1. Introduction

We are developing a Kanban-based issue-tracking application specifically designed for software engineers. Our goal is to create a tool that enhances task management, project tracking, and team collaboration. The survey was conducted among VT computer science students who represent future software engineers. These participants are familiar with task and issue-tracking tools commonly used in software development, making them relevant stakeholders in our elicitation process. We selected a survey for our requirements elicitation because it allowed us to gather insights quickly and directly from users who are likely to utilize such tools in their professional careers. The survey consisted of three key questions, including a mix of closed ended and open-ended responses. This combination provided us with both quantitative and qualitative insights. Their feedback helped us align our tool's design with their needs and preferences.

2. The four questions selected to ask yourself with answers
    1. What is the project objective?
        a. The objective of this project is to design an issue tracking boot to help automate the software engineering process in order to promote productivity and general product efficiency.
    2. What problem are you trying to solve?
        a. The problem we are trying to solve is the lack of communication between software engineers and evenly distributing work where bottlenecking is at a low to ensure methodical work.
    3. Who is the target audience?
        a. The targeted audience is software engineers and software companies who could benefit from the issue bot.
    4. What is the approval process for requirements?
        a. We will collect data and requirements through our group brainstorming sessions and then our team will filter the gathered requirements for the best ideas.

3. Survey Questions

Below are the questions we asked in the survey:

1. On a scale of 1-5, how useful do you find task-tracking tools (e.g., Trello, Jira) for managing group projects?
2. How often do you use any task or issue-tracking tool for your coursework or personal projects?
    - Daily
    - Weekly

    - Occasionally
    - Never
3. What feature or improvement would you find most helpful in a task-tracking system designed for students?

4. Survey Responses

- Usefulness of Task-Tracking Tools:
    - ⅝ students find the task-tracking tools useful.
- Frequency of Use:
    - 75% of students use the issue tracking tool daily.
- Desired Features/Improvements: The most commonly requested features included:
    - Seeing my progress daily.
    - To do list based on priority
    - Seeing everyone else's completed task on the to do list
    - Reminders
    - An even distribution of tasks
    - Integration with other software development tools
    - Connecting the tool to canvas or github
    - Combining with existing applications like GitHub

5. Analysis of Responses

- Based on the survey, we identified key functionalities that students want in a task-tracking system:
    - Integration with tools that students already use (e.g., course management platforms like Canvas).
    - Real-time collaboration features and automated reminders to manage deadlines more effectively.
    - A streamlined user interface that focuses on simplicity and ease of use.
- The application should prioritize:
    - Usability: Simple and easy for students to learn and use efficiently.
    - Scalability: Should work well for both small projects and large collaborative efforts.
- Students find task-tracking tools generally useful but desire more tailored solutions that are specific to their needs as students, such as integration with coursework and intuitive user interfaces.

6. Conclusion

Summary of Elicited Requirements: The survey revealed that while students find existing task-tracking tools like Trello and Jira helpful, they are looking for features that cater specifically to academic and collaborative workflows. Our tool will focus on usability, integration, and real-time collaboration.

7. Link to Survey Responses

https://docs.google.com/forms/d/e/1FAIpQLSdguJxk06V0MCrvp84KdHQiyxQHh6hnUuWzq4nVXxHVs0kUNg/viewform