Mapping of Individual Performance

07. Mapping / Declaration for Each Team:

This document outlines the individual contributions of the three team members involved in the development of the "Kids Color Book" educational game project. The work has been distributed to ensure balanced involvement in planning, design, coding, testing, and documentation.

Name: Maaz Ahmed khawaja, Ifrah Sanaullah, Abanoub Hanna
Team Size: 3 Members
Game Engine: Godot
Language Used: GDScript
Project Title: *Kids Color Book*
Target Audience: Children aged 5–10

Maaz Ahmed khawaja Individual Performance:

I declare the following mapping of responsibilities and individual contributions for this project:

Designer of the Final Presentation:

• Created the full 15-minute presentation while ensuring an additional 2-minute section for questions, meeting all project requirements.
• Compiled and organized all necessary materials to clearly explain the project goals, design decisions, technical implementation, and demo plan.
• Structured the presentation for clarity and flow, making it easy to follow and professional.
• Focused on selecting content and visuals that best demonstrate our team's development process and readiness for acceptance.

Documentation Lead:

• Responsible for creating and maintaining the project documentation throughout development.
• Updated the feature descriptions and project logs whenever changes were made or new functionality was implemented.
• Ensured all documentation was clear, consistent, and ready for submission.

Mapping of Individual Performance

UI/UX Designer:

• Designed the overall user interface layout using Canva, planning the visual structure before implementation in Godot.
• Focused on child-friendly design elements, including large, clear buttons and high-contrast color palettes for accessibility.
• Conducted informal testing to verify that navigation and interaction were intuitive for the target age group (5–10 years).

Artist / Illustrator:

• Created the game's background artwork entirely from scratch, ensuring a playful, simple, and copyright-free design.
• Prepared the final image for use in Godot by optimizing dimensions and format for performance.
• Contributed feedback on visual consistency during UI development.

Developer / Game Logic:

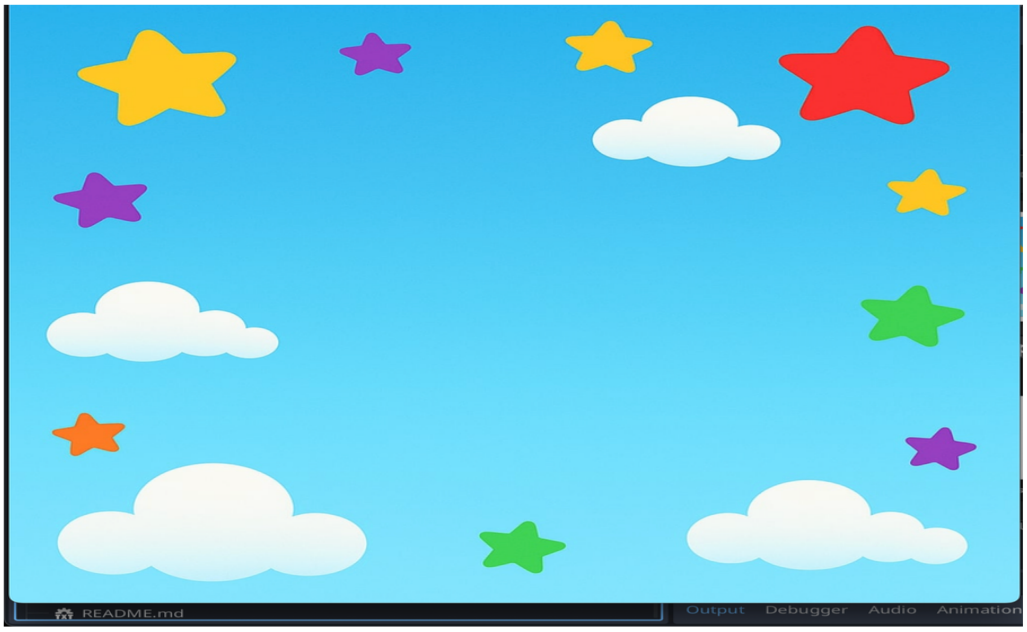
• Implemented the Godot scenes (StartScene.tscn and MainGame.tscn), connecting UI elements and navigation flow this also includes to test it on various laptops and os.
• Developed the color-fill logic, including custom error-prevention to avoid unintended color assignments.
• Integrated imported images and sound effects (gamestart.wav, win-sound.wav, game-over.wav) using Godot's AudioStreamPlayer nodes.
• Tested the Git repository with frequent, clearly documented commits to maintain version history and support team collaboration.

Collaboration and Quality Assurance (all members):

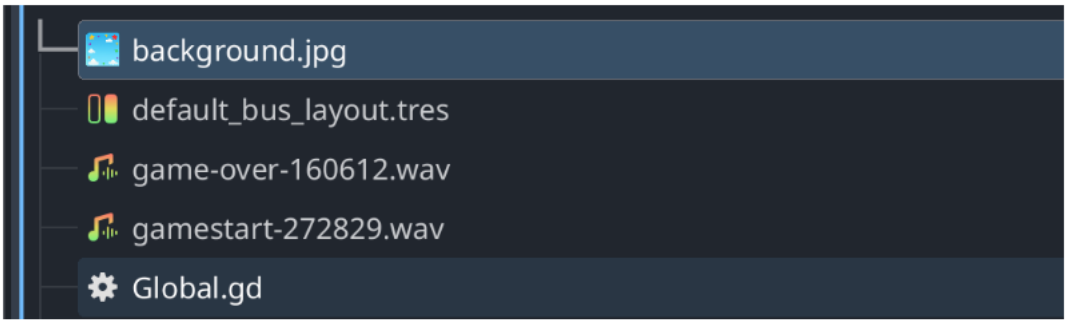
• Participated in regular reviews of game functionality and UI/UX design.
• Conducted joint troubleshooting sessions to resolve bugs or integration issues.
• Verified the final prototype against project requirements to ensure it was ready for acceptance.

Design of background.jpd using paint microsoft and canva and other tools. This picture is designed, owned and produced entirely by me so it can be used for monitization purposes, Find the image on next page ☺

Mapping of Individual Performance



All audio files that are used are carefully made and designed to be copyright free and can be used for purpose of professional release



Mapping of Individual Performance

Ifrah Sanaullah Individual Performance:

Below is a detailed summary of my individual contributions to the “Kids Color Book” project. These highlight my roles in idea development, game design, coding, documentation, and team collaboration.

1. Idea Generation and Selection:

Each team member contributed one original game idea to our professor. Out of all submissions, my idea was selected as the most suitable to proceed with. The concept focused on teaching color theory and color mixing to children through an interactive, gamified experience. After approval, I collaborated with my teammates to refine, pitch, and present the chosen idea as our final project direction.

2. UI Design and Game Flow Planning:

I led the design of the game’s visual structure and interface logic. This included defining the overall look and feel, button layouts, navigation flow, and user interaction style. I also created a gameplay dummy for Level 1 that outlined how color selection, feedback, and scoring should function. This dummy served as a blueprint for my teammates to develop the remaining levels.

3. Game Development (Initial Stage):

I began the game development in Godot using GDScript, creating the first playable version of Level 1. This prototype included basic UI elements, scene transitions, and initial logic for color selection and mixing. After completing this version, I handed it over to my teammates with instructions for further development.

4. Voice Feedback Feature for Accessibility:

To enhance accessibility for children who may have difficulty reading, I added voice .wav files that play during key game events. For example, when the game ends, a voice announces “Game Over” instead of showing only text. This feature helps players understand the game through auditory feedback, making the experience more engaging for young children.

Mapping of Individual Performance

5. Code Reviewing and Technical Advising:

After my teammates added new levels or features, I:

- Reviewed their code to ensure consistency and readability
- Helped clarify logic and suggested more efficient or cleaner solutions
- Recommended improvements based on testing and overall game vision I acted as a technical guide to maintain the original concept and ensure smooth gameplay.

6. Collaboration and Support:

Throughout the project, I:

- Participated in team meetings, pitch preparation, and feedback discussions
- Communicated clearly to keep development aligned with goals
- Supported design consistency and helped fix bugs as needed.

7. Testing and Quality Control:

I tested the game during both the early prototype and later development stages to ensure:

- All levels functioned smoothly
- Game feedback (win/loss messages) was appropriate
- Visual design remained child-friendly. I provided continuous feedback on playability, interface clarity, and overall experience.

8. Documentation Management and Quality Assurance:

While my teammates focused on game development, I took primary responsibility for project documentation, including:

- Requirements Documentation
- Architectural Documentation
- Test Documentation
- Acceptance Documentation
- User Documentation
- Project Documentation (approach and lessons learned)
- Team Contribution Declaration: I ensured every document reflected our game's features and gameplay accurately. Although some documents were initially drafted by others, I reviewed, edited, and updated them to keep everything clear, complete, and aligned with the professor's Task 2 and Task 3 checklists. This ensured our submission was professional and ready for evaluation.

Mapping of Individual Performance

9. Contribution to Presentation and Idea Pitch:

I created the initial pitch presentation using Canva to clearly communicate our game idea to the professor. While my teammates prepared the final presentation, I contributed significantly by adding player personas, updated gameplay theory, and detailed explanations of game mechanics. I also ensured the final presentation was complete and submitted it via Moodle.

10. Project Submission and Version Control Management:

I managed the submission of all project deliverables, including pushing the full game code to our GitLab repository and submitting all documents and presentations on time. Although the team collaborated on all tasks, I ensured everything was properly organized, aligned, and submitted before deadlines. This helped maintain clear communication and kept the project on track.

11. Weekly Progress Reporting:

Our team collaboratively prepared weekly progress reports through Moodle. Since I managed the documentation, I mainly wrote these reports summarizing weekly achievements, upcoming tasks, and pending issues. This kept our professor informed of our progress and helped our team stay organized.

12. Kanban Board Management:

My teammates gathered weekly updates based on the professor's requirements, game features, and task progress. I organized this information by creating and managing a Kanban board on GitLab. This visual tool helped us track progress and pending tasks, improved coordination, and ensured workload and deadlines were managed effectively.

13. Persona Creation and Integration:

Each team member created one persona to represent our target audience. I developed the persona of Mr. Kumar, a parent, to help better understand user needs and motivations. I incorporated all three personas, including mine, into the Requirements document and the presentation to highlight our user-focused design approach. Additionally, I uploaded a separate file containing the personas to our Git repository to keep all project materials well-organized and accessible.

14. Persona Creation and Integration:

Each team member created one persona representing our target audience. I developed the persona of Mr. Kumar, a parent, to better understand user needs. I included all three personas in the Requirements document and presentation,

Mapping of Individual Performance

and uploaded a separate personas file to our Git repository for easy access and organization.

Summary and Personal Reflection

This project taught me how to take an idea from concept to prototype and effectively guide a team through further development. Throughout the process, I improved my skills in UI planning, teamwork, and code review, and gained a deeper understanding of the importance of shared ownership in group projects. I am proud of the final outcome and confident that our game meets both the initial goals and the needs of our target audience.

Mapping of Individual Performance

Abanoub Hanna Individual Performance:

I played a key role in ensuring that our project met all acceptance criteria and standards. Additionally, I took charge of team communication and coordination to keep everyone aligned and on schedule.

Acceptance Documentation Lead

- Took primary responsibility for preparing the Acceptance Documentation, ensuring it clearly defined the criteria for game completion and evaluation.
- Made sure that the document accurately reflected the game's features, performance benchmarks, and user acceptance standards based on our professor's guidelines.
- Collaborated closely with the team to incorporate feedback and align the acceptance criteria with the actual gameplay and testing results.

Project Coordination and Team Communication

- Initiated and organized weekly team meetings via Zoom to facilitate communication and progress tracking.
- Scheduled meetings by sending out invites and managing group communication links, ensuring all team members attended and contributed actively.
- Helped keep the team aligned with project milestones, deadlines, and professor requirements through effective coordination.

Contribution to Weekly Progress Reports

- Actively participated in writing and reviewing weekly progress reports alongside the team.
- Provided detailed updates on acceptance documentation status and overall project readiness during report preparation.
- Assisted in tracking pending tasks, achievements, and planning for upcoming weeks, maintaining transparency with the professor.

Support in Game Development and Testing

- Supported teammates during game testing phases by providing feedback from a user perspective aligned with the target audience, considering the viewpoint of Anna, a primary school teacher persona.
- Helped identify any discrepancies between acceptance criteria and game functionality to ensure a quality final product.

Mapping of Individual Performance

Collaboration and Teamwork

- Worked closely with Ifrah and Maaz to integrate documentation, presentations, and gameplay development.
- Participated in team discussions, offering constructive feedback and suggestions for improvements.
- Ensured smooth communication flow and timely resolution of project challenges through active engagement in meetings.

Reflection

- Gained experience in project documentation, team coordination, and acceptance testing processes.
- Learned the importance of clear communication and proactive leadership in a collaborative project setting.
- Proud to contribute to a meaningful educational game designed to help children learn color theory effectively.