**WBS Structure:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| WBS Activity | WBS ID | Task Name | Start Date | End Date | Responsible | Predecessors |
| **1. Project Initiation** | 1.1 | Gather business requirements | 01-Mar-26 | 07-Mar-26 | Business Analyst, Project Manager | - |
|  | 1.2 | Conduct feasibility study | 08-Mar-26 | 14-Mar-26 | Project Manager, Technical Consultant | 1.1 |
|  | 1.3 | Approve project charter | 15-Mar-26 | 20-Mar-26 | Project Sponsor, Project Manager | 1.2 |
| **2. Project Planning** | 2.1 | Define project scope and deliverables | 21-Mar-26 | 28-Mar-26 | Project Manager, Development Lead | 1.3 |
|  | 2.2 | Build detailed WBS and schedule | 29-Mar-26 | 05-Apr-26 | Project Planner, PMO | 2.1 |
| **3. Data and Model Preparation** | 3.1 | Data collection and preparation | 06-Apr-26 | 12-Apr-26 | Data Engineer, Data Scientist | 2.2 |
|  | 3.2 | Model design | 13-Apr-26 | 27-Apr-26 | AI Engineer, Data Scientist | 3.1 |
| **4. Development & Integration** | 4.1 | Prototype chatbot development | 28-Apr-26 | 12-May-26 | AI Engineer, Software Developer | 3.2 |
|  | 4.2 | Integration with customer support systems | 13-May-26 | 28-May-26 | Integration Specialist, Backend Developer | 4.1 |
| **5. Testing and Quality Assurance** | 5.1 | Security and performance testing | 11-Jun-26 | 30-Jun-26 | QA Team, Security Specialist | 4.2 |
| **6. Implementation and Deployment** | 6.1 | Staff training and readiness | 01-Jul-26 | 15-Jul-26 | Training Specialist, HR, Project Manager | 5.1 |
|  | 6.2 | Pilot deployment | 16-Jul-26 | 24-Jul-26 | Project Manager, Support Team | 6.1 |
|  | 6.3 | Final go-live and project closure | 26-Jul-26 | 31-Jul-26 | Project Manager, Client Representative | 6.2 |

Gnatt chart

A purple lines on a white background

AI-generated content may be incorrect.

**Task Interdependencies**

The activities within the chatbot project are very dependent. The completion of business requirements gathering (1.1), project charter approval (1.3) should not take place until the feasibility study (1.2) is complete. In the development, the design of the model (3.2) needs to be accomplished with the completed data collection and preparation (3.1), and the prototype chatbot development (4.1) has to be done before integration with customer support (4.2). The success of the stage of integration is required in security and performance testing (5.1) and the training of the staff (6.1) and preparation is necessary prior to pilot deployment (6.2). Lastly, the project is only able to achieve final go-live and close (6.3) upon the successful completion of all the preceding stages.

**Roles and Responsibilities**

Every task is assigned to the most suitable project role. Business Analysts are in charge of requirements collection and scope definition and the Project Manager is in charge of planning and approvals. Model design and chatbot development is done by the AI Engineers and Data Scientists with assistance of the Backend and Integration Specialists. The Quality of the systems are put through QA testers and Security Analysts. The support staff and trainers make sure that the employees can handle the chatbot system once it has been put in place.

**Timeline Summary**

The project will take about five months; it will begin with requirements gathering on 1 March 2026 and end with final go-live and closure on 31 July 2026. The main landmarks were: charter approval of the project on 20 March, model design on 27 April, system testing on 30 June and pilot deployment in the middle of July. This timeline is captured in the Gantt chart and this shows the flow of tasks and dependencies in order to carry the project to successful completion.