

### **Participation and Role in the Group**

During Semester 1, I worked closely with my team members to conceptualise, plan, and develop the project for this module. My involvement spanned the full development process, from initial idea generation and defining the final project brief, to early written work and practical demonstrations leading toward the outcome. At the beginning of the project, roles were assigned to ensure an efficient workflow. My primary responsibility was designing functional working demonstrations that could later be refined and integrated into the final project, ensuring alignment with the core requirements outlined in the assessment brief and client expectations.

I contributed consistently through weekly group meetings, where we discussed progress, addressed challenges, and planned upcoming tasks to ensure steady development. I actively contributed to our Trello board by updating sections such as the project proposal, demonstrations, and target audience analysis. These weekly goals helped maintain accountability and ensured that progress was made throughout the semester.

### **My Contribution**

My first demonstration contribution was a cybersecurity-themed mini-game titled Capture the Flag. This game was designed for classroom use, with students divided into two teams, each working on individual computers. A central scoreboard would be projected at the front of the classroom via the teacher's computer. Players could choose from different roles Analyst, Cryptographer, Engineer, or Wildcard each corresponding to a specific type of challenge. These challenges included activities such as phishing detection, cipher decryption, and password security tasks. Based on whether players completed challenges correctly or incorrectly, points would be added to or deducted from their team's score. The game would conclude once a team reached a predefined point total.

My second demonstration contribution was a Tower Stack mini game. Following feedback and a revised project brief approved by the client, the project shifted direction, requiring the development of a new set of mini games. The revised concept allowed users to access a mini game as a reward for correctly answering educational questions. The Tower Stack game focused on reaction speed and timing, requiring players to stack blocks on top of one another. The higher the tower, the more points the player would earn for their team, reinforcing both engagement and competition.

In addition to developing these prototypes, I assisted with gameplay logic, testing, usability evaluation, and incorporating feedback. I also contributed to refining ideas and ensuring that individual components could cohesively align with the final project brief.

All designs and demonstrations were uploaded to our GitHub repository, enabling effective collaboration and communication across the team.

### **Lessons Learned**

One of the key lessons learned during Semester 1 was the importance of clear communication and collaboration within a group environment. Assigning defined roles and distributing tasks fairly helped ensure that workloads were balanced and that each member contributed effectively. Regular updates and structured planning were essential in keeping the project on track and meeting deadlines.

I also gained a strong appreciation for prototyping, testing, and iterative development. Receiving feedback on early prototypes proved invaluable, as each iteration allowed us to make incremental improvements, ultimately strengthening the overall quality of the project.

### **Personal Reflections**

This project has significantly enhanced my experience of teamwork and professional collaboration. I am satisfied with my group's performance, as all members demonstrated professionalism, commitment, and a shared goal of delivering a successful project.

While challenges remain particularly around collaborative coding and managing potential conflicts within shared codebases these obstacles present valuable learning opportunities. Successfully integrating different coding styles and project components will be crucial to the project's success.

Overall, this project has been both enjoyable and rewarding. Unlike other modules, it placed strong emphasis on soft skills and teamwork, which are essential for future employment and professional environments