ENG1 - Assessment 2

Change Report

Change2.pdf

Group 6

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For each of the following items, include a brief explanation and justification of any changes made to the other team's Assessment 1 deliverables (pointing to specific sections of the deliverables that have been added/updated). Include the precise URLs of the original (i.e. the other team's) and the updated versions of the deliverables. The updated deliverables do not need to adhere to the page limits for Assessment 1. If there is no change to report, please state and justify why no change was necessary. (Maximum 5 marks per item, to a maximum total of 20 marks; ≤ 8 pages in total with ≤ 3 pages per item) i. Requirements ii. Architecture iii. Method selection and planning iv. Risk assessment and mitigation

Summary

After selecting a team post-presentation, we swiftly downloaded and organised all deliverables for the upcoming assessment. A dedicated folder within our shared Google Drive was established for Assessment 2's documents, where we meticulously updated and augmented the content as we saw fit for this change report.

Original documents from Assessment 1, sourced from our chosen team, were stored in a separate folder with restricted editing permissions. This served as both a point of reference for the original material and a tool for tracking changes made during the revision process.

To streamline our workflow, we adopted a system of documenting each modification made to the deliverables. Team members contributed bullet points or brief explanations detailing the rationale behind their respective alterations. Afterwards, all team members provided an extensive summary behind the reasoning of their changes in full.

Assignments were distributed so that members responsible for specific deliverables in Assessment 1 also took charge of revising and annotating their work in response to the received documents in Assessment 2. This approach capitalised on their familiarity with the content, facilitating the identification of necessary changes within the change report.

All changes to the original code inherited from the previous group are trackable using git. You can view the full commit history [here](), which includes all changes we made. For clarity when viewing the current version of the code as to what is and what is not changed, we note with a comment noting how much has changed and for what reason, if relevant. These changes are clearly labelled and identifiable. Since changes in the implementation are tracked as such, they are not explicitly listed in the change report, as repeating changes is not ideal.

Since we added a code formatter for consistency, this tool has corrected formatting from the project from before we took it over. This sort of change is not noted.

REQUIREMENTS DOCUMENT

After the release of the new Product brief we found it important to add to and update the Requirements document, in doing so we added the following; *UR_SCOREBOARD, UR_ACHIVEMENTS,UR_SCOREBORD, FR_STREAK, FR_ACHIEVEMENTS, FR_MAP, FR_SETTINGS, FR_SCOREBOARD, NFR_STREAK and NFR_LEADERBOARD*. This was in order to align the previous requirements document with the new requirements specified by the stakeholder in the second document. We believe these fit the constraints of the new specified requirements.

Upon further inspection of the requirements document that we obtained we also chose to add the following; *UR_MAP, UR_FAILURE, FR_FAILURE.* This was because even though the previous team designed constraint requirements for failure and for the map of the game they did not implement the correct user requirements relating to these specifications. We felt it was the right choice to add that onto the table based on our experience.

Also in order to increase the readability and clarity of the document we decided to add colour to create a priority system within the user requirements and changed the font used inside all the tables making it much easier to read. Taking over the previous requirements document lead us to also correct some of their mistakes in the descriptions of their functional requirements

We were not particularly happy with a separate table for constraint requirements as we believed they should be integrated with and located within fit criteria for non functional system requirements however we decided that this does not take away from our effort for the implementation and rather makes the constraints partially easier to identify. The table remained as before with some of our design constraints following the new product brief added onto the non-functional requirements table instead.

ORIGINAL DOCUMENT RECEIVED: 📄 Req1

AFTER CHANGES: 📄 Req2

ARCHITECTURE DOCUMENT

With the new brief for the project, there were a few gameplay mechanics to be implemented. These features were adding a leaderboard system, and adding streaks and achievements. For these we created new structural and behavioural diagrams that can be found on [our website](#).

Along with the new features, there were also changes to the existing code to improve it and make it fit with the new systems. This resulted in changes to the original diagrams on the website, for example the player class diagram. One of the main changes to the architecture was the overall class diagram. Having updated it, it now shows all the newly created classes and their relations and associations to each other. We also removed any classes that were made redundant in the process.

We also updated the Requirements -> Architecture table in the architecture document to cover the new defined requirements of UR_SCOREBOARD, UR_STREAKS, UR_ACHIEVEMENTS, etc.

ORIGINAL DOCUMENT RECEIVED: 📄 Arch1

AFTER CHANGES: 📄 Arch2

Risk Assessment and Mitigation

After acknowledging the given risk assessment document, we identified several potential areas for enhancement. Overall, all the risks are comprehensive and well-structured, covering both human and technological aspects of the project.

First of all, we reallocated our team members to each risk to match the part of the project the person is focused on and the risks to ensure the alignment between risk ownership and project responsibilities.

Regarding Risk R8, which concerns the competition with other teams for the marks offered, which is beyond the scope of the project. As such, we have determined that this is not directly relevant to our project anymore. Therefore, our team decided to exclude it from further consideration and focus on managing other risks that are integral to the project's goals and objectives.

Upon deeper analysis of the risk document we also identified that we do not agree with some likelihood and severity of the certain risks in particular:
- R3 changed likelihood from high to low because staff turnover is highly unlikely
- R4 defined likelihood as medium instead of high because, due to effective resource management we are able to complete all tasks in scheduled timeframe.
- R5 also changed likelihood from medium to low because illness is generally unexpected and severity from high to medium as we have other team members who can cover the completion of the task
- R6 changed likelihood from low to medium as in practice requirements quite often may change

The significant change was the addition of the "People" category to the list of risk categories that represents the critical uncertainties related to team members and human resources involved in the project. Risks such as R1, R2 and R5 were categorised under this category because they directly pertain to the actions and interaction of team members. Additionally, we have added the clarification on how risks are categorised.

Therefore, R18 and R19 have been added within the People category. R18 addresses potential communication issues among team members, which can be mitigated through regular and open team meetings. R19 focuses on the critical aspect of communication with stakeholders, emphasising the importance of clear and consistent communication to avoid miscommunication.

R16 acknowledges the importance of resource estimation, which is the frequent project management challenge. Mitigation strategy involves either allocating additional team members to complete the task or adjusting the timeline. R17 addresses the challenges

associated with the inheritance nature of the project that may lead to the delay of the project progress. To mitigate this risk, our project plan reflects the flexibility to have designated periods for code and other deliverables review and the possibility of consulting previous developers for clarifications.

ORIGINAL DOCUMENT RECEIVED: 📄 Risk assessment and mitigation

AFTER CHANGES: 📄 Risk2

Plan:

We reviewed the Method Selection and Planning document to understand the previous team's structure for delivering the project. We found it comprehensive and aligned with effective project management principles, so no major changes were necessary. Instead, we focused on updating the project plan to reflect our current approach and progress. We revised the tasks, re-assigned responsibilities, and included a new table to clearly represent each team member's responsibilities. This updated plan better illustrates how our work has evolved during the second phase of the project development and ensures clear accountability for the remaining workload.

ORIGINAL DOCUMENT RECEIVED: 📄 Method Selection and Planning

AFTER CHANGES: 📄 *Plan2*

References