## Project: Assistant for Effortless Cloud Resource Management and Experimentation

# Task: Test The agent response to question on architecture generation

Welcome to the Cloud Resource Management Tool! This system is specifically designed to help developers, startups, and individual users choose the best AWS services based on their specific requirements. Whether someone is looking to optimize costs, scale infrastructure, or utilize AWS's services, this system provides recommendations to help you make informed decisions.

### **How the System Works**

# **User Input**

Users will have to prompt the system by describing their project requirements, such as:

- Budget constraints
- Desired AWS architecture (e.g., serverless, microservices, etc.)
- Specific use cases (e.g., machine learning, data analytics, IoT)
- AWS services they are interested in, for now we consider S3
- Performance needs (e.g., scalability, availability, fault tolerance)

#### **Examples of The prompts to test the System**

- 1. We are a startup with a budget of \$700 per month. We need a cloud platform that supports containerization and can scale automatically as the number of users grows. What architecture would you recommend?"
- 2. I want to build an e-commerce platform and need a cloud solution that can handle traffic spikes during sales events, with a budget of \$500.Moreover I want this to be available 24/7. Which cloud service and architecture should I choose?"

- 3. Our business needs to create a cloud-based machine learning platform, with a budget of \$250. The system needs to scale as we process more data. What cloud architecture should we consider?
- 4. I am developing a web app for a growing user base. My budget is \$1500 per month, and I need a cloud service that can automatically scale and handle database management. Would you please guide me in different options I can follow, considering cost and architecture?
- 5. In our start-up, we are launching an IoT solution and need a scalable cloud platform that can handle real-time data from thousands of devices, within a \$900 budget. Can you suggest a solution we can go with?