

Software Engineering Project

Milestone - 1

Tasks for Milestone 1

1. Identifying Primary Secondary and Tertiary Users
2. User Stories for the requirements based on **SMART** guidelines

Identifying Primary Secondary and Tertiary Users

Here are the various types of users that are identified to use this application and categorized into different groups

- **Primary Users**

These are direct users who interact with the system regularly and whose primary activities are directly supported by the system.

1. **Students:** They use the system to raise tickets for issues or queries and engage with the support process, including viewing FAQs, participating in Discourse threads, and providing feedback on resolved tickets.
2. **Support Staff:** This group includes individuals responsible for addressing and resolving the tickets raised by students. They interact with the system by managing tickets, responding to queries, and updating the status of issues.
3. **Administrators:** These users oversee the system's operation, including managing user roles, updating FAQs based on resolved tickets, and analyzing feedback for system improvement.

- **Secondary Users**

These users indirectly interact with the system or use it for oversight, maintenance, and analysis purposes.

1. **Developers and Technical Teams:** Responsible for integrating new features, maintaining the system, ensuring uptime, and addressing any technical issues that arise.

2. **Support Team Leaders:** They review performance metrics, oversee the support staff's work, and use feedback and system data to identify training needs or areas for improvement.
3. **Data Analysts:** Specialists who analyze ticket data, feedback, and system usage patterns to provide insights into common issues, system efficiency, and user satisfaction.

Tertiary Users

These users are not directly interacting with the system but are affected by its outputs or may use its data for external purposes.

1. **Higher Education Authorities:** These could include university management or external educational bodies interested in oversight and ensuring the system meets quality and responsiveness standards.
2. **Third-Party Applications and Services:** External services that might integrate with the system for added functionalities, such as chatbots for automated support or analytics platforms for deeper insights.
3. **Researchers and Educational Technologists:** Individuals or groups studying the effectiveness of support systems in educational environments could use anonymized data from the system for their analyses.

Writing User Stories

Primary Users

Students

1. As a student, I want to see a Discourse thread linked to each support ticket I create, so that I can follow discussions and solutions related to my query.
2. As a student, I want to be able to +1 an existing ticket that matches my concern, so that I can avoid creating duplicate tickets and help prioritize common issues.
3. As a student, I want to receive notifications when my ticket status changes or when there's a reply on the associated Discourse thread, so that I'm always informed about the progress and solutions.
4. As a student, I want to have the ability to mark a ticket as resolved once my query has been adequately addressed, ensuring clarity for support staff and other students regarding the resolution of common issues.

Support Staff

5. As a support staff member, I want to convert a private Discourse thread to a public one after resolving a ticket, so that the solution can benefit more students and possibly reduce future tickets on the same issue.
6. As a support staff member, I want to receive alerts on high-priority tickets through GChat, so that I can address urgent issues promptly.

Administrators

7. As an administrator, I want to categorize resolved tickets and their solutions into the dynamic FAQ section, so that students can easily find answers to common queries, reducing the overall ticket volume.
8. As an administrator, I want to be able to send alerts on GChat to support staff for urgent issues or updates, ensuring they are promptly informed and can react quickly to address any concerns.

Secondary Users

Developers and Technical Teams

7. As a developer, I want to integrate the ticketing system with Discourse and Google Chat through APIs, so that the system functions seamlessly and automates notifications and thread creation.

Data Analysts

8. As a data analyst, I want to analyse the feedback and +1/-1 data from tickets, so that we can generate insights on support performance and common issues. (Optional)

Tertiary Users

Third Party Apps

9. As a third-party app developer (considering integration), I want to access public data from the ticketing system, such as FAQs and public Discourse threads, so that I can include this information in our app to provide additional resources to students. (optional)