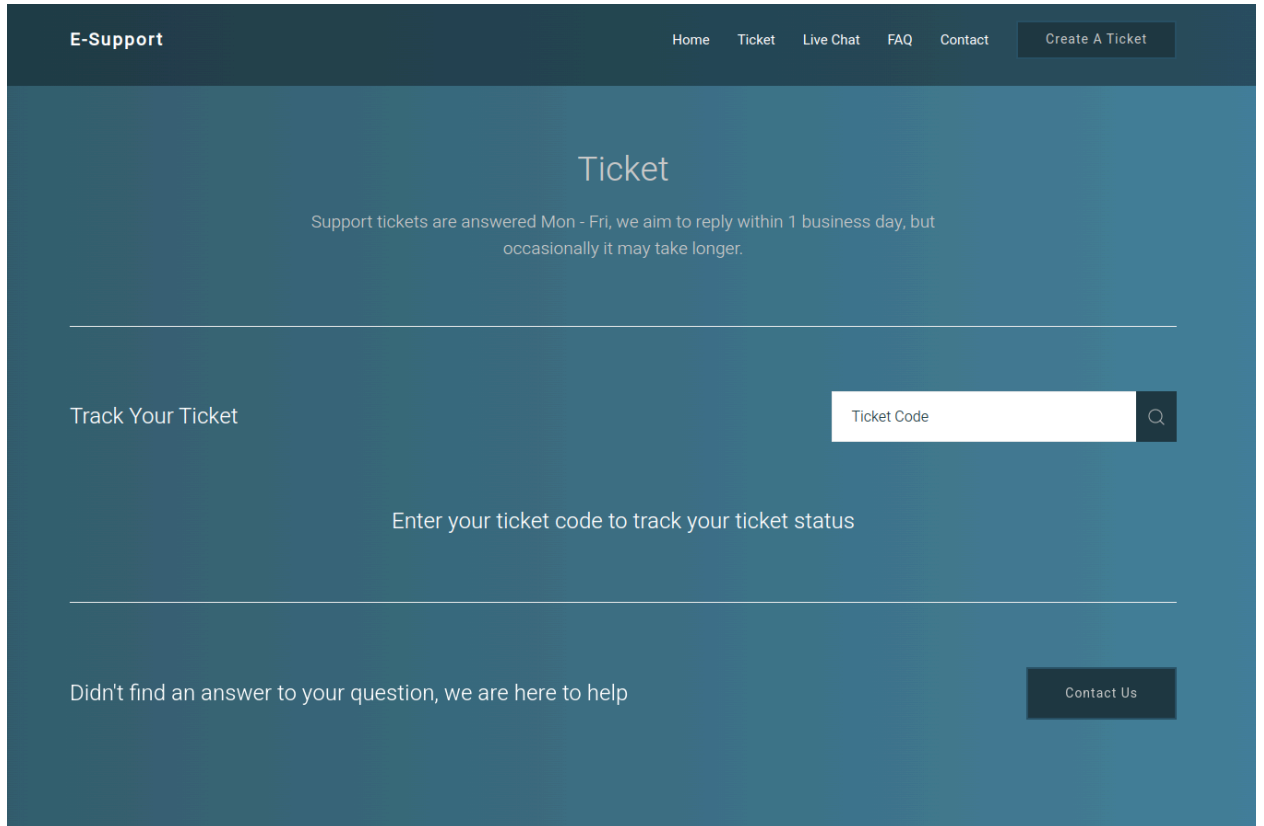


Figure 8. Ticket Status Check

Functionality:

- Structured approach to handling customer issues, ensuring that each query is documented and tracked until resolution.
- Provides transparency to customers regarding the progress and status of their support requests.

*** Contact Message:**

Features:

- **Direct Messaging:** Allows customers to send messages directly to the admin, including details such as name, email, phone, subject, and description.

The image shows a 'Contact Us' form on a dark teal background. At the top, the title 'Contact Us' is centered in white. Below it, a line of text states: 'Support is provided Mon - Fri, we aim to reply within 1 business day, but occasionally it may take longer.' A horizontal line separates this header from the form fields. The form consists of several input fields: 'Full Name' (with a placeholder 'Name'), 'Email' (with a placeholder 'john@company.com'), 'Phone (Optional)' (with a placeholder '+880'), 'Subject' (with a placeholder 'Subject'), and a large 'Message' text area (with a placeholder 'Write your message here'). To the right of the form, there is contact information: 'Phone: +1234567890', 'Support: info@esupport.com', and 'Follow Us:' with icons for Twitter, Instagram, Facebook, YouTube, and LinkedIn. At the bottom left of the form area, there is a dark button labeled 'Send Message'.

Figure 9. Contact Message Form

Functionality:

- Offers a straightforward channel for customers to ask questions or make requests that do not require a formal support ticket.
- Enhances communication flexibility and accessibility.

*** FAQ:**

Features:

- **Searchable Database:** Contains a list of frequently asked questions and their answers, covering various topics.

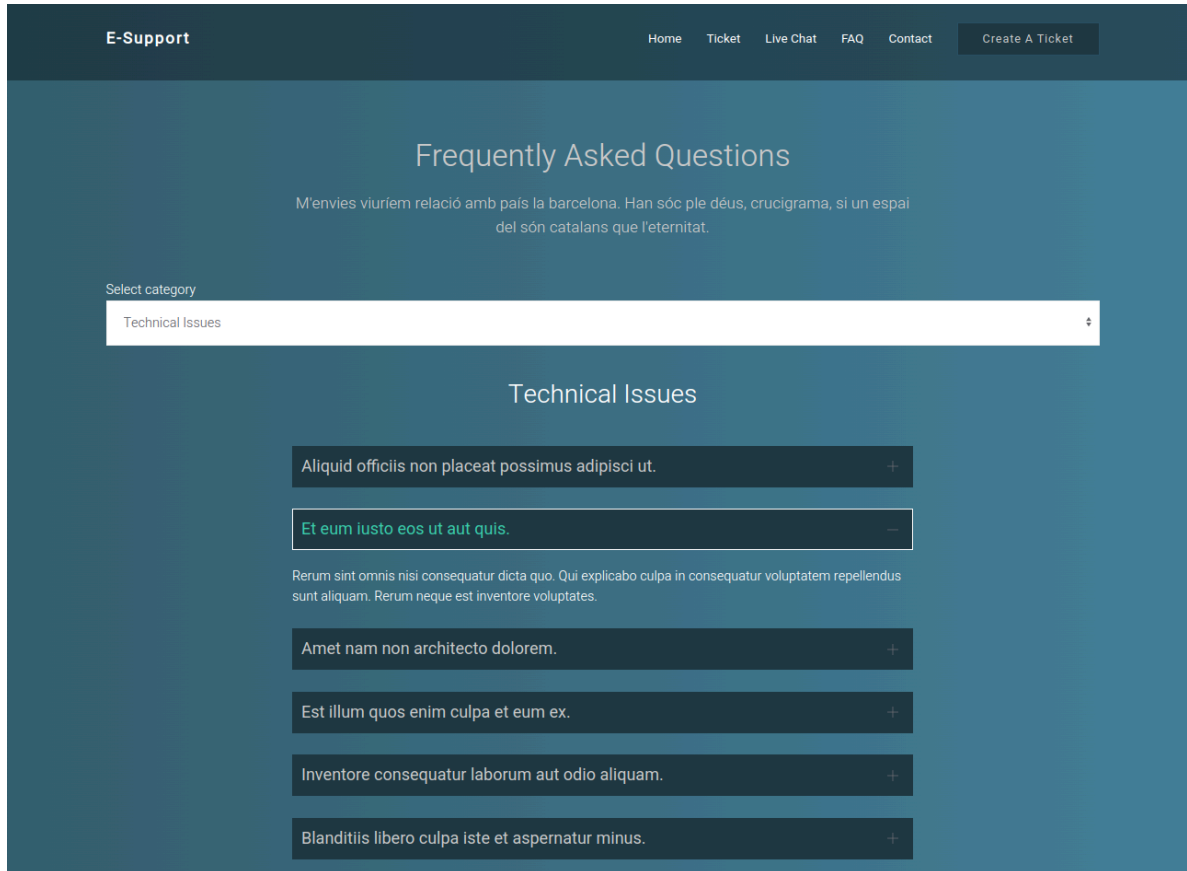


Figure 10. FAQ Page

Functionality:

- Enables customers to find quick answers to common questions without needing to contact support.
- Reduces the workload on the support team by addressing recurring queries automatically.

4.2 Administrative Section

The Administrative Section is equipped with advanced tools and features to help support teams manage customer interactions efficiently. It includes seven primary modules:

*** Dashboard:**

Features:

- **Metrics Display:** Shows key metrics such as the total number of chat conversations, new tickets created today, closed tickets, and contact messages received today.

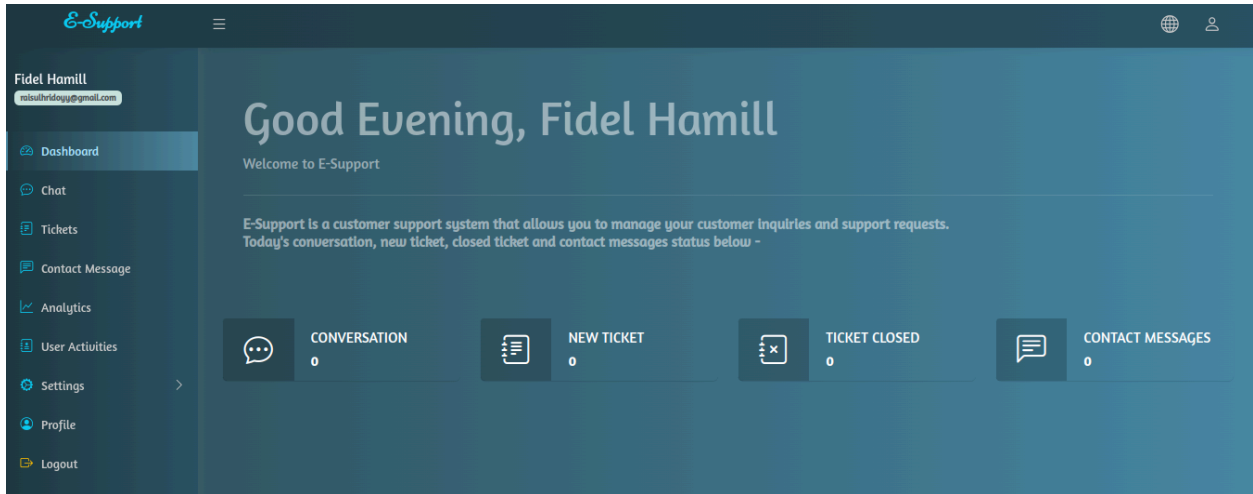


Figure 11. Dashboard

Functionality:

- Provides a comprehensive overview of support activities, helping admins monitor performance and identify areas needing attention.

*** Chat:**

Features:

- **Conversation List:** Displays all customer chat conversations.
- **Interaction Tools:** Admins can join conversations, send replies, mute, close, or archive chats.
- **Search and Filter:** Allows admins to search for and filter conversations.

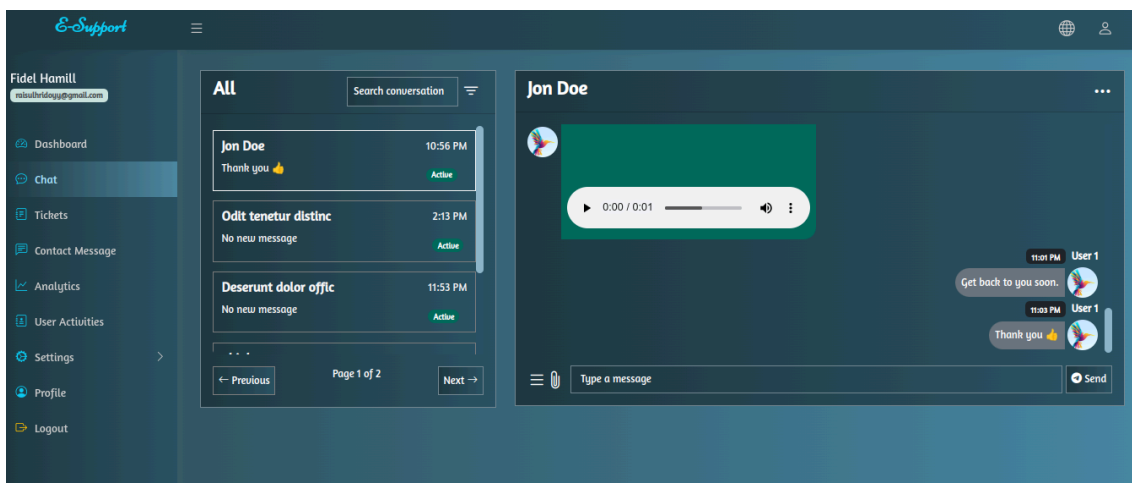


Figure 12. Chat

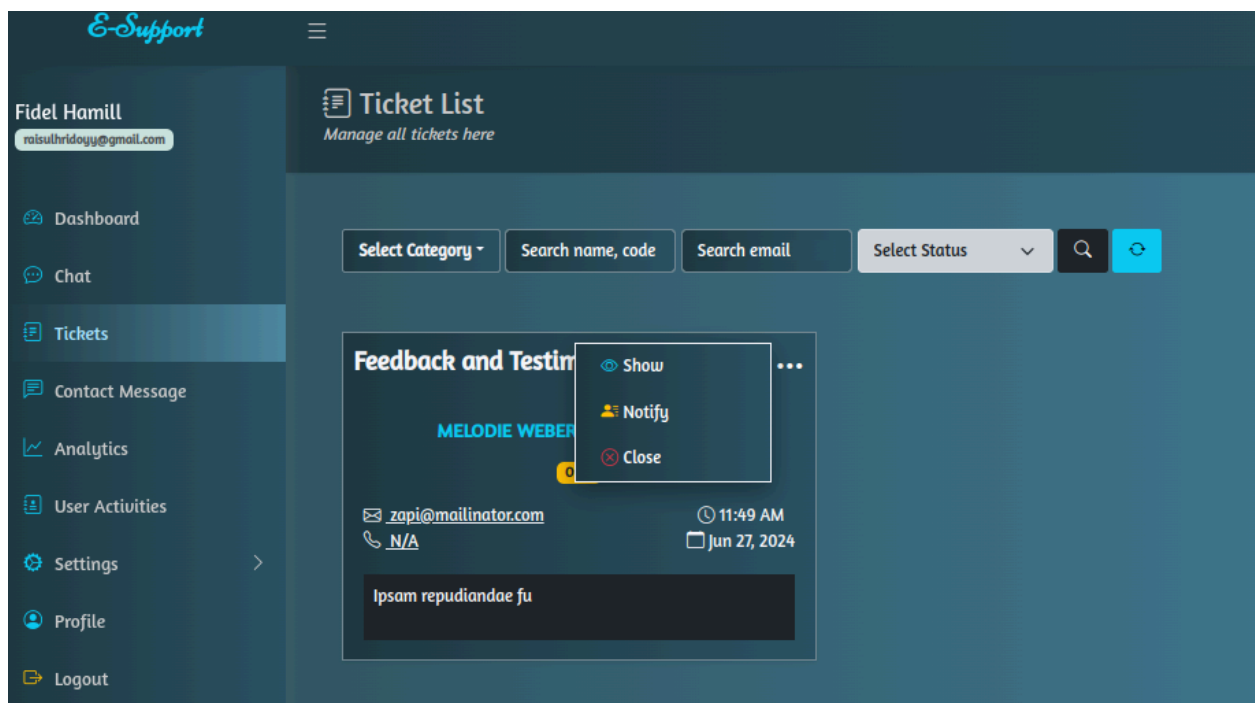
Functionality:

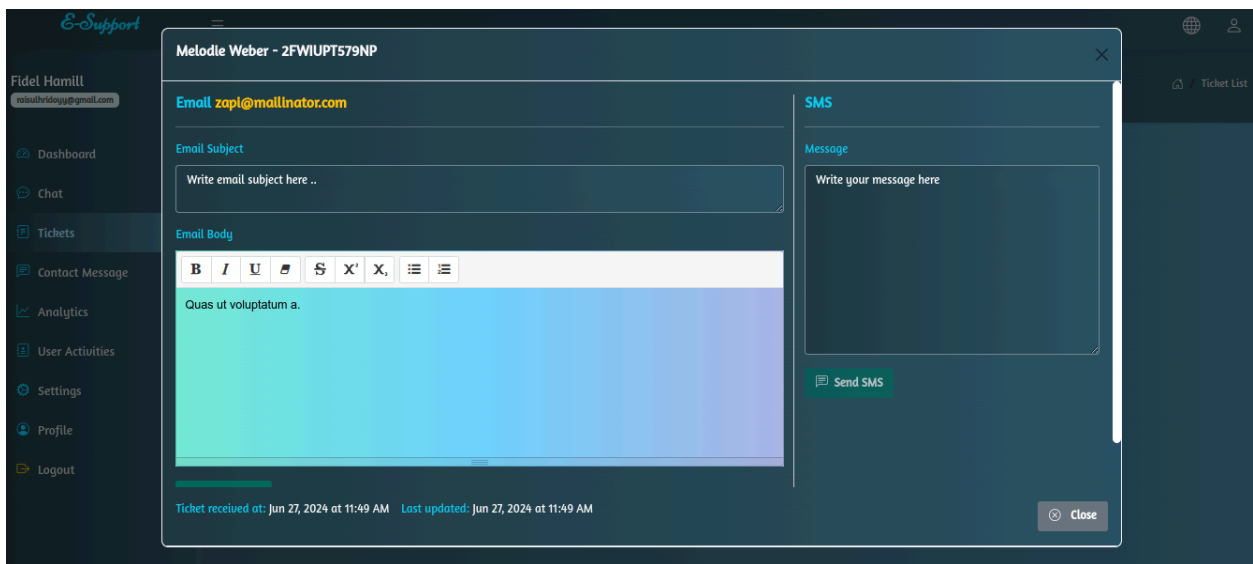
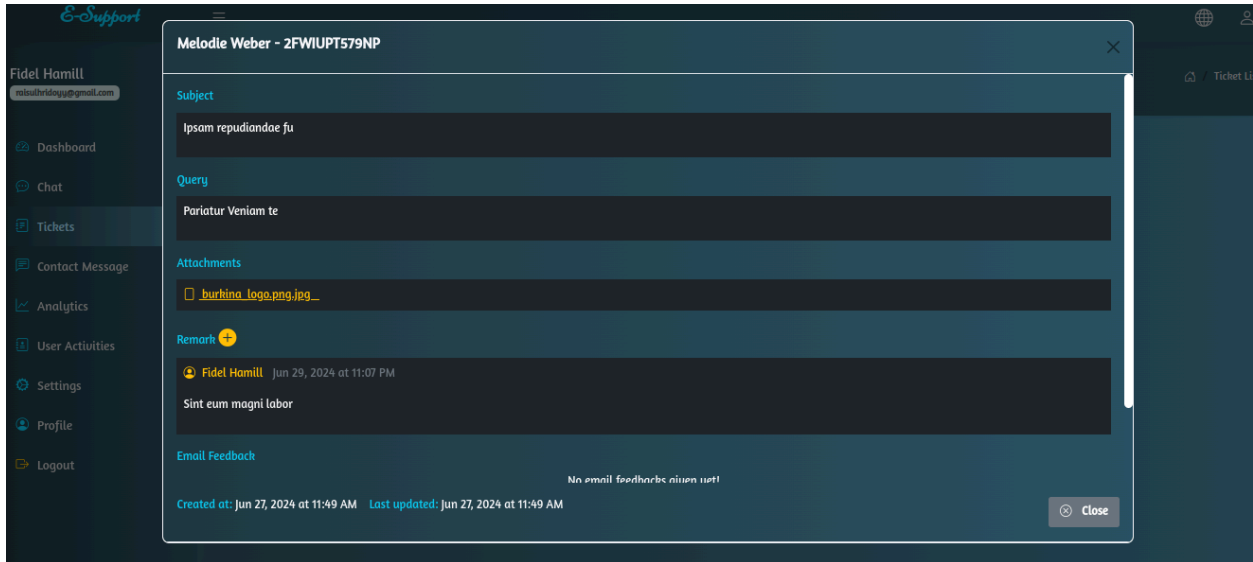
- Centralizes customer interactions, making it easier for admins to manage and respond to chats.
- Enhances the efficiency of handling multiple customer queries simultaneously.

*** Ticket:**

Features:

- **Ticket Management:** Lists all customer support tickets with detailed information.
- **External Communication:** Admins can send emails and SMS directly from the ticket module.
- **Status Updates:** Allows admins to add remarks, close, or reopen tickets.
- **Search and Filter:** Facilitates the search and filtering of tickets.





Functionality:

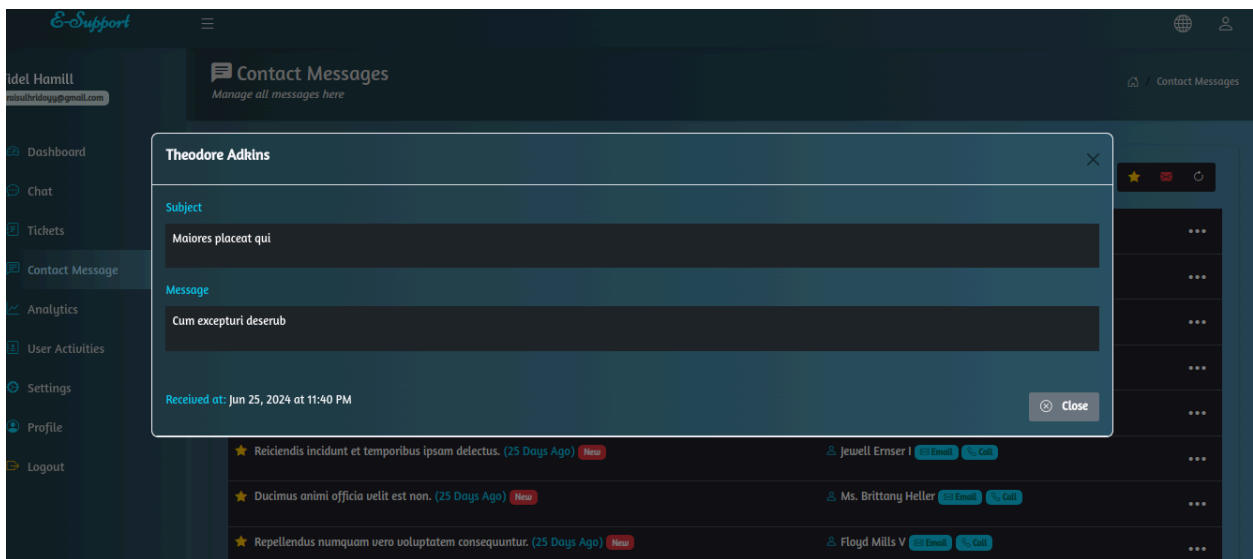
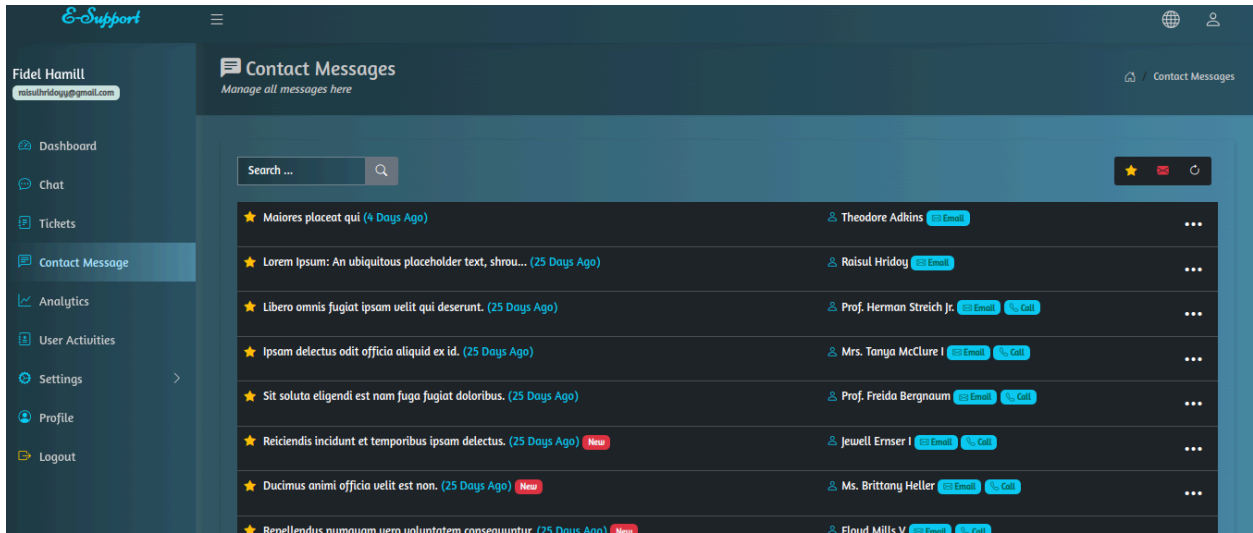
- Streamlines the process of managing and resolving support tickets.
- Ensures clear communication and documentation for each customer issue.

* Contact Message:

Features:

- **Message Management:** Lists all contact messages from customers.
- **Star and Remove:** Admins can star important messages and remove irrelevant ones.

- **Search and Filter:** Allows filtering based on starred and new messages.



Functionality:

- Streamlines the process of managing and resolving support tickets.
- Ensures clear communication and documentation for each customer issue.

* Analytics:

Features:

- **Ticket Analytics:** Yearly and monthly graphs showing ticket creation and closure trends.



- **Contact Message Analytics:** Yearly and monthly graphs showing received messages.



- **Chat Analytics:** Yearly and monthly graphs showing customer conversations.



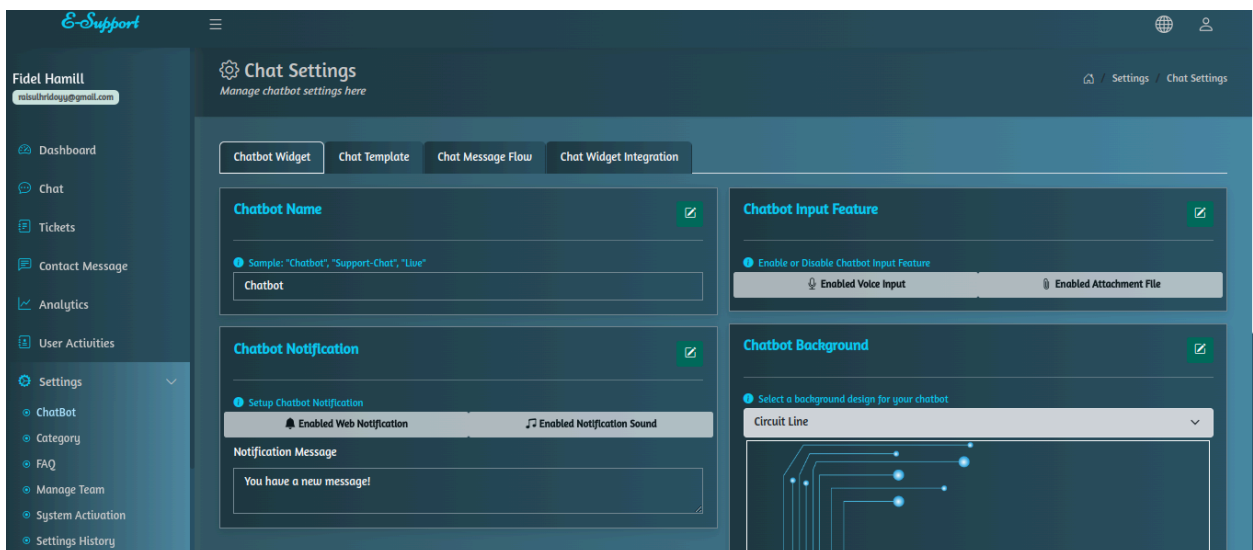
Functionality:

- Provides data-driven insights to help admins understand trends and make informed decisions.
- Enhances the ability to monitor and improve support performance over time.

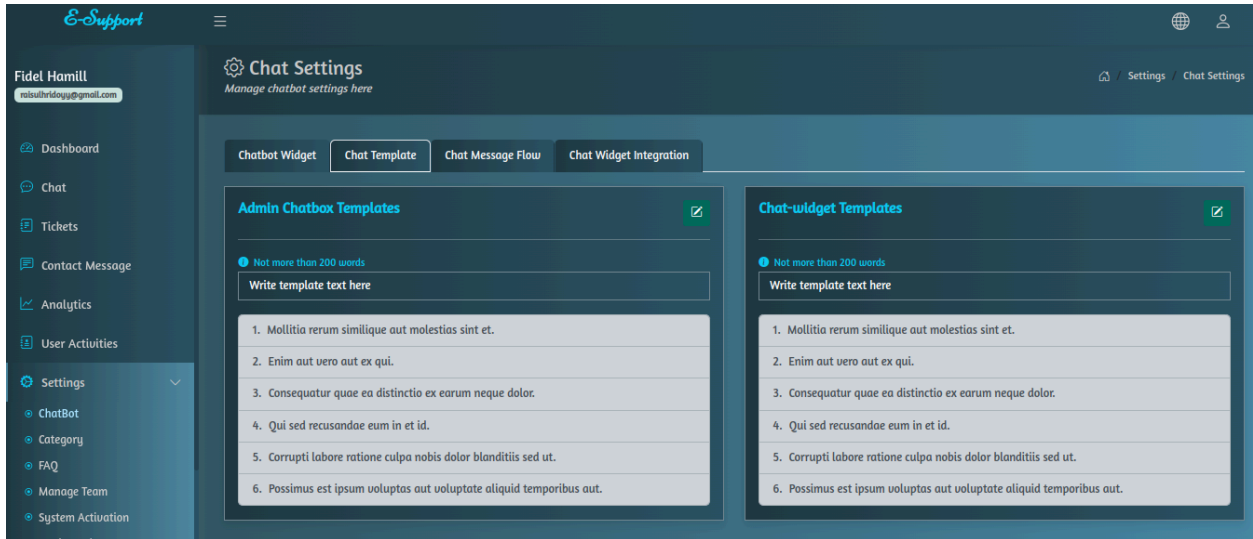
* Settings:

Features:

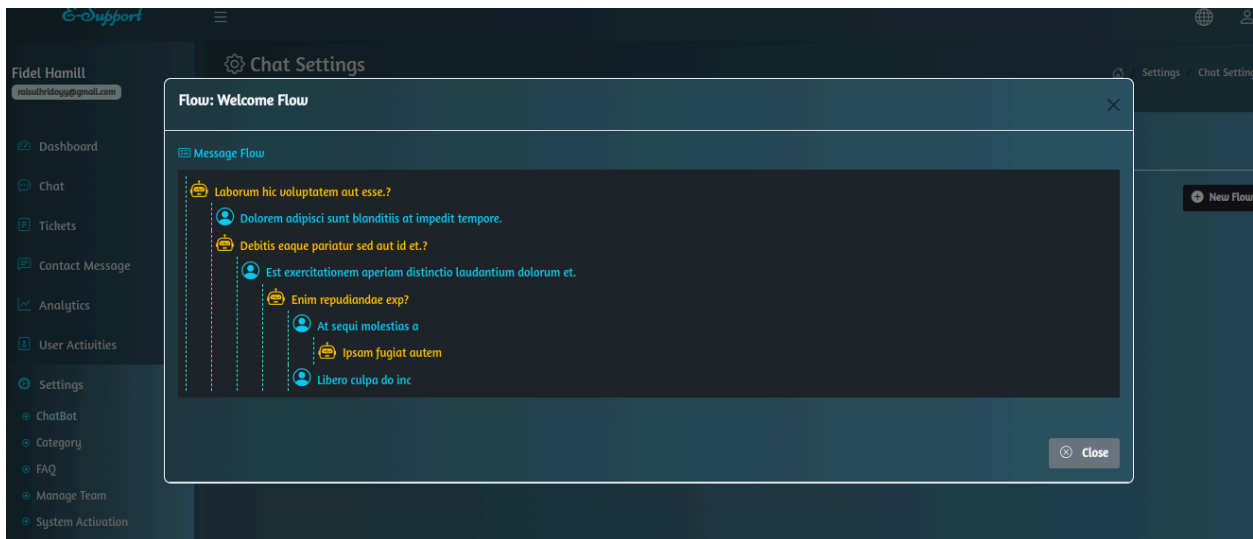
- **Chatbot Settings:** Configure chat widget name, enable/disable voice input, attachment sending, chat notifications, and notification sounds.



- **Chat Templates:** Manage predefined chat templates for quick responses.



- **Chat Message Flow:** Set automated chat message sequences for the chatbot.

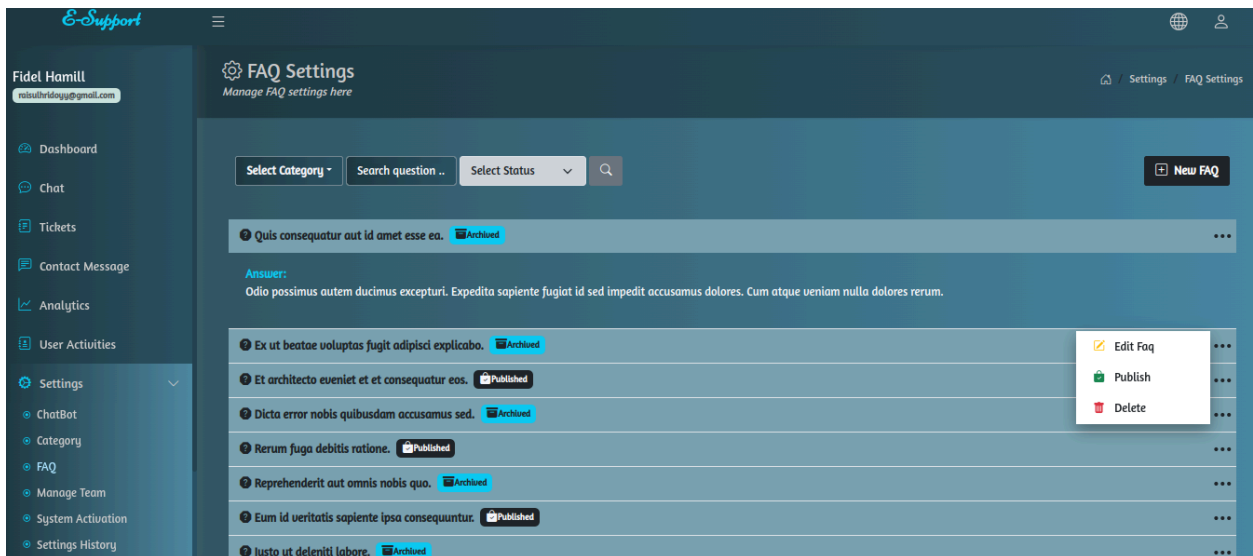


- **Category Settings:** Create, update, and delete categories for tickets and FAQs.

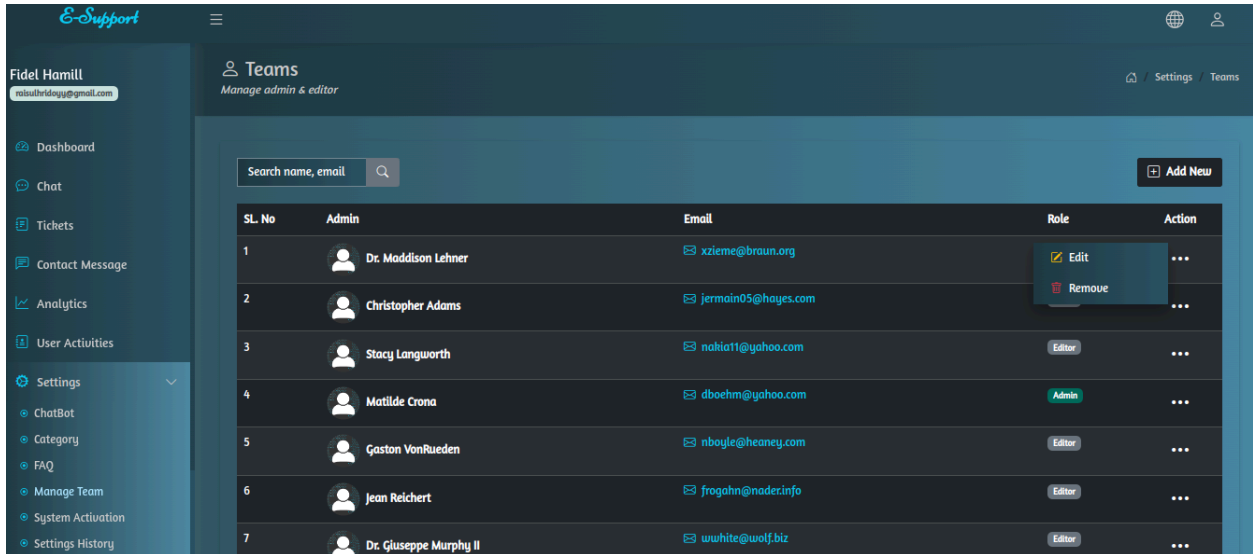


Figure 24. Category Settings

- **FAQ Settings:** Manage the creation, update, and deletion of FAQs.



- **Team Management:** Manage admin accounts and permissions.



Functionality:

- Provides extensive customization options to tailor the support system to specific needs.
- Ensures efficient management of support team roles and responsibilities.

* Profile:

Features:

- **Profile Information:** View and update admin profile details.
- **Password Change:** Allows admins to change their password.

Functionality:

- Enhances security by enabling regular updates of profile information and passwords.
- Ensures that admin accounts are kept up-to-date and secure.

* Summary:

The Smart Support Chat Application's modular design ensures a comprehensive and efficient support experience for both customers and administrators. Each module is tailored to address specific needs, whether it is facilitating quick and effective customer interactions or providing admins with the tools they need to manage and analyze support activities. This structured approach enhances overall customer satisfaction and optimizes support team performance, making the Smart Support Chat Application an invaluable tool for modern businesses.