
IBM AICTE PROJECT

VEDRA: ECO LIFESTYLE AGENT

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OUTLINE

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PROBLEM STATEMENT

The Eco Lifestyle Agent, built with Watsonx Assistant, helps people live more eco-friendly by providing simple, personalized tips. It answers questions like "How can I use less plastic?" or "What green travel options are near me?" It also shares advice on sustainable habits, products, recycling, and government programs. This tool makes going green easy and practical for everyday life.

PROPOSED SOLUTION

Mood-Aware Eco Suggestions

Using sentiment detection, it changes responses based on your tone. If you seem stressed or tired, it says: "Take a walk in the park today. It's good for you and the Earth".

A Game-Like Missions

Users receive fun daily missions to make eco-friendly choices. "Your Quest Today: Refuse two plastic bags.

Reward: This makes the journey interactive and engaging.

Build a Digital Clone of Your Lifestyle

The agent builds a virtual "EcoTwin" – a profile of your lifestyle footprint based on what you search and the actions you take.

It visualizes: Your carbon footprint, Water saving score , Plastic-free days

SYSTEM APPROACH

System requirements-

Hardware Requirements:

Device: Any device with a modern web browser, including a laptop, desktop, tablet, or mobile Internet

A stable internet connection

Software Requirements:

IBM Cloud account (Lite or Standard)

IBM Watsonx Assistant enabled

TOOLS USED

Watsonx Assistant: the main conversational AI framework, focuses on intent handling, dialogue design, and user flow.

Prompt Templates: provide predefined responses and follow-up actions for FAQs.

Actions UI: a visual flow builder that allows you to design no-code or low-code conversational paths.

Web Chat Integration: lets you embed a chatbot in a website, mobile app, or portal.

Watsonx.ai: is an optional feature for future AI services such as RAG or sentiment-aware answers.

Cloud Object Storage: enables you to store PDFs, knowledge bases, or eco-related datasets if needed.

Assistant Analytics: helps you track user interactions, the most common queries, and user feedback.

ALGORITHM

- Unlike traditional ML prediction systems, the Eco Lifestyle Agent uses rule-based conversational logic and intent recognition within Watsonx Assistant. This method was selected because the main goal is to provide real-time, actionable eco-suggestions based on user queries. It does not aim to predict future outcomes.
- Watsonx Assistant employs intent classification, entity recognition, and dialogue flow management to understand user input and offer personalized guidance. For improved intelligence, it can optionally integrate retrieval-based systems like RAG (Retrieval-Augmented Generation)

END USERS

- Environmentally conscious individuals
- Students & young adults
- Families & homemakers
- Educational institutions

DEPLOYMENT

The Eco Lifestyle Agent is set up through the following steps:

1. Build and Train Assistant

Create intents, entities, and actions in Watsonx Assistant.

Configure custom prompts and branching logic.

2. Test on Preview Interface

Use Watson's preview panel to simulate conversations.

3. Deploy on Platform of Choice

Use Web Chat integration to embed the assistant in websites or mobile apps.

You can also integrate with WhatsApp, Slack, or MS Teams.

4. Monitor and Improve

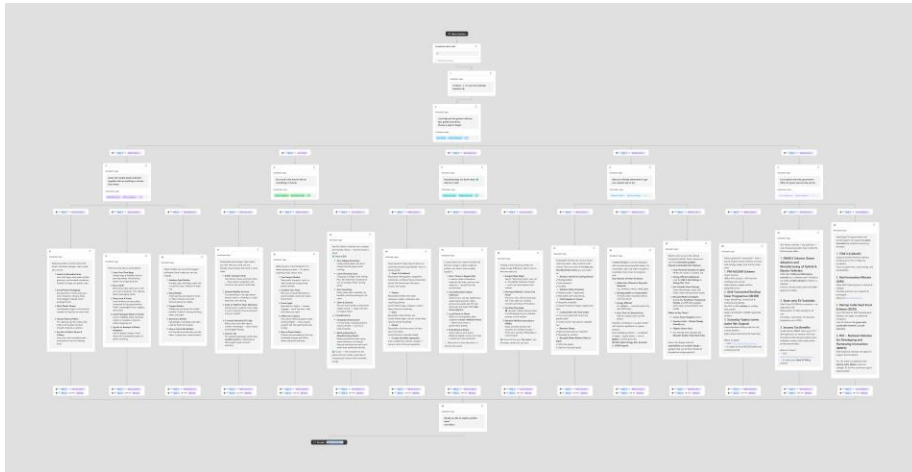
Use Watson Assistant's built-in analytics to monitor user engagement.

Regularly update eco content, adjust flows, and add new features like EcoTwin or Mood-aware nudges.

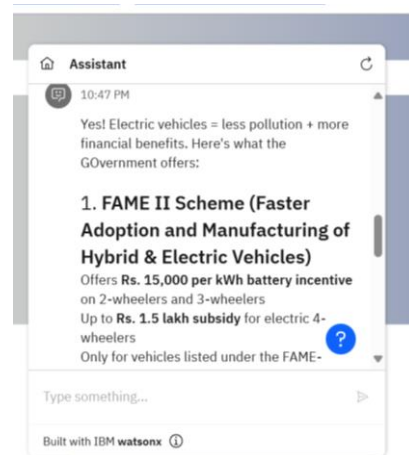
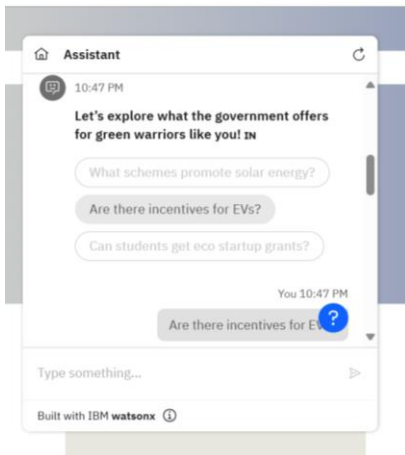
RESULT

The Eco Lifestyle Agent provides personalized, real-time eco-tips with Watsonx Assistant. It understands user questions naturally and encourages daily sustainability. It also offers local green suggestions. The assistant is responsive and easy to use, helping users make environmentally friendly choices with ease.

RESULT



RESULT



CONCLUSION

- **By combining technology with sustainability**, this agent helps users make conscious, eco-friendly choices every day. Using Watsonx Assistant, it provides relatable, real-time advice and gamified tips that make green living easier. The platform builds lasting habits with a personal touch, encouraging users to take part in protecting the planet.

FUTURE SCOPE

- The Eco Lifestyle Agent can work with IoT devices to monitor energy and water use in real time.
- Location-based suggestions can help users find local recycling centers, green events, and transport options.
- Gamified rewards and community challenges can increase user engagement and motivation.
- With Watsonx.ai, the agent will learn and adjust to user habits, making sustainability very personalized.

REFERENCES

ChatGpt- Conceptualized & co-developed with OpenAI ChatGPT for guidance

[ChatGPT](#)

UN Environment Programme (UNEP) – Global eco-tips, sustainable lifestyle resources

[UNEP](#)

MNRE (Ministry of New and Renewable Energy) – Solar rooftop, EV & green energy schemes

[MNRE](#)

MoEFCC (India Environment Ministry) – Govt. schemes, recycling rules, plastic bans

[MoEFCC](#)

Watson Assistant Documentation – IBM setup, training, and integration help :

[IBM Cloud Docs](#)

IBM CERTIFICATIONS



IBM CERTIFICATIONS



IBM CERTIFICATIONS



GITHUB LINK-

[HTTPS://GITHUB.COM/SURYANK7/ECO-LIFESTYLE-AGENT](https://github.com/SURYANK7/ECO-LIFESTYLE-AGENT)



THANK YOU