The project aims to develop a **ChatBot_HelpDesk**— a web-based system that allows individuals and businesses to create, manage, and deploy AI-powered chatbot agents tailored for customer interaction, support, and internal service assistance. The platform provides a unified interface for users to design custom conversational agents, define their knowledge base, and integrate them seamlessly into websites or internal systems.

The system is designed to assist two primary user categories — **individual users** and **business organizations** — with flexible pricing models and scalability in mind.

- **Individual users** can subscribe to the platform with a monthly cost of 200,000 VND.
- **Business organizations** can access advanced collaboration and management features with a monthly subscription of 500,000 VND. Additionally, the system applies a pay-per-use model, charging **100 VND per AI-generated ticket response** to maintain fair usage and cost efficiency.

System Overview

The **Agent Web Platform** provides a variety of features divided into several major functional modules:

1. Agent Creation and Configuration (Core Flow)

Users can create AI agents with different purposes — such as answering customer inquiries about products, handling complaints, or assisting staff in serving clients more effectively.
Each agent can be customized with:

- A **knowledge base**, where users input domain-specific data stored in the database.

- A **response configuration module**, allowing users to define instructions that shape how the AI answers questions.

- A **testing feature**, enabling users to preview and refine their agents' responses before deployment.

2. Agent Sharing and Collaboration

The system supports two types of sharing mechanisms:

- **Personal sharing**, where an agent is shared directly with another user via email.

- **Group sharing**, where the creator can form a team or department group, allowing multiple employees to use the same agent collaboratively.
  This feature enhances cooperation within companies and enables collective access to the same AI resources.

3. Helpdesk and Customer Support Integration

Agents can be used as **helpdesk assistants**, managing customer interactions efficiently.
Key capabilities include:

- Automatically answering customer inquiries and generating **ticket responses** for unresolved cases.

- Managing **customer information** and **employee data** within the same system.

- Providing **statistical reports** to track performance, ticket resolution time, and interaction metrics.

4. Web Embedding and Automation

Users can generate **embed scripts** to integrate their AI agents directly into their company's websites or portals. If an agent cannot answer a question, the query is automatically logged as a **ticket response**, allowing administrators to review and improve the knowledge base later.

Operating Environment

- **Frontend & Backend Framework:** Next.js
- **Deployment:** Vercel
- **Database:** Firebase

Design and Implementation Constraints

- **Programming Language:** TypeScript (Next.js framework)
- **Database:** Firebase
- **Development Methodology:** Scrum Agile

Conclusion

In summary, this project aims to provide an intelligent, scalable, and user-friendly web platform that empowers both individuals and businesses to create, deploy, and manage AI chatbot agents efficiently.
The system will streamline customer service workflows, improve response time, and reduce the workload of support staff by automating common interactions — while maintaining transparency, collaboration, and control through integrated management tools.