Document 6

**USE Case Diagrams**



**Activity Diagrams**

|  |  |
| --- | --- |
| A diagram of a chatbot  Description automatically generated | A diagram of a process  Description automatically generated |
| A diagram of a customer support  Description automatically generated | A diagram of a process  Description automatically generated |
| A diagram of a software company  Description automatically generated |

**Use case specification document.**

|  |  |
| --- | --- |
| **USE CASE ID:** CHAT-001 | **USE CASE Name:** Customer Chat Support |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Enables customers to communicate with agents in real time through chat. |
| 1. **Actors**
 | Primary Actor: CustomerSecondary Actor: Support Agent  |
| 1. **Pre-Conditions**
 | Customer initiates chat; internet connection available. |
| 1. **Basic Flow**
 | * Customer initiates a chat session via web interface.
* AI bot greets the user and collects basic info.
* A ticket is created and routed to an agent.
* Agent responds in real time.
* Chat ends and transcript is saved to ticket
 |
| 1. **Alternate Flow**
 | If no agent is available, bot provides fallback response and promises follow-up. |
| 1. **Exceptional Flow**
 | If chat system fails, prompt the customer to send an email and log an incident. |
| 1. **Post-Conditions**
 | Transcript stored; ticket updated. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | Low-latency chat infrastructure. |

|  |  |
| --- | --- |
| **USE CASE ID:** Email-001 | **USE CASE Name:** Email Ticket Creation |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Automatically creates support tickets from customer emails. |
| 1. **Actors**
 | Primary Actor: CustomerSecondary Actor: System  |
| 1. **Pre-Conditions**
 | Email received at support address. |
| 1. **Basic Flow**
 | * Customer sends an email to support address.
* System reads and parses email.
* Ticket is created and categorized using AI.
* Customer gets an acknowledgment email.
 |
| 1. **Alternate Flow**
 | If AI fails to categorize, default to 'General Inquiry'. |
| 1. **Exceptional Flow**
 | If mailbox access fails, log error and alert admin. |
| 1. **Post-Conditions**
 | Ticket created and acknowledged. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | IMAP or SMTP email integration |

|  |  |
| --- | --- |
| **USE CASE ID:** Call-001 | **USE CASE Name:** VoIP-Based Call Support |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Facilitates support calls using VoIP with call logging and recording. |
| 1. **Actors**
 | Primary Actor: CustomerSecondary Actor: Support Agent  |
| 1. **Pre-Conditions**
 | Customer calls support line. |
| 1. **Basic Flow**
 | * Customer calls support number.
* IVR directs call to appropriate agent.
* Agent handles issue and logs call.
* Call is recorded and associated with a ticket.
 |
| 1. **Alternate Flow**
 | If all agents are busy, place the call-in queue or offer callback option. |
| 1. **Exceptional Flow**
 | If VoIP system fails, display offline notice and redirect to chat/email. |
| 1. **Post-Conditions**
 | Call log and recording saved, ticket updated. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | Integration with VoIP provider. |

|  |  |
| --- | --- |
| **USE CASE ID:** Ticket-001 | **USE CASE Name:** Ticket Lifecycle Management. |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Manages the entire lifecycle of a support ticket. |
| 1. **Actors**
 | Primary Actor: Support AgentSecondary Actor: Admin |
| 1. **Pre-Conditions**
 | Ticket exists in the system. |
| 1. **Basic Flow**
 | * Ticket is created from chat/email/call.
* Agent updates status and adds notes.
* Resolution is provided.
* Ticket is closed after customer confirmation.
 |
| 1. **Alternate Flow**
 | If ticket needs escalation, it is reassigned with higher priority. |
| 1. **Exceptional Flow**
 | If agent forgets to update status, system sends reminder. |
| 1. **Post-Conditions**
 | Ticket closed with resolution details. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | Status change logs, timestamps |

|  |  |
| --- | --- |
| **USE CASE ID:** AI-001 | **USE CASE Name:** Ticket Routing |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | AI assigns tickets to the best-suited agent/team. |
| 1. **Actors**
 | Primary Actor: SystemSecondary Actor: Support Agent |
| 1. **Pre-Conditions**
 | Ticket is generated. |
| 1. **Basic Flow**
 | * Ticket is analyzed by AI engine.
* Relevant category, sentiment, and tags are extracted.
* Best-suited agent is assigned automatically.
 |
| 1. **Alternate Flow**
 | If no agent is available, assign to fallback team. |
| 1. **Exceptional Flow**
 | If routing engine fails, assign to manual review queue. |
| 1. **Post-Conditions**
 | Ticket routed and assigned. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | AI model training and agent skill mapping. |

|  |  |
| --- | --- |
| **USE CASE ID:** BOT-001 | **USE CASE Name:** AI Chatbot Resolution |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Bot handles common queries and creates tickets for unresolved issues. |
| 1. **Actors**
 | Primary Actor: CustomerSecondary Actor: AI Bot  |
| 1. **Pre-Conditions**
 | Chatbot is configured and trained. |
| 1. **Basic Flow**
 | * Bot greets and queries customer intent.
* Bot suggests solutions or articles.
* If unresolved, ticket is escalated to agent.
 |
| 1. **Alternate Flow**
 | Bot follows up with links or prompts for more info. |
| 1. **Exceptional Flow**
 | Bot crashes or loops—redirect to agent. |
| 1. **Post-Conditions**
 | Query resolved or ticket created. |
| 1. **Frequency of Use**
 | High |
| 1. **Special Requirements**
 | NLP integration, FAQ knowledge base. |

|  |  |
| --- | --- |
| **USE CASE ID:** Integrate-001 | **USE CASE Name:** Jira Integration |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Allows support tickets to be linked and tracked with Jira issues. |
| 1. **Actors**
 | Primary Actor: Support AgentSecondary Actor: System  |
| 1. **Pre-Conditions**
 | Integration configured. |
| 1. **Basic Flow**
 | * Agent flags ticket for dev team.
* Jira issue is created and linked.
* Updates are synced in both systems.
 |
| 1. **Alternate Flow**
 | Allow manual entry of Jira issue ID. |
| 1. **Exceptional Flow**
 | If API fails, alert user to retry later. |
| 1. **Post-Conditions**
 | Ticket and issue linked. |
| 1. **Frequency of Use**
 | Low |
| 1. **Special Requirements**
 | Jira API access and credentials. |

|  |  |
| --- | --- |
| **USE CASE ID:** Report-001 | **USE CASE Name:** SLA Dashboard Reporting |
| **Created By:** Jay Kishan Sahu | **Date Created:** 25/02/2025 |
| 1. **Use Case Description**
 | Displays SLA metrics and performance for management. |
| 1. **Actors**
 | Primary Actor: ManagerSecondary Actor: Admin  |
| 1. **Pre-Conditions**
 | Ticket data exists. |
| 1. **Basic Flow**
 | * Manager logs in to dashboard.
* Applies filters for team, period, ticket type.
* Views SLA adherence and escalation rates.
 |
| 1. **Alternate Flow**
 | Export report to CSV or PDF. |
| 1. **Exceptional Flow**
 | If no data available, show default 'No Results'. |
| 1. **Post-Conditions**
 | Report viewed or downloaded. |
| 1. **Frequency of Use**
 | Medium |
| 1. **Special Requirements**
 | Realtime analytics engine. |

Document 7

**** **Screens and Pages.**



Document 8

**Tools Visio and Axure**

**Microsoft Visio** is primarily used for creating diagrams, flowcharts, org charts, process maps, network diagrams, and floor plans.

Its key features are:

* Drag-and-drop shapes for creating diagrams quickly.
* Ideal for business process modeling, system architecture diagrams, and IT infrastructure mapping.
* Supports a wide range of templates (e.g., flowcharts, UML, Activity Diagram).
* Integrates with Microsoft 365 tools like Excel and Teams.
* Can export diagrams as PDFs or images and share them.

Use Cases:

* Business analysts use Visio to map as-is and to-be processes.
* IT teams use it for network and system design.
* Project managers use it for workflow visualization.

**Axure RP** is a wireframing, prototyping, and documentation tool used for UX/UI design and interaction modeling.

Its key features:

* Create interactive prototypes with dynamic content, conditions, and logic.
* Supports responsive design for different screen sizes.
* Allows annotation and collaboration with stakeholders.
* Generates HTML-based interactive prototypes that can be tested in real browsers.
* Useful for creating realistic simulations of apps and websites before development.

Uses:

* UX designers use it for user journey flows and wireframes.
* BAs and Product Owners use it to gather feedback on mock interfaces.
* Developer’s reference Axure prototypes to understand UI behavior.

Document 9

**BA Experience**

**My experience as BA in following phases:**

1. **Requirement gathering:** As a BA, in this project I did document analysis, Interviews and conducted JAD session for requirement gathering. The requirements being gathered was then documented in BRD. I also created a RTM document.
2. **Requirement Analysis:** In requirement analysis phase, I analyzed the gathered requirements and prepared Functional Requirement Document. In this process, the duplicate requirements were removed. The functional requirements were then categorized and sorted. I conducted a session where requirements were prioritized. I also did feasibility study, Risk analysis and stakeholder analysis.
3. **Design:** In Design phase, I created use case specification documents, build Use Case diagrams, Activity Diagrams and Screen Mockups.
4. **Development:** In Development Phase, I managed the RTM document by following up with the development team in regular intervals. I kept the stakeholders updated about the progress of project. I also did continuous requirement validation during development phase.
5. **Testing:** I supported Testing team in creating Test cases and test case documentation. And did functional testing to validate the functionality of the features.
6. **Deployment:** While deployment phase, I supported in deployment planning. Also, after deployment I supported in organizing training sessions for delivery teams for smooth transition of process to new application.

After each phase was completed, I was responsible to get sign-offs from stakeholders to mark the completeness of that phase so that project can proceed to next phase.