CONVERSATIONAL BOOK RECOMMENDATION CHATBOT

Subtitle: Using IBM Watson Assistant

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PROJECT OVERVIEW

- This project aims to build a smart, conversational chatbot that recommends books based on the user's preferences.
- The chatbot interacts using natural language and recommends books using the selected genre, mood, and author.
- Built using IBM Watson Assistant with Dialog Skills and AI-powered intent/entity understanding.

PROBLEM STATEMENT

- Problem: Users often struggle to find books that align with their mood and taste.
- Current Challenges:Overwhelming number of book choices online.Lack of personalized recommendation engines that are conversational.
- Goal: Create an intelligent assistant that gives book suggestions tailored to the user's feelings and interests.

OUR APPROACH

- Step 1: Design intents like greetings, book preferences, help, and goodbye.
- Step 2: Create entities for Genre, Mood, and Author with multiple examples.
- Step 3: Use dialog nodes and slot-filling logic to collect user data.
- Step 4: Recommend books based on matched combinations.
- Step 5: Test the conversation flow in Watson's Try It Out panel.

TECH STACK USED

- IBM Watsonx Assistant: For building the chatbot
- IBM Cloud: For deployment and service management
- Dialog Skills: To manage conversational flow
- Intents & Entities: To understand user input
- Slot-Filling: For collecting complete preferences
- Tools: Google Slides, GitHub, VS Code (optional)

FEATURES OF BOOKBOT

- Engages users with natural conversation
- Recognizes user's genre, mood, and favorite author
- Provides instant book recommendations
- Handles multiple combinations of inputs
- Gracefully ends conversation when user is done

CHALLENGES FACED

- SLOT FILLING LIMITATION: NO VISIBLE SLOT-FILLING IN DIALOG SKILL UI
- SOLUTION: USED FOLLOW-UP PROMPTS FOR EACH REQUIRED ENTITY
- LACK OF PREBUILT BOOK DATASET:
- SOLUTION: MANUALLY CREATED BOOK RECOMMENDATIONS FOR GENRE-MOOD-AUTHOR COMBINATIONS
- REPETITIVE NODE CREATION:
- SOLUTION: USED CHILD NODES AND REUSE LOGIC PATTERNS TO SAVE TIME

RESULTS AND LEARNINGS

- Successfully built a responsive, engaging book recommendation assistant
- Learned how to manage dialog flows, intents, entities, and test in Watson
- Understood real-world application of AI in conversation design
- Gained experience in solving user-centered problems with technology

FUTURE IMPROVEMENTS

- Connect to external book APIs for dynamic recommendations
- Add voice interaction capabilities
- Improve NLP handling with custom webhooks or logic
- Expand language support for wider user base

THANK YOU