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- **Problem Statement ID –1648**
- **Problem Statement Title - Online Chatbot-based Ticketing System**
- **Theme-Travel & Tourism**
- **PS Category- Software**
- **Team Name (Registered on portal)- circuitalchix**

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Chatbot-based Ticketing System

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- **Proposed Solution**

- Implementation of a chatbot-based ticket booking system.
- Integrates payment gateway and provides analytics for decision-making.

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TECHNICAL APPROACH

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Technologies to be used:

- Programming Languages: Python, JavaScript
- Frameworks: Flask, React, Dialogflow (for chatbot), Tensorflow, Pytorch
- Others: Payment Gateway Integration (like Stripe/PayPal)

Methodology and Process:

- Develop the chatbot using Dialogflow.
- Integrate with Flask backend for booking management.
- Use React for frontend interaction.
- Implement payment gateway for secure transactions.

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FEASIBILITY AND VIABILITY

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Feasibility:

- Leveraging existing technologies ensures implementation within a reasonable timeframe.
- Minimal hardware requirements make it scalable.

Challenges:

- Ensuring chatbot accuracy in various languages.
- Integrating seamless payment processing.

Overcoming Strategies:

- Rigorous testing across languages.
- Partnering with reliable payment gateway providers.

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IMPACT AND BENEFITS

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Potential Impact:

- Enhances visitor satisfaction by reducing wait times.
- Increases museum revenue through streamlined operations.

Benefits:

- Social: Improves accessibility for non-English speakers.
- Economic: Reduces costs associated with manual booking errors.
- Environmental: Minimizes paper usage through digital ticketing.

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RESEARCH AND REFERENCES

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- E. Handoyo, M. Arfan, Y. A. A. Soetrisno, M. Somantri, A. Sofwan and E. W. Sinuraya, "Ticketing Chatbot Service using Serverless NLP Technology," 2018 5th International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), Semarang, Indonesia, 2018, pp. 325-330, doi: 10.1109/ICITACEE.2018.8576921. keywords: {Facebook;Electrical engineering;Urban areas;Natural language processing;Programming;Task analysis;Testing;chatbot;routing agent;conversation;NLP;interaction;intent},