Minecraft Add-On, Team 3, Course section W01, D2L group #08

Date: 01/29/24

Project Overview
Background:

KSU Esports has an official KSU Minecraft server with over 450 members. They mainly use free open-source software to run the server. Some examples of software they currently use are moderation and event plug-ins, Discord bots, etc. Currently, if they have an issue, bug, or suggestion for one of their pieces of software, they must contact the original developer to see if they are interested in working on the software, and if not, they must work on the application themselves. Their current software also isn't always a perfect fit for the server/community; it may be missing features that they need. They also use Minecraft version Paper for their server as well.

Objectives:

The primary goal of this project is to create an in-game ticketing and reporting system that Minecraft players can easily use to submit any moderation requests they may have. It will feature an easy-to-use user interface for initiating and tracking tickets. The system needs seamless integration with the official KSU Minecraft Discord server as another access mechanism and to support notifications. As this tooling involves operation at the server level, it should prioritize resource efficiency and minimize performance impact through thoughtful architectural decisions. Code organization and modularity are also important to build a maintainable, adaptable ticketing platform for preserving long-term utility and the ability to extend with new capabilities in the future. By facilitating player reporting, the ticketing system aims to foster accountability within the game community.

Scope:

Join the KSU Esports Discord and Minecraft servers to understand the current system.

Project Participants

Roles	Name	Major responsibilities	Contact (Email and/or Phone)
Project owner sponsor	Kylie Nowokunski	Determine the Projects goals and receive the deliverables throughout the project	Konowoku1@students.kennesaw.edu
Team leader	Ryan Shah	Technical Writing, meeting note taker/recorder, creating and maintaining the team site, cybersecurity research and some web server testing. I also help to facilitate group	rshah20@students.kennesaw.edu Phone: 678-779-9544

		progress by scheduling and running the team meetings, creating outlines for presentations, being available as much as possible to help clarify any issues or questions regarding the project and its expectations. I also act as liaison between the Project Owner/Professor and the team.	
Team members	Reece Clark	Research, network defense planning, security policy drafting & implementation.	rclark99@students.kennesaw.edu Phone: 678-207-9674
	Tristan Lance	Research risk assessment on import assets, list common threats, analysis on threats that could happen	tlance2@students.kennesaw.edu Phone: 404-348-6794
	Liliana Pantoja	Server infrastructure management, research security hardening tactics, penetration testing within the server.	lpantoja@students.kennesaw.edu Phone: 470-338-0181
	Alex Millerioux	Help to research and implement the in accordance with the various tasks that need to be done in order to successfully complete this project.	amilleri@students.kennesaw.edu Phone: 240-888-3657
Advisor / Instructor	Donald Privitera	Facilitate project progress; advise on project planning and management.	dprivit2@kennesaw.edu

Project website
https://sites.google.com/view/minecraftteam3/home

Final Deliverables

1. A complete in-game ticketing/reporting system for the KSU Minecraft server which is integrated into their discord with easy-to-use UI for players to interact with.

Milestones

#1 - By 02/18/2024

#2 - By 03/24/2024

#3 FINAL - By 4/19/2023

Deliverable Expectations

Milestone 1 Expectations:

- Research Minecraft plug-in (paper)/mod (fabric) development
- Draft architecture for add-on
- Set up test environment on PC

Milestone 2 Expectations:

- Start coding and implementing chat commands
- Set up plug-in to connect with SQL database

Milestone 3 Expectations:

- Store all required information in the SQL database and polish UI
- Push in-game tickets to the KSU Discord channel

Future milestone meetings date/time

Milestone 1 meeting date and time: February 16th at 4:30 PM

Milestone 2 meeting date and time: March 22nd at 4:30 PM

Milestone 3 meeting date and time: April 19th at 4:30 PM

Collaboration Plan

The primary source of communication for the group will be through Teams. We have set up filesharing and a chat to communicate in MS Teams. The team will meet weekly on Thursdays at 6 P.M. on Teams. The goal of each meeting will be to obtain a status report of each member's progress in the Project and discuss deliverables. Also, the team leader and some members will communicate with the project owners weekly on Friday at 4:30 pm via MS Teams and submit weekly progress reports to the project owners.

Communication Plan & Policy

- Always try their best to share the work equally and everyone must be open to compromise.
- The job assigned to each group must be or each member must do his/her best to be at 50% of his task a week before the deliverables.
- Always ask for help when you know you will be late to complete your task or cannot do the work.
- Each group member must always keep up with the discussion in the group chat or reply on time avoiding ghosting other members when mentioned in chat for 10 hours outside of exempt from communications hours.
- The exemption from communication hours is defined as 1 – 7 AM communication is not expected during these hours for example if someone mentions you at 10 PM the expectation would be for you to respond by at least 3 PM.

- In the instance someone doesn't respond within 10 hours agreed upon everyone has exchanged emails and numbers via this document. The first step will be reaching out via email. If that doesn't work, then the next step would be to text if you get no response then call them multiple times, and if they are still ghosting at that point the team leader will contact the instructor to resolve the issue.
- Weekly meetings are on Thursdays at 6 pm. Each group member should respect the meeting time we agreed upon or inform the group ahead of time if you're going to be absent.
- Always come prepared to the meetings and share something. Everyone should contribute and speak.
- The team will be using MS Teams for communication, file sharing, and meetings.

Project Schedule, WBS, and Tasks Plan

See the .MPP file and Gantt chart - file attached.

Project Change Management

If the scope and or the requirements were to change the project owner Kylie Nowokunski would have ultimately approve of these changes. Our group would have to adapt to the changes made to complete the project. Also, we have split our group up into coders and testers so if the change were to be on the software side the coders would be affected.

Quality Assurance Plan

- The group is split up into coders and testers.
- Coders will make the actual ticketing/reporting system.
- Testers will test what the coders make as if they were regular players on the Minecraft server.
- Testers are checking the coders' work to see what needs to be fixed to provide a high-quality easy-to-use system for the players of the server.
- Testers will be looking out for things such as bugs in chat commands and test every slash command example "/chat" to see which one is working as intended.
- Testers will spend 7 days or more if needed testing the system.
- There will be four break/fix cycles throughout the project, two for Milestone 2 and two for Milestone 3 within the week planned for each Milestone.
- Break: Identify any defects, bugs, or issues with the system. Testers will test for things such as functionality, usability, performance bottlenecks, and security vulnerabilities.
- Triage and Prioritize: Reported issues are triaged and prioritized based on their severity and impact. High-priority issues that significantly impact functionality or pose critical risk are addressed first.
- Fix: The coders investigate and analyze the reported issues. They will implement the necessary code changes to resolve the issues
- Re-test: Once the issues are fixed, the testers will re-test the affected areas. They will validate that the fixes have been correctly implemented and that the issues have been resolved. Additionally, they perform regression testing to ensure that the fixes have not introduced any new defects or issues in other areas.
- Regression and Cycle Continuation: If new issues are found during the re-testing phase, the break/fix cycle continues with the newly identified defects being reported, triaged, and fixed. This iterative process continues until all known high-priority issues are resolved.
- Once everything is fixed repeat this for the next cycle planned within the Milestone.

Risk Management Plan

- We have established that each member must do his best to be at 50% of his task a week before the deliverables to avoid missing deliverables.
- If D2L and Teams were to go down, we would act accordingly. For D2L, it would only affect the group if it went down before submitting an assignment due during the downtime, and the resolution would be to contact the instructor to explain the situation. For Teams, the form of communication would shift to text messaging and meetings would be over the phone if necessary.
- If someone misses getting their work turned over or turning over non-usable work to the team the work will be allocated to a different member with the least number of tasks as the work needs to be completed and if it is non-usable the work that has been done will be scrapped since it can't be used anyways.
- If the sponsor misses a meeting, we will kindly ask to reschedule it for a later day or time because those sponsor meetings are very important.
- If for some reason the Team Leader cannot meet with the sponsor that week Reece Clark will be the alternate followed by Alex Millerioux as the alternate's alternate.

Signed by:

Ryan Shah

Alex Millerioux

Tristan Lance

Liliana Pintcu