Azure DevOps User Stories and Sprint Plan for AI-powered Talent Acquisition Chatbot

Overall Project Structure:

Epic: AI-Powered Talent Acquisition Chatbot

Feature 1: CV Processing Pipeline

Feature 2: Intelligent Chatbot Interface

Feature 3: Deployment and Containerization

Feature 4: Documentation and Repository Standards

Sprint Schedule:

Sprint 1 (24/11/2024 - 30/11/2024)

Sprint 2 (01/12/2024 - 07/12/2024)

Sprint 3 (08/12/2024 - 14/12/2024)

Sprint 4 (15/12/2024 - 21/12/2024)

Sprint 5 (22/12/2024 - 28/12/2024)

Sprint 6 (29/12/2024 - 31/12/2024)

Each sprint will have tasks distributed between Person A and Person B to ensure balanced workload.

User Stories, Features, and Tasks

Feature 1: CV Processing Pipeline

User Story 1.1: As a user, I want to upload a directory of CVs and process them so the bot can extract, chunk, and embed relevant data.

Sprint 1 Tasks:

Task 1.1.1: (Person A) Set up the CV processing script structure using Python and integrate Marker OCR for text extraction.

Task 1.1.2: (Person B) Design the pipeline to parse CVs, chunk text into meaningful pieces, and embed them using stella\_en\_400M\_v5.

Task 1.1.3: (Person A) Integrate the pipeline with Milvus Vector DB for storing embeddings.

Sprint 2 Tasks:

Task 1.1.4: (Person B) Test the CV processing pipeline with a sample dataset.

Task 1.1.5: (Person A) Handle errors and edge cases (e.g., incomplete CVs).

Task 1.1.6: (Person B) Optimize the embedding process for scalability.

Feature 2: Intelligent Chatbot Interface

User Story 2.1: As a user, I want to chat with the bot to find the best candidates based on job descriptions.

Sprint 3 Tasks:

Task 2.1.1: (Person A) Build a chatbot using LangChain and integrate it with Llama3.2 for natural language understanding.

Task 2.1.2: (Person B) Implement a search functionality querying Milvus Vector DB for the most relevant candidates.

Task 2.1.3: (Person A) Develop prompts for retrieving candidate summaries based on user input.

Sprint 4 Tasks:

Task 2.1.4: (Person B) Allow the bot to answer specific questions about shortlisted candidates.

Task 2.1.5: (Person A) Refine chatbot responses for accuracy and clarity.

Task 2.1.6: (Person B) Perform end-to-end testing of the chatbot interface.

Feature 3: Deployment and Containerization

User Story 3.1: As a developer, I want the application to be easily deployed using Docker.

Sprint 5 Tasks:

Task 3.1.1: (Person A) Write a Dockerfile for the CV processing pipeline.

Task 3.1.2: (Person B) Write a Dockerfile for the chatbot service.

Task 3.1.3: (Person A) Configure Docker Compose for multi-service deployment.

Task 3.1.4: (Person B) Test the containerized application on a local environment.

Feature 4: Documentation and Repository Standards

User Story 4.1: As a team, I want to maintain a well-documented and organized repository to ensure code quality and ease of collaboration.

Sprint 6 Tasks:

Task 4.1.1: (Person A) Write detailed README with setup instructions.

Task 4.1.2: (Person B) Add comments and inline documentation across the codebase.

Task 4.1.3: (Person A) Create a contribution guide for the repository.

Task 4.1.4: (Person B) Review and clean up the codebase to match coding standards.

Azure DevOps Setup

Epic: AI-Powered Talent Acquisition Chatbot

Features:

CV Processing Pipeline

Intelligent Chatbot Interface

Deployment and Containerization

Documentation and Repository Standards

User Stories and Tasks:

Each user story mapped to tasks as outlined above.

Sprint Planning:

Sprint backlog updated with tasks for each sprint.

Add time estimates for each task and log efforts using the timelog plugin.