**Live Project – Agile Document Conversational AI ChatBot**

# Document 1: Definition of Done

**Produced Code for Presumed Functionalities:**

* The code developed fulfills the functionalities outlined in the user stories.
* All intended features and scenarios are implemented as described.

# Assumptions of User Story Met:

* All assumptions and conditions specified in the user stories are validated and met.
* User stories are reviewed to ensure that all implicit and explicit assumptions are addressed.

# Project Builds Without Errors:

* The project builds successfully in the development environment.
* Ensuring smooth execution of the chatbot, there are no compilation or build errors.

# Unit Tests Written and Passing:

* Unit tests are created for all new features and functionalities.
* All unit tests pass successfully, ensuring the code behaves as expected.

# Project Deployed on the Test Environment Identical to Production Platform:

* The ChatBot is deployed to a test environment that mirrors the production setup.
* Deployment scripts and procedures are tested and validated.

# Tests on Devices/Browsers Listed in the Project Assumptions Passed:

* The ChatBot is tested on all specified devices and browsers.
* Compatibility and performance tests are conducted to ensure cross- platform functionality.

# Feature OK-ed by UX Designer:

* The feature is reviewed and approved by the UX designer.
* Design and usability criteria are met, ensuring a positive user experience.

# QA Performed & Issues Resolved:

* Quality Assurance (QA) testing is completed, including functional, regression, and performance tests.
* All identified issues and bugs are resolved before marking the user story as done.

# Feature Tested Against Acceptance Criteria:

* The feature is tested thoroughly against the predefined acceptance criteria.
* Acceptance tests are documented and results are reviewed with the Product Owner.

# Feature OK-ed by Product Owner:

* The Product Owner reviews and approves the feature.
* Any feedback or changes requested by the Product Owner are addressed.

# Refactoring Completed:

* Code is refactored to improve readability, maintainability, and performance.
* Refactoring does not introduce new bugs or regressions.

# Any Configuration or Build Changes Documented:

* All configuration changes and build processes are documented.
* Documentation is updated to reflect the current state of the project.

# Documentation Updated:

* User manuals, technical documentation, and help guides are updated to include new features and changes.
* Documentation is reviewed for accuracy and completeness.

# Peer Code Review Performed:

* Code changes are peer-reviewed by other developers.
* Feedback from code reviews is incorporated, and any issues are addressed.

**Document 2- Product Vision**

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| **Scrum Project Name:** | **Conversational AI Chatbot** |  |  |
| **Venue:** | **Meeting Room- 12** |  |  |
| **Date:** | **Start time: 09:00 am** | **End time: 11:30 am** | **Duration: 02:30 Hrs** |
| **Client:** | **CAI ChatBot** |  |  |
| **Stakeholder list:** | **Client, Support Team, Marketing Team, End User** |  |  |
| **Scrum Team** | | | |
| **Scrum Master:** | Aditya P |  |  |
| **Product owner:** | Vedant Mulay |  |  |
| **Scrum Developer 1:** | Anurag S |  |  |
| **Scrum Developer 2:** | Sneha P |  |  |
| **Scrum Developer 3:** | Sanjay D |  |  |
| **Scrum Developer 4:** | Anvita N |  |  |
| **Scrum Developer 5:** | Amit K |  |  |

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| **Vision:** What is your vision, your overarching goal for creating the product?  To revolutionize customer interactions by providing an intelligent, efficient, and scalable Conversational AI chatbot that enhances user experience, automates support, and drives business growth through AI-  driven engagement. | | | |
| **Target group** | **Needs** | **Product** | **Value** |
| *Market Segment* | *Problem* | *What product is it?* | *How is the product going to*  *benefit the company?* |
| Businesses in e-  commerce, Telecom, Banking, Healthcare, and Customer support sectors *Target Users and Customers*  End users seeking quick and efficient customer support. | Traditional chatbots  only respond to limited predefined questions. Customers find them frustrating and non-interactive. Companies struggle to provide personalized and real-time support  *Benefit*  Reduces wait time for customer queries. - Provides 24/7 support without human intervention. - Enhances  customer engagement and satisfaction. | A Conversational AI  Chatbot using NLP & AI for seamless interaction. upcoming events.  *Is it feasible to develop the product?*  Personalization, multilingual support, and intelligent response generation.  *Is it feasible to develop the product?*  Yes, with AI models, cloud integration, and scalable infrastructure. | Reduces customer service  costs. - Increases operational efficiency.  *What are the business goals?*  Improve customer retention and engagement. Automate repetitive tasks.  *What is the business model?*  SaaS-based subscription or enterprise licensing model. |

**Document 3 User Stories:**

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| --- | --- | --- | --- | --- | --- | --- |
| **User Story No** | **User Story** | **Task** | **Priority** | **BV** | **CP** | **Acceptance Criteria** |
| 1 | As a user, I want the chatbot to understand my natural language input so that I can  communicate easily. | Implement NLP | High | 10 | 8 | The chatbot correctly interprets at least 80% of user queries. |
| 2 | As a user, I want the chatbot to detect my intent so that I get  relevant responses. | Implement intent recognition | High | 9 | 7 | Intent classification accuracy is at least 85%. |
| 3 | As a user, I want the chatbot to extract key details from my input so that I don’t have to provide redundant  information. | Implement entity recognition | High | 9 | 8 | Entity extraction has at least 85% accuracy. |
| 4 | As a user, I want the chatbot to maintain context across conversations so that I don’t have to repeat  myself. | Implement context manageme nt | High | 10 | 9 | Context persists for at least 5 minutes or across 3 interactions. |
| 5 | As a user, I want to receive predefined quick reply options so that I can select responses  faster. | Implement quick replies | Mediu m | 7 | 4 | Quick reply buttons appear for common queries. |
| 6 | As a user, I want to provide input via voice so that I can interact hands- free. | Implement speech-to- text | Mediu m | 8 | 7 | Voice input is accurately transcribed with at least 90% accuracy. |
| 7 | As a user, I want the chatbot to respond with voice output so that I can  listen instead of reading. | Implement text-to- speech | Mediu m | 8 | 7 | Response is delivered as voice within 2 seconds. |
| 8 | As a user, I want to switch languages in the chatbot so that I can  interact in my preferred language. | Implement multilingual support | High | 9 | 8 | Users can switch between at least 3 languages dynamically. |
| 9 | As a user, I want the chatbot to provide automated responses to FAQs so that I get instant  answers. | Implement FAQ  handling | High | 10 | 5 | At least 95% of predefined FAQs are answered accurately. |

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| 10 | As a user, I want the chatbot to handle small talk so that the conversation feels  natural. | Implement casual conversatio n | Mediu m | 7 | 5 | The chatbot can handle at least 20 casual phrases. |
| 11 | As a user, I want the chatbot to suggest follow-up actions so that  I get a guided experience. | Implement response suggestions | High | 9 | 7 | The chatbot suggests relevant next steps based on  intent. |
| 12 | As a user, I want to escalate to a human agent if needed so that I  can get better assistance. | Implement live agent handoff | High | 10 | 8 | Handoff triggers after 3 failed chatbot responses. |
| 13 | As a user, I want the chatbot to support rich media (images, GIFs,  videos) so that I get more engaging responses. | Implement multimedia responses | Mediu m | 8 | 6 | The chatbot can send images, videos, and GIFs when relevant. |
| 14 | As a user, I want to receive a summary of my conversation so that I can review important points. | Implement conversatio n summary | Mediu m | 8 | 7 | A summary is generated for conversations  exceeding 5 minutes. |
| 15 | As a user, I want to provide feedback on chatbot responses so that it can improve over  time. | Implement feedback collection | High | 9 | 7 | Users can rate responses with a thumbs-up/down button. |
| 16 | As a user, I want the chatbot to recognize my previous interactions so  that I get personalized responses. | Implement user history tracking | High | 9 | 8 | The chatbot personalizes responses based on past conversations. |
| 17 | As a user, I want the chatbot to validate my input so that I provide  correct information. | Implement input validation | High | 9 | 6 | The chatbot prompts for correction if input is  invalid. |
| 18 | As a user, I want the chatbot to recognize intent variations so that I don’t have to use exact  phrases. | Implement synonym and phrase recognition | High | 9 | 7 | The chatbot understands at least 5 variations per intent. |
| 19 | As a user, I want the chatbot to detect my sentiment so that it can adjust responses  accordingly. | Implement sentiment analysis | Mediu m | 8 | 7 | Responses change based on detected sentiment (positive, neutral, negative). |

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| 20 | As a user, I want the chatbot to process structured inputs (forms, selections) so that I can  provide data easily. | Implement structured input handling | Mediu m | 8 | 6 | The chatbot supports form- based inputs. |
| 21 | As a user, I want to receive proactive notifications from the chatbot so that I stay  updated. | Implement push notification s | Mediu m | 7 | 5 | Users can opt in for chatbot notifications. |
| 22 | As a user, I want to set reminders with the chatbot so that I don’t forget important tasks. | Implement reminder functionalit y | Mediu m | 8 | 6 | The chatbot can store and notify reminders at set times. |
| 23 | As a user, I want to cancel or modify a request so  that I can correct mistakes. | Implement request cancellation | Mediu m | 7 | 5 | Users can cancel or edit an ongoing chatbot request. |
| 24 | As a user, I want to access my chat history so that I can refer back to  past interactions. | Implement chat history access | Mediu m | 8 | 6 | Users can view at least their last 10 conversations. |
| 25 | As a user, I want to personalize chatbot settings (e.g., tone, theme) so that I have a  customized experience. | Implement chatbot customizati on | Mediu m | 8 | 6 | Users can adjust chatbot behavior (formal, casual) and theme settings. |

**User stories for Business End:**

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| --- | --- | --- | --- | --- | --- | --- |
| **User Story No** | **User Story** | **Task** | **Priority** | **BV** | **CP** | **Acceptance Criteria** |
| 1 | As a business, I want the chatbot to handle customer queries 24/7 so that I can provide continuous  support. | Implement 24/7 chatbot availability | High | 10 | 8 | Chatbot is available and responsive at all times without downtime. |
| 2 | As a business, I want the chatbot to integrate with my CRM system so that I can track customer interactions. | Implement CRM integration | High | 9 | 8 | Chatbot integrates with existing CRM to log customer interactions. |
| 3 | As a business, I want the chatbot to  automate lead | Implement lead generation flow | High | 9 | 7 | Chatbot qualifies leads and logs  them into the CRM |

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|  | generation so that I can increase sales  opportunities. |  |  |  |  | automatically. |
| 4 | As a business, I want the chatbot to handle simple tasks like booking appointments or scheduling meetings so that I can save  time. | Implement appointment scheduling | High | 8 | 6 | The chatbot can schedule, reschedule, and cancel appointments. |
| 5 | As a business, I want the chatbot to provide product recommendations based on customer preferences so that I can increase  conversions. | Implement product recommendation engine | High | 9 | 8 | Chatbot recommends relevant products based on  customer’s history  or preferences. |
| 6 | As a business, I want the chatbot to process orders and payments securely so that I can complete transactions directly  in the chat. | Implement order and payment processing | High | 10 | 9 | Chatbot processes payments and orders with secure payment gateways. |
| 7 | As a business, I want the chatbot to track customer feedback so that I can improve my products and  services. | Implement feedback collection | Medium | 8 | 6 | Chatbot collects customer ratings and feedback after each interaction. |
| 8 | As a business, I want the chatbot to reduce human agent workload by handling routine inquiries so that my team can focus on complex  issues. | Implement automated responses for common queries | High | 9 | 7 | Chatbot can resolve at least 70% of FAQs automatically. |
| 9 | As a business, I want the chatbot to support multi- channel integration (website, social media, mobile) so  that I can reach | Implement multi-channel integration | High | 9 | 8 | Chatbot works seamlessly across website, social media, and mobile platforms. |

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|  | customers where they are. |  |  |  |  |  |
| 10 | As a business, I want the chatbot to provide detailed analytics and reports so that I can measure chatbot performance  and ROI. | Implement chatbot analytics dashboard | High | 8 | 7 | Chatbot provides metrics such as user interactions, success rate, and conversions. |

**Document 4: Agile PO Experience for Conversational AI Chatbot Project**

As a Product Owner (PO), I played a crucial role in defining the vision, prioritizing features, and ensuring the successful development of a Conversational AI (CAI) Chatbot. My responsibilities involved collaborating with stakeholders, managing the product backlog, and guiding the Scrum team to deliver a high-quality chatbot solution. Below is a detailed breakdown of the PO's responsibilities and key activities:

# Market Analysis

**Analysis of Market Need/Demand**:

* Conducted market research to assess demand for AI-powered chatbots in industries like e-commerce, banking, and healthcare.
* Evaluated competitors and identified key differentiators to enhance chatbot features.

# Availability of Similar Products:

* + Researched existing products in the market.
  + Analyzed their strengths and weaknesses to identify opportunities for differentiation and improvement in Conversational AI Chatbot.

# Enterprise Analysis

**Due Diligence on Market Opportunity**:

* + Assessed business opportunities for AI-driven automation in customer support.
  + Conducted feasibility studies on chatbot deployment in different market segments.
  + Assessed the potential user base and their specific needs.

# Product Vision and Roadmap Product Vision:

* + Developed a clear vision for Conversational AI Chatbot that addresses the identified needs and market

demand.

# Product Roadmap:

* + Created a roadmap outlining high-level features and a timeline for their delivery.
  + Ensured the roadmap aligns with stakeholder expectations and business goals.
  + Defined the long-term vision for the CAI chatbot, focusing on automation, personalization, and efficiency.

# Managing Product Features Managing Stakeholder Expectations:

* + Engaged with stakeholders to understand their needs and priorities.
  + Communicated regularly to manage expectations and keep stakeholders informed.

# Prioritization of Epics, Stories, and Features:

* + Prioritized features based on their criticality and return on investment (ROI).

# Managing Product Backlog Prioritization of User Stories:

* + Ranked user stories based on their importance and value.

# Reprioritization Based on Stakeholder Needs:

* + Continuously adjusted priorities based on changing stakeholder needs and feedback.

# Epics Planning:

* + Planned and managed larger epics that encompass multiple user stories.

# Managing Overall Iteration Progress Sprint Progress Review:

* + Regularly reviewed the progress of each sprint to ensure alignment with goals.

# Reprioritization of Sprints and Epics:

* + Adjusted priorities and plans as needed based on sprint progress and feedback.

# Sprint Retrospectives with Business Analyst:

* + Conducted retrospectives to identify improvement areas and implement changes.

# Sprint Meetings Facilitation

* + 1. **Sprint Planning Meeting**:
       - Planned the work to be completed in the upcoming sprint.

# Daily Scrum Meeting:

* + - * Conducted daily stand-ups to track progress and address any blockers.

# Sprint Review Meeting:

* + - * Reviewed the completed work with stakeholders at the end of each sprint.

# Sprint Retrospective Meeting:

* + - * Reflected on the sprint to identify successes and areas for improvement.

# Backlog Refinement Meeting:

* + - * Continuously refined and prioritized the backlog.

# User Stories Creation

User Stories Development

* + - * Created detailed user stories with clear acceptance criteria, tasks, priority, business value (BV), and complexity points (CP).
      * Ensured user stories were aligned with the overall product vision and goals

# Scrum Liaison Role

* + - * 1. **Communication with Business Stakeholders**:

Served as the primary point of contact between business stakeholders and the Scrum team.

Ensured stakeholders were informed about project development and progress.

# Collaboration with Scrum Teams:

Worked closely with Scrum teams to translate the product vision into actionable features.

Defined product features and broke them down into manageable product backlog items.

**Document 5:**

1. **Product Backlog:**

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| --- | --- | --- | --- | --- | --- | --- |
| **User Story ID** | **User Story** | **Task** | **Priority** | **BV** | **CP** | **Sprint** |
| **US001** | As a user, I want the chatbot to understand my natural language input so that I can communicate easily. | Implement NLP | High | 10 | 8 | 1 |
| **US002** | As a user, I want the chatbot to  detect my intent so that I get relevant responses. | Implement intent recognition | High | 9 | 7 | 1 |
| **US003** | As a user, I want the chatbot to extract key details from my input so that I don’t have to provide redundant information. | Implement entity recognition | High | 9 | 8 | 1 |
| **US004** | As a user, I want the chatbot to maintain context across  conversations so that I don’t have  to repeat myself. | Implement context management | High | 10 | 9 | 1 |
| **US005** | As a user, I want to receive  predefined quick reply options so that I can select responses faster. | Implement quick replies | Medium | 7 | 4 | 1 |
| **US006** | As a user, I want to provide input via voice so that I can interact hands-free. | Implement speech-to-text | Medium | 8 | 7 | 1 |
| **US007** | As a user, I want the chatbot to respond with voice output so that I can listen instead of reading. | Implement text-to-speech | Medium | 8 | 7 | 1 |
| **US008** | As a user, I want to switch languages in the chatbot so that I can interact in my preferred  language. | Implement multilingual support | High | 9 | 8 | 2 |
| **US009** | As a user, I want the chatbot to provide automated responses to FAQs so that I get instant answers. | Implement FAQ handling | High | 10 | 5 | 2 |
| **US010** | As a user, I want the chatbot to handle small talk so that the conversation feels natural. | Implement casual conversation | Medium | 7 | 5 | 2 |
| **US011** | As a user, I want the chatbot to suggest follow-up actions so that I  get a guided experience. | Implement response suggestions | High | 9 | 7 | 2 |

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| **US012** | As a user, I want to escalate to a  human agent if needed so that I can get better assistance. | Implement live agent handoff | High | 10 | 8 | 2 |
| **US013** | As a user, I want the chatbot to support rich media (images, GIFs, videos) so that I get more  engaging responses. | Implement multimedia responses | Medium | 8 | 6 | 2 |
| **US014** | As a user, I want to receive a summary of my conversation so  that I can review important points. | Implement conversation summary | Medium | 8 | 7 | 2 |
| **US015** | As a user, I want to provide feedback on chatbot responses so that it can improve over time. | Implement feedback collection | High | 9 | 7 | 3 |
| **US016** | As a user, I want the chatbot to recognize my previous interactions so that I get  personalized responses. | Implement user history tracking | High | 9 | 8 | 3 |
| **US017** | As a user, I want the chatbot to validate my input so that I provide  correct information. | Implement input validation | High | 9 | 6 | 3 |
| **US018** | As a user, I want the chatbot to recognize intent variations so that I don’t have to use exact phrases. | Implement synonym and phrase recognition | High | 9 | 7 | 3 |
| **US019** | As a user, I want the chatbot to  detect my sentiment so that it can adjust responses accordingly. | Implement sentiment analysis | Medium | 8 | 7 | 3 |
| **US020** | As a user, I want the chatbot to process structured inputs (forms, selections) so that I can provide data easily. | Implement structured input handling | Medium | 8 | 6 | 3 |
| **US021** | As a user, I want to receive proactive notifications from the chatbot so that I stay updated. | Implement push notifications | Medium | 7 | 5 | 3 |
| **US022** | As a user, I want to set reminders  with the chatbot so that I don’t  forget important tasks. | Implement reminder functionality | Medium | 8 | 6 | 4 |
| **US023** | As a user, I want to cancel or modify a request so that I can correct mistakes. | Implement request cancellation | Medium | 7 | 5 | 4 |
| **US024** | As a user, I want to access my chat history so that I can refer back to past interactions. | Implement chat history access | Medium | 8 | 6 | 4 |
| **US025** | As a user, I want to personalize  chatbot settings (e.g., tone, theme) so that I have a | Implement chatbot customization | Medium | 8 | 6 | 4 |

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|  | customized experience. |  |  |  |  |  |
| **US026** | As a business, I want the chatbot to handle customer queries 24/7 so that I can provide continuous  support. | Implement 24/7 chatbot availability | High | 10 | 8 | 4 |
| **US027** | As a business, I want the chatbot to integrate with my CRM system so that I can track customer  interactions. | Implement CRM integration | High | 9 | 8 | 4 |
| **US028** | As a business, I want the chatbot to automate lead generation so that I can increase sales  opportunities. | Implement lead generation flow | High | 9 | 7 | 4 |
| **US029** | As a business, I want the chatbot to handle simple tasks like booking appointments or scheduling meetings so that I can save time. | Implement appointment scheduling | High | 8 | 6 | 5 |
| **US030** | As a business, I want the chatbot to provide product recommendations based on  customer preferences so that I can increase conversions. | Implement product recommendation engine | High | 9 | 8 | 5 |
| **US031** | As a business, I want the chatbot to process orders and payments  securely so that I can complete transactions directly in the chat. | Implement order and payment processing | High | 10 | 9 | 5 |
| **US032** | As a business, I want the chatbot to track customer feedback so that I can improve my products and services. | Implement feedback collection | Medium | 8 | 6 | 5 |
| **US033** | As a business, I want the chatbot to reduce human agent workload by handling routine inquiries so that my team can focus on  complex issues. | Implement automated responses for common queries | High | 9 | 7 | 5 |
| **US034** | As a business, I want the chatbot to support multi-channel integration (website, social media,  mobile) so that I can reach customers where they are. | Implement multi-channel integration | High | 9 | 8 | 5 |
| **US035** | As a business, I want the chatbot to provide detailed analytics and reports so that I can measure | Implement chatbot analytics dashboard | High | 8 | 7 | 5 |

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|  | chatbot performance and ROI. |  |  |  |  |  |

1. **Sprint Backlog:**

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| --- | --- | --- | --- | --- | --- |
| **User Story ID** | **User Story** | **Task** | **Owner** | **Status** | **Estimated**  **Effort (hours)** |
| **US001** | As a user, I want the chatbot to understand my natural language input so that I can communicate  easily. | Implement NLP | AI  Engineer | In Progress | 30 |
| **US002** | As a user, I want the chatbot to detect my intent so that I get  relevant responses. | Implement intent recognition | AI  Engineer | In Progress | 28 |
| **US003** | As a user, I want the chatbot to extract key details from my input so that I don’t have to provide redundant  information. | Implement entity recognition | AI  Engineer | In Progress | 28 |
| **US004** | As a user, I want the chatbot to maintain context across conversations so that I don’t have  to repeat myself. | Implement context management | AI  Engineer | To Do | 20 |
| **US005** | As a user, I want to receive predefined quick reply options so  that I can select responses faster. | Implement quick replies | UI-UX  Developer | To Do | 15 |
| **US006** | As a user, I want | Implement | AI | In | 18 |

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|  | to provide input via voice so that I  can interact hands-free. | speech-to-text | Engineer | Progress |  |
| **US007** | As a user, I want the chatbot to respond with voice output so that I can listen instead of  reading. | Implement text- to-speech | AI  Engineer | In Progress | 18 |
| **US008** | As a user, I want to switch languages in the chatbot so that I can interact in my preferred  language. | Implement multilingual support | AI  Engineer | To Do | 12 |
| **US009** | As a user, I want the chatbot to provide automated responses to FAQs so that I get instant answers. | Implement FAQ handling | AI  Engineer | To Do | 08 |
| **US010** | As a user, I want the chatbot to handle small talk so that the  conversation feels natural. | Implement casual conversation | AI  Engineer | To Do | 12 |
| **US011** | As a user, I want the chatbot to suggest follow-up actions so that I get a guided  experience. | Implement response suggestions | AI  Engineer | To Do | 18 |
| **US012** | As a user, I want to escalate to a human agent if needed so that I  can get better assistance. | Implement live agent handoff | Developer | To Do | 20 |
| **US013** | As a user, I want  the chatbot to support rich | Implement  multimedia responses | AI  Engineer | To Do | 20 |

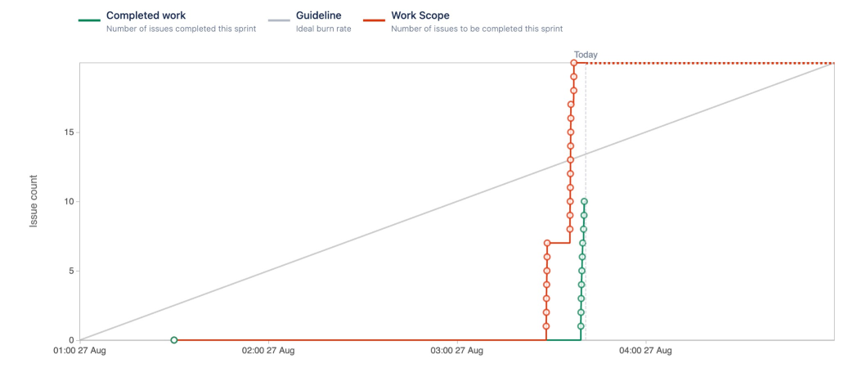
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | media (images, GIFs, videos) so that I get more  engaging responses. |  |  |  |  |
| **US014** | As a user, I want to receive a summary of my conversation so that I can review  important points. | Implement conversation summary | Developer | To Do | 20 |
| **US015** | As a user, I want to provide feedback on chatbot responses so that it can improve  over time. | Implement feedback collection | Developer | In Progress | 16 |
| **US016** | As a user, I want the chatbot to recognize my previous interactions so that I get personalized  responses. | Implement user history tracking | Developer | To Do | 18 |
| **US017** | As a user, I want the chatbot to validate my input so that I provide correct  information. | Implement input validation | AI  Engineer | In Progress | 28 |
| **US018** | As a user, I want the chatbot to recognize intent variations so that I don’t have to  use exact phrases. | Implement synonym and phrase recognition | AI  Engineer | To Do | 24 |
| **US019** | As a user, I want the chatbot to detect my sentiment so that it can adjust responses accordingly. | Implement sentiment analysis | AI  Engineer | To Do | 28 |
| **US020** | As a user, I want | Implement | AI | To Do | 30 |

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| --- | --- | --- | --- | --- | --- |
|  | the chatbot to process structured inputs (forms, selections) so that I can provide data  easily. | structured input handling | Engineer |  |  |
| **US021** | As a user, I want to receive proactive notifications from the chatbot so  that I stay updated. | Implement push notifications | Developer | To Do | 24 |
| **US022** | As a user, I want to set reminders with the chatbot so that I don’t forget important  tasks. | Implement reminder functionality | Developer | To Do | 18 |
| **US023** | As a user, I want to cancel or modify a request so that I can  correct mistakes. | Implement request cancellation | Developer | To Do | 16 |
| **US024** | As a user, I want to access my chat history so that I can refer back to  past interactions. | Implement chat history access | Developer | To Do | 14 |
| **US025** | As a user, I want to personalize chatbot settings (e.g., tone, theme) so that I have a customized  experience. | Implement chatbot customization | AI  Engineer | To Do | 18 |
| **US026** | As a business, I want the chatbot to handle customer queries 24/7 so that I can provide continuous support. | Implement 24/7 chatbot availability | AI  Engineer | To Do | 14 |

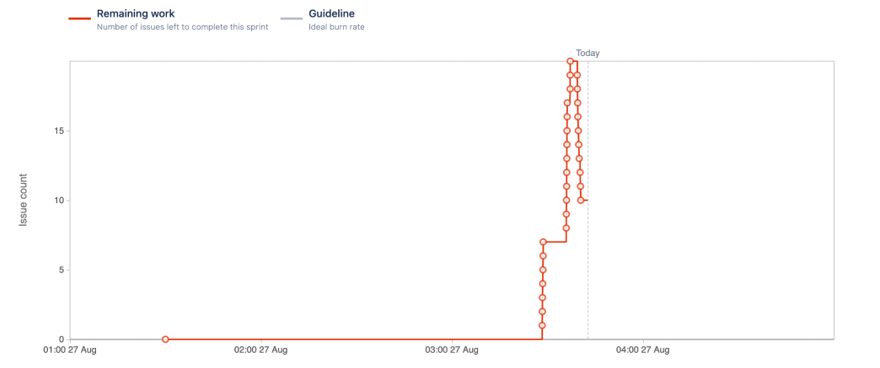
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **US027** | As a business, I want the chatbot to integrate with my CRM system so that I can track customer  interactions. | Implement CRM integration | Backend Developer | To Do | 14 |
| **US028** | As a business, I want the chatbot to automate lead generation so that I can increase  sales opportunities. | Implement lead generation flow | Backend Developer | To Do | 12 |
| **US029** | As a business, I want the chatbot to handle simple tasks like booking appointments or scheduling meetings so that I  can save time. | Implement appointment scheduling | Backend Developer | To Do | 12 |
| **US030** | As a business, I want the chatbot to provide product recommendations based on customer preferences so that I can increase  conversions. | Implement product recommendation engine | Backend Developer | To Do | 16 |
| **US031** | As a business, I want the chatbot to process orders and payments securely so that I can complete transactions directly in the  chat. | Implement order and payment processing | Developer | To Do | 18 |
| **US032** | As a business, I want the chatbot to track customer feedback so that I can improve my | Implement feedback collection | Backend Developer | To Do | 12 |

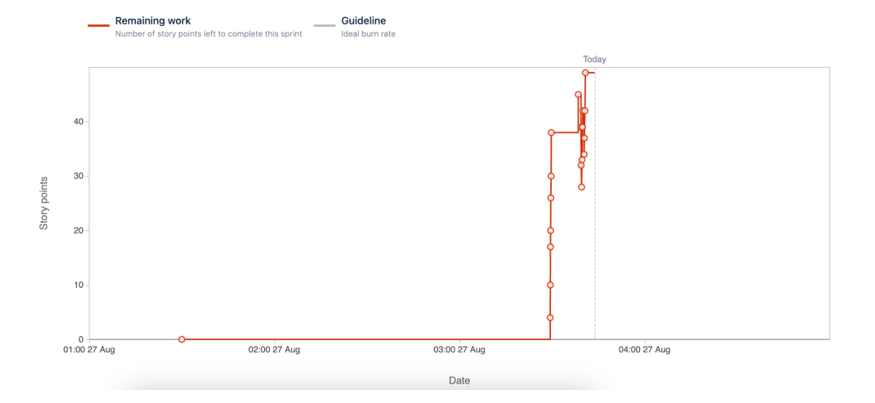
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | products and  services. |  |  |  |  |
| **US033** | As a business, I want the chatbot to reduce human agent workload by handling routine inquiries so that my team can focus on  complex issues. | Implement automated responses for common queries | Backend Developer | To Do | 12 |
| **US034** | As a business, I want the chatbot to support multi- channel integration (website, social media, mobile) so that I can reach customers where  they are. | Implement multi-channel integration | Backend Developer | To Do | 16 |
| **US035** | As a business, I want the chatbot to provide detailed analytics and reports so that I can measure chatbot performance and  ROI. | Implement chatbot analytics dashboard | Backend Developer | To Do | 08 |

**Product Burndown Chart:**



**Sprint Burndown Chart:**

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**Document 6: Sprint meetings.**

**Meeting Type 1: Sprint Planning meeting**

|  |  |
| --- | --- |
| **Date** | 23/01/2025 |
| **Time** | 09:30 AM |
| **Location** | B12 Bay, HQ |
| **Prepared By** | Vedant |
| **Attendees** | Business Analyst, Technical Team, Project  Manager, Architect, Data Scientist. |

**Agenda Topic:**

|  |  |  |
| --- | --- | --- |
| **Topic** | **Presenter** | **Time allotted** |
| ChatBot Interface and Functionalities. | Vedant | 1:00 Hr |
| API Finalization | Vedant | 1:00 Hr |

**Other Information:**

|  |  |
| --- | --- |
| **Observers** | Project manager, Solution Architect |
| **Resources** | Internet |
| **Special Notes** | NA |

**Sprint review meeting:**

|  |  |
| --- | --- |
| **Date** | 26/01/2025 |
| **Time** | 09:00 AM |
| **Location** | B12 Bay, HQ |
| **Prepared By** | Vedant |
| **Attendees** | Business Analyst, Technical Team, Project  Manager, Architect, Data Scientist. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sprint status** | **Things to demo** | **Quick updates** | **What’s next** |
| **In progress** | **API and NLP Model Integration.** | **API and NLP Integration done.** | **Text To Speech and Speech To Text model Integration.** |

**Sprint retrospective meeting:**

|  |  |
| --- | --- |
| **Date** | 26/01/2025 |
| **Time** | 09:00 AM |
| **Location** | B12 Bay, HQ |
| **Prepared By** | Vedant |
| **Attendees** | Business Analyst, Technical Team, Project  Manager, Architect, Data Scientist. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agenda** | **What went**  **well** | **What didn’t go**  **well** | **Questions** | **Reference** |
| API Integration. | All Stories | NA | NA | NA |
| NLP Model Integration. | NA | Integration | Already discussed | Modifications required |

**Daily Stand-up Meeting**

**Question: What did you do yesterday?**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Role** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| AI | Worked on NLP | Continued | Started | Completed | Worked on | Started | Finished |
| Engineer | implementation. | working on | working on | intent | entity | casual | casual |
| 1 |  | NLP. | intent | recognition. | recognition. | conversation | conversation |
|  |  |  | recognition. |  |  | feature. | feature. |
| AI | Developed | Finished | Worked on | Finalized | Implemented | Started | Continued |
| Engineer | context | context | entity | entity | basic casual | multilingual | multilingual |
| 2 | management | management | recognition. | recognition | conversation. | support. | support. |
|  | for chatbot. | for chatbot. |  | model. |  |  |  |
| Developer | Designed quick | Implemented | Tested | Integrated | Finalized UI | Tested | Finalized |
| 1 | replies UI. | quick reply | quick | quick | for multi- | multi- | multi- |
|  |  | buttons. | replies on | replies in | channel. | channel UI. | channel UI. |
|  |  |  | platform. | UI. |  |  |  |
| Developer | Set up CRM API. | Integrated | Tested CRM | Worked on | Continued | Integrated | Tested |
| 2 |  | CRM with | integration. | lead | lead | payment | payment |
|  |  | backend. |  | generation | generation | gateway. | gateway |
|  |  |  |  | flow. | development. |  | functionality. |
| Developer | Implemented | Continued | Worked on | Integrated | Tested | Focused on |  |
| 3 | backend for lead | developing | feedback | payment | payment | performance |
|  | generation. | lead | collection | gateway | gateway with | monitoring |
|  |  | generation. | flow. | API. | sandbox | setup. |
|  |  |  |  |  | data. |  |

**Question: What will you do today?**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Role** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| AI  Engineer 1 | Continue testing intent  recognition. | Test intent recognition with sample  data. | Start working on entity  recognition. | Implement context management  for chatbot. | Test entity recognition and context. | Start working on multilingual  support. | Continue working on multilingual  support. |
| AI  Engineer 2 | Continue with entity recognition model. | Start implementing small talk functionality. | Test entity recognition with dataset. | Finalize casual conversation feature. | Continue working on multilingual support. | Test multilingual support across  languages. | Finalize multilingual feature. |
| Developer 1 | Implement quick reply functionality. | Test quick reply functionality. | Work on multi- channel UI elements. | Finalize multi- channel UI integration. | Test multi- channel functionality. | Work on user interaction  flow for chatbot. | Finalize chatbot user interaction flow. |
| Developer 2 | Finish CRM integration testing. | Finalize lead generation flow. | Implement lead data capture. | Work on feedback collection  feature. | Continue feedback system  development. | Implement chatbot analytics. | Test chatbot analytics and  reporting. |
| Developer 3 | Finalize lead generation API. | Continue lead generation testing. | Test lead generation with real  data. | Work on payment gateway  integration. | Continue payment gateway  testing. | Focus on performance monitoring  features. | Test performance monitoring  setup. |

**Question: What (if any) is blocking your progress?**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Role** | **Monday** | **Tuesday** | **Wednes**  **day** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| AI Engineer 1 | None | None | None | None | None | None | None |
| AI Engineer 2 | None | None | None | None | None | None | None |
| Developer 1 | Waiting for backend API for quick  replies. | Waiting for API integrati on. | None | None | None | Minor design alignment issues. | No blockers. |
| Developer 2 | Need clarification on CRM data usage. | None | None | Waiting for feedback on lead  flow. | No blockers. | None | None |
| Developer 3 | Need feedback on lead generation  API. | None | None | None | No blockers. | None | None |