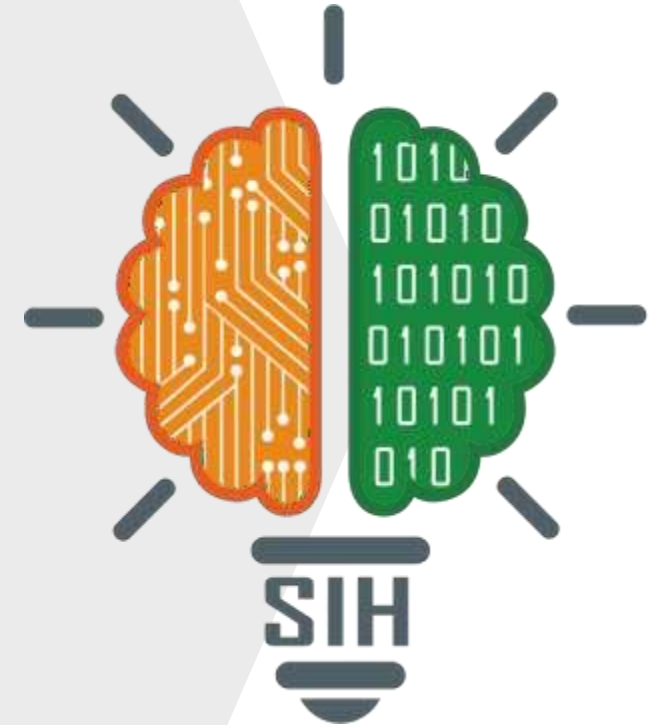


# SMART INDIA HACKATHON 2024



## Online Chatbot based ticketing system

- Problem Statement ID – SIH1605
- Problem Statement Title - Online Chatbot based ticketing system
- Theme- Travel & Tourism
- PS Category- Software
- Team ID -
- Team Name – BINARY BEAST



# Online Chatbot based ticketing system

## Proposed Solution (Integration of a customized chatbot with a ticketing system in one place is an evolutionary feature.)

- It is an automatic tool that can prioritize customer requests in a single place.
- Without having to move to the relevant digital communication medium, an agent can answer their message in real time from the helpdesk ticketing platform.
- Some other chatbot builders offer chatbot integration with the ticketing system, but they are not for free. Our aim is to provide a free chat-bot that is directly linked with the IRCTC.
- Chatbots use conversational AI to understand customers' problems and generate humanized responses by leveraging your company's specific data.



## ➤ Data Storage & Management

- **Database:** SQL for structured data, NoSQL for unstructured data.
- **Security:** Encryption & access controls to protect sensitive data.

## ➤ Monitoring & Analytics

- **Real-Time Monitoring:** Tools like Prometheus & Grafana.
- **Dashboards:** Visualize key metrics (e.g., resolution times, satisfaction scores).

## ➤ Testing & Deployment

- **CI/CD:** Automated pipelines with Jenkins/GitHub Actions.
- **User Testing:** Collect feedback for improvements before full deployment.

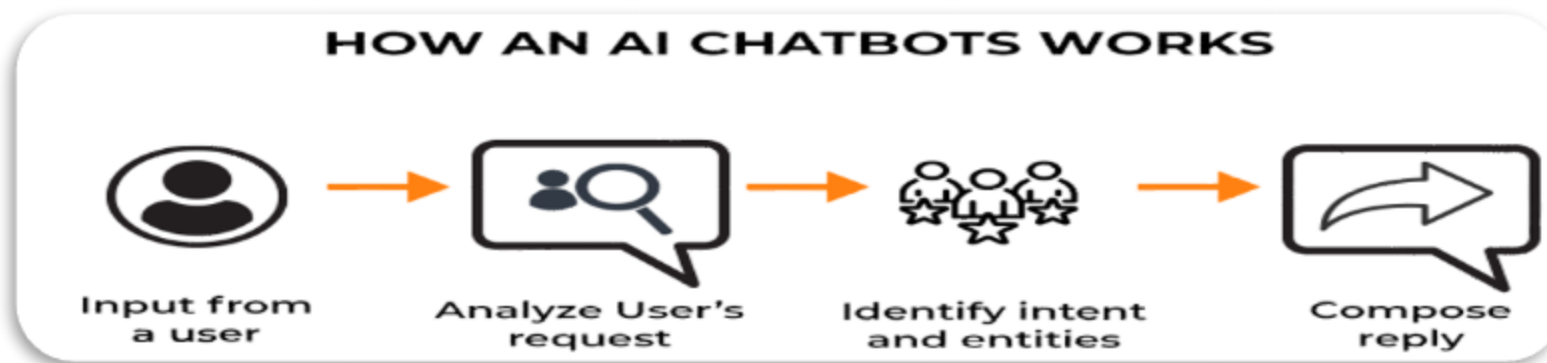
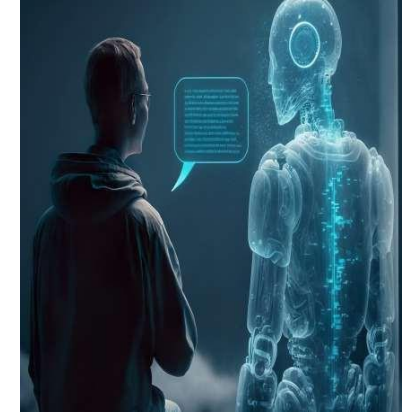
## ➤ Automation & Workflow Management

- **Automated Ticket Creation:** Auto-generate and route tickets to the appropriate department.



# FEASIBILITY AND VIABILITY

- Chatbots use conversational AI to understand customers' problems and generate humanized responses by leveraging your specific data and also customers need instant answers. With this feature, they can quickly be satisfied without unnecessarily using the agent's time.
- The ticketing system lets your agents label and prioritizes tickets based on their importance while managing multiple cases at the same time. Sometimes, you can even segment tickets and resolve them all together to save time.
- As previously mentioned, tickets represent automatically stored information in a single place. It is a knowledge hub that would be valuable for human agents to solve current problems and chatbots to train for future conversations.
- The ticket would be centralized in a single thread, where all relevant data about the client and agent would be stored. The information would move together with the ticket even if it were to change hands between agents.



- **Enhanced Customer Experience:** The chatbot ticketing system provides instant responses to customer inquiries, reducing wait times and improving overall satisfaction.
- **24/7 Availability:** Customers can access support at any time, which is particularly beneficial for global businesses with diverse time zones.
- **Personalized Support:** By integrating with CRM systems, the chatbot can offer personalized assistance based on customer history and preferences.
- **Accessibility:** The system can be designed to support multiple languages and accessibility features, making it easier for a diverse audience to use.
- **Reduced Stress:** Quick and efficient resolution of issues can reduce customer frustration and stress.
- **Cost Savings:** Automating ticket handling reduces the need for a large customer support team, leading to significant cost savings.
- **Scalability:** The system can easily scale to handle increased volumes of inquiries without a proportional increase in costs.





- **RESEARCH:**

1. GOOGLE
2. CHAT GPT
3. GITHUB

- **REFERENCES:**

<https://tiledesk.com/blog/chatbot-ticketing-system/>

<https://www.happyfox.com/chatbot/a-complete-guide/>

