Project Report - Book Recommendation and Chatbot using IBM Watson

Project Title

Book Recommendation System and Chatbot using IBM Watson

Team Members

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Objective

To develop an AI-powered system that recommends books based on user preferences and allows users to interact with a chatbot developed using IBM Watson for queries and suggestions.

Tools and Technologies Used

- IBM Watson Assistant (Chatbot)

- IBM Watson Discovery (optional)

- Python

- Flask

- HTML/CSS

- IBM Cloud Services

Description

This project implements a dual-purpose system combining a book recommendation engine and a chatbot using IBM Watson.

The chatbot interacts with users through natural language and gathers preferences such as genre, author, or interest areas.

Based on this input, the system recommends books using a pre-trained model or static dataset.

IBM Watson Assistant is trained to understand queries like:

- Suggest a book in mystery

- Who wrote Harry Potter?

- Tell me top 5 books for self-help

The chatbot acts as a virtual librarian, enhancing user engagement and making the book selection process interactive and fun.

Working Modules

1. User Interface (UI): Chat window for user queries

2. Watson Assistant Integration: Handles chatbot responses

3. Recommendation Engine: Suggests books using logic or ML model

4. Backend Server (Flask): Manages communication between UI and Watson

Expected Outcome

- A functional chatbot that responds to book-related queries

- Personalized book recommendations

- Friendly and responsive UI

Skills Learned

- Conversational AI with IBM Watson

- Chatbot Design and Flow

- Data Handling in Python

- Basic Machine Learning (if implemented)

- Flask-based web development

Conclusion

This project demonstrates how AI and NLP can be applied to the field of education and reading by offering a smart and engaging way to find books.

The use of IBM Watson brings in the power of machine understanding of language, making the chatbot intuitive and useful.