Proposed Changes

After analysing the product and play testing the game we had a stand up meeting in which every team member had the possibility to comment on the quality of the software and propose changes.
Once we had produced an extensive list of suggested changes, we reviewed and discussed each item on the list to determine its relationships with the project Requirements [1,2] and with the Configuration Items [3]. In general, a proposed change was approved if it could be linked to a requirement and if its impact on the respective CIs was considered manageable.

The list of proposed changes has been formatted into a table, each suggestion was assigned six characteristics:
- An ID, to identify it and allow traceability
- A description
- A type, which indicates what of kind of change it is
- A reference to requirements, indicating to which requirements it is related
- A reference to Configuration Items, indicating to which CIs it is related
- Notes, to explain the reasoning behind the change

Out of the 26 proposed changes, only 3 were discarded (highlighted in orange).

ID	Description	Type	Reference to requirements	Reference to CIs	Notes
PC1	Restyle the game UI to make it clearer	GUI	N8	CI3, CI9	Even though requirement N8 referred specifically to the game map, it seemed necessary to us to restyle the game HUD and the entire game UI to improve clarity and ease of use.
PC1A	Display number of remaining actions	GUI	N12	CI3, CI9	The UI did not show to players how many actions they had left in a turn. Adding a simple label makes the game easier to play.

PC1B	Add an End Turn button	GUI	N10	CI3, CI8, CI9	This was required by the product brief but was not elicited in the original requirements elicitation document.
PC1C	Change Beer and Knowledge player perks to ATK and DEF perks	GUI	N12	CI3, CI9	Beer and Knowledge were a very unusual and unintuitive names for players' perks, so we changed them to the more standard attack and defense.
PC1D	Change Beer and Knowledge icons with ATK and DEF icons	GUI	N12	CI3, CI9	Changing the name of the perks required updating their respective icons
PC1E	Add a menu button to pause game, save game and exit	GUI	F7	CI3, CI9	In order to perform the interaction required by F7 we decided to implement a simple menu button.
PC2	Create a Main menu	GUI	N11	CI3, CI9	We strongly believed that having a simple menu would highly increase the overall quality of the product as well as making it more user friendly. Additionally, a Menu would allow players to decide if to start a new game or load one.
PC3	Create a Game Setup sub-menu	GUI		CI3, CI9	Discarded due to lack of traceability to requirements and to the risk of not finishing implementation on time.
PC4	Create an Options menu	GUI		CI3, CI9	Discarded due to lack of traceability to requirements and to the risk of not finishing implementation on time.
PC5	Add a Save & Load mechanism	Implementation	F7	CI10	Required by the product brief.
PC6	Balance fight resolution mechanism	Implementation	N9	CI10	The fight resolution mechanism felt heavily based on RNG and was very unpredictable. Therefore we decided to tweak it to

					make it more based on skill.
PC7	Require at least three human players to play the game	Implementation	F1, N3	CI10	For the sake of simplicity and to respect the requirements we decided to make this game playable by three or four human players
PC8	Allow at most one Neutral Player	Implementation	F1, N3	CI10	If only three human players are in the game, the fourth player is neutral. The Neutral Player never attacks an enemy and simply expands on empty sectors.
PC9	Create dialog boxes to give feedback to users and allow them to make choices	Implementation	N12	CI10	We believed a dialog box system would be easy to implement and would greatly simplify user interaction.
PC9A	Notify when a player is eliminated	Implementation	N12	CI10	Improves user experience.
PC9B	Notify when the game is over	Implementation	N12	CI10	Improves user experience.
PC9C	Notify when quitting the game	Implementation	N12	CI10	Improves user interaction.
PC9D	Enable Neutral Player	Implementation	F1	CI10	Using a dialog box to enable the Neutral Player simplifies the GUI and allows to avoid creating a Game Setup sub-menu.
PC10	Create a minigame	Implementation	F3	CI9, CI10	Required by the product brief.
PC10A	Simple quiz minigame	Implementation	F3	C10	Discarded because the idea was not considered interesting enough to develop.

PC10B	Flappy Bird clone	Implementation	F3	CI10	We felt that a clone of the popular mobile game Flappy Bird would suit our needs for a simple and quick mini game.
PC11	Attacking an enemy should not automatically end the turn	Implementation	N12	CI10	Initially a turn ended when a player moved twice or whenever he attacked an enemy. We believed that players should always be able to use two actions during their turns, so that even new users would not struggle to understand gameplay.
PC12	Rewrite and improve comments in the code	Implementation		CI10	Some of the comments in the code were unclear or hard to understand.
PC13	Remove 2 players and 3 players gamemode testing	Testing	N4	CI4, CI5, CI12	Since the game always requires four players in play, tests for 2 and 3 players gamemode were not necessary.
PC14	Add test to check if the Neutral Player is in play, when enabled	Testing	F1	CI4, CI5, CI12	With the introduction of a Neutral Player, new tests were needed to check that it functions properly.
PC15	Add black box tests to check the functionalities of the new GUI	Testing	N11	CI4, CI5, CI12	Restyling the game UI and creating a Main Menu requires appropriate testing that all functionalities work as intended.

References

[1] SEPR "Requirements Document" Lazer Dolphin Games [Online]. Available: https://sepr-team-margaret.github.io/content/Req1U2.pdf [Accessed: Feb. 14, 2018].

[2] SEPR "Extended Requirements Elicitation" Risky Developments [Online]. Available: http://www.riskydevelopments.co.uk/documents/ExtendedRequirementsElicitation.pdf [Accessed: Feb. 18 2018].

[3] SEPR "Configuration Items" Risky Developments [Online]. Available: http://www.riskydevelopments.co.uk/documents/ConfigurationItems.pdf [Accessed: Feb. 18 2018].