|  |  |
| --- | --- |
| **Prepared By** | **Reviewed By** |
| **Anjana** | **Hajira** |
| Solution POC (DE/DX) | L&D Lead (DE/DX) |

LOG ANALYZER

# Problem Statement

ABC Company’s business users frequently encounter site downtime issues with a critical web application. IT Operations business leaders are seeking answers regarding the root cause of the frequent system crashes and statistics related to which internal application is experiencing problems.

**Scope**: The system’s as follows:

* The bot must be capable of accepting log files as input.
* It should analyse the input and provide responses to user queries based on the uploaded data.

# Skill Tower

|  |  |
| --- | --- |
| **Use Case Name** | **Skill Names *(Associates can choose any technology as per their preference which is available in the syllabus. The below data is only for the reference)*** |
|  | * Python * Streamlit or any frontend technology to build GUI requirements. * LangChain * AWS Bedrock/Open AI, * Vector database - Fiass, Pinecone |

# User Story

**As a** User of Log Analyzer

**I should be** able to upload a document

**So that** I can infer on the Summary and be able to get response to the prompts on the uploaded data

1. The input file which can be uploaded should be .log format.
2. The maximum size of the file to be 100MB
3. On uploading the right file format, the document should get uploaded
4. Once the documents is uploaded successfully, User should be able to prompt the bot based on the uploaded data
5. The bot should be able to respond correctly for the prompts given by the user

Acceptance Criteria

**Scenario – Positive flow**

**Given** the format of the input is .log

**When** user uploads the file

**Then** input file should get uploaded.

**Scenario – Positive flow**

**Given** the log file

**When** user inputs a prompt to list top 3 issues

**Then** no of times a issue is occurred is greater than 5, greater than 3, greater than 2, use emojis to indicate it.

**Scenario – Error Handling-1**

**Given** the format of the input file is not .log  
**when** user uploads the same,

**Then** the upload should be failed

**AND** respective **error message** like **‘Upload only valid file format’** should be displayed.

**Scenario – Error Handling-2**

**Given** the size of the file is not within the prescribed limit  
**when** user uploads the same,

**Then** the upload should be failed

# Expected Deliverables

The following are the expected technical deliverables.

Technical Deliverables

* Application code base.
* Fully functional application which should be running and working.
* Use case diagram
* Architecture diagram
* Video recording that demonstrates the working of the application should be provided.
* Unit test case documentation

# Evaluation Rubrics

* The program logic should be simple and effective.
* Quality of the documentation.
* Functionality completeness.
* Coding standards.
* GUI Design.

# Sample Prompts

Scenario: If user has uploaded a log file of an application

Sample prompts can be as follows (The prompt should be on the uploaded data)

* List Top 3 issues which are reoccurring.

**Sample Log file from GitHub**

[GitHub - logpai/loghub: A large collection of system log datasets for AI-driven log analytics [ISSRE'23]](https://github.com/logpai/loghub)

***NOTE:***

*This use case can be multiple hands-on activity scenarios based on the data being uploaded where the base working of the bot remains same.*

# Evaluation

1. **Document Creation**

Please create appropriate documents based on section 4 & 5.

Please find below Case Study Evaluation workflow

****

1. **Based on solution submitted, a demo / viva voce session will be arranged with the Mentor**

Connect with mentor will be arranged and would be communicated by the L&D team.