Project Design Phase-II

Solution Requirements (Functional & Non-functional)

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| Team ID | NM2023TMID07991 |
| Project Name | The IssueTracker: A Reliable Complaint Management System for Improved Customer Service |
| MaximumMarks | 4 |

# Functional Requirements:

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | Detailed bin inventory. | he bin inventory of an issue tracker complaint management system refers to the specific components or modules that make up the system. Here is a detailed breakdown. Complaint submission forms/screens: Allows customers to submit complaints with relevant information and attachments. Provides an overview of complaint statuses, statistics, and notifications for support staff. |
| FR-2 | Real time bin monitoring. | Real-time bin monitoring in the issue tracker complaint management system involves the ability to track and monitor the system's components, processes, and performance in real-time. Here are some key elements of real-time bin monitoring. Continuous monitoring of the system's hardware, software, and network infrastructure. Real-time alerts and notifications for any issues or abnormalities detected in the system. Monitoring and tracking system performance metrics such as response time, processing time, and resource utilization. Real-time visualization of performance data through dashboards or graphs. |
| FR-3 | Expensive bins. | In the context of the issue tracker complaint management system, the term "expensive bins" does not have a specific meaning. It is possible that there is a miscommunication or misunderstanding. If you are referring to the cost of implementing or maintaining the system, the expenses can vary depending on several factors. |
| FR-4 | Adjust bin distribution. | Ensure the most optimal distribution of bins. Identify areas with either dense or sparse bin distribution.  Make sure all trash types are represented within a stand.  Based on the historical data, you can adjust bin capacity  or location where necessary. |
| FR-5 | Eliminate unefficient picks. | Streamline the Complaint Handling Process: Identify any bottlenecks or unnecessary steps in the complaint handling process and streamline it for efficiency. Simplify and automate tasks where possible to reduce manual effort and minimize human error. |

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|  |  | Utilize intelligent algorithms or rules to automatically assign and prioritize complaints based on their severity, impact, or predefined criteria. This ensures that high-priority issues are addressed promptly and efficiently. |
| FR-6 | Plan waste collection routes. | The issue tracker complaint management system is primarily designed to handle and manage customer complaints, rather than waste collection routes. However, if you are looking to optimize waste collection routes, you may need a specialized system or software specifically designed for waste management and route planning. Such systems typically consider factors like bin locations, collection schedules, truck capacities, traffic conditions, and optimization algorithms to create efficient routes. |

# Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | Usability is a crucial non-functional requirement for the issue tracker complaint management system. It focuses on ensuring that the system is user-friendly, intuitive, and easy to use. Here are some key usability non-functional requirements. The system should have a well-designed and visually appealing user interface that is intuitive and easy to navigate. The layout should be logical, and controls and options should be clearly labeled and organized. |
| NFR-2 | **Security** | Security is a critical non-functional requirement for the issue tracker complaint management system to ensure the confidentiality, integrity, and availability of sensitive data. Here are some key security non-functional requirements for the system. |
| NFR-3 | **Reliability** | Reliability is an important non-functional requirement for the issue tracker complaint management system. It focuses on the system's ability to perform consistently and reliably over time, ensuring that it is available and functioning as expected. Here are some key reliability non-functional requirements for the system. The system should be designed to tolerate and handle faults, errors, or failures gracefully. This may involve implementing fault-tolerant mechanisms such as redundant servers, data backups, and automated error recovery processes. |
| NFR-4 | **Performance** | Performance is a crucial non-functional requirement for the issue tracker complaint management system. It focuses on ensuring that the system operates efficiently, with optimal response times and throughput, to handle user interactions and process complaints effectively. Here are some key performance non-functional requirements for the system. The system should provide prompt responses to user actions, such as submitting a complaint or retrieving complaint details. It should aim for low latency to minimize waiting times and provide a smooth user experience. |
| NFR-5 | **Availability** | Availability is a critical non-functional requirement for the issue tracker complaint management system. It focuses on ensuring that the system is accessible and operational for users when they need it. Here are some key availability non-functional requirements for the system |
| NFR-6 | **Scalability** | Scalability is an important non-functional requirement for the issue tracker complaint management system. It focuses on the system's ability to handle increasing workloads, user traffic, and data volume without significant degradation in performance. Here are some key scalability non-functional requirements for the system |