## **Updated GUI Report**

The original GUI only comprised of the interface of the game map and the HUD, a description of it can be found on "Lazer Dolphin Games" website[1].

After reviewing the product we believed that the GUI was not very intuitive and user friendly, the initial requirements[2] covered usability very briefly, therefore we elicited new requirements[3] regarding the User Interface.

In order to redesign the UI and make it more functional and effective, we followed basic design principles[4] and Human Computer Interaction fundamentals[5, 6].

Since we thought that the main flaw of the initial GUI was usability, we particularly focused on the principle "Think About the User".

The game map has not been modified, so each player is still associated with a certain colour (red, blue, yellow, or green), and all sectors are colored according to which player owns them. If enabled, the Neutral Player is associated with the white color. Unowned sectors are colored gray and units are represented by a colored block containing the unit's level.

However the HUD has been completely reworked to meet the updated requirements. The player status cards have been moved to the bottom so that they would not cover part of the map anymore. The status cards' information was reordered and the perks' labels "Beer" and "Knowledge" have been changed to the more intuitive "ATK" and "DEF". Following these modifications, the landmark icons have also been updated to respect the new names of the perks. To the right of the map a simple text label has been added to display the number of actions remaining to the player.

To meet requirement N10 a new button has been added to the bottom right of the HUD, which allows players to end their current turn.

As required by F7, in the top left corner, a menu button has been added to allow users to pause the game and return to Main Menu or save the current game.

All the changes already described also aimed at fulfilling requirement N12.

Additionally, a dialog box system has also been added to further improve user interaction and playability. Dialog boxes are used to perform several actions: getting inputs; confirming choices and notifying the user about certain events.

To meet requirement N11 a very simple Main Menu was added to the game, so that users would not be forced to play a new game when the software was started. The new menu only contains three buttons, each one with a clear label indicating its function.

The interaction with the game is very simple and follows the standards common to the genre, all actions can be performed with a single click on the respective UI component.

In order to meet requirement F3, a new interface had to be implemented to display the mini game and enable players to interact with it. The character in the mini game is controlled by either clicking the left mouse button, the space bar or the Up Arrow key, giving users the option to choose their preferred method of input.

The graphic style of the game has been preserved, all new assets aim at emphasizing the "Sketched" and "Doodled" theme, which has been combined with real pictures to make the interface look as if it has been drawn on paper.

The artwork for the mini game has been hand drawn to be consistent with the game theme. Screenshots of the game and more detailed descriptions of the user interface are available in the game manual[7].

## References

- [1] SEPR "Graphical User Interface Report" Lazer Dolphin Games [Online]. Available: <u>https://sepr-team-margaret.github.io/content/GUI2.pdf</u> [Accessed: Feb. 15, 2018].
- [2] SEPR "Requirements Document" Lazer Dolphin Games [Online]. Available: <u>https://sepr-team-margaret.github.io/content/Req1U2.pdf</u> [Accessed: Feb. 14, 2018].
- [3] SEPR "Extended Requirements Elicitation" Risky Developments [Online]. Available: <u>http://www.riskydevelopments.co.uk/documents/ExtendedRequirementsElicitation.pdf</u> [Accessed: Feb. 17 2018].
- [4] Nikolaos Golas. User Interface Design Best Practices. [Online]. Available: <u>https://www.ieee.li/pdf/viewgraphs/user\_interface\_design\_best\_practices.pdf</u> [Accessed: Jan. 16, 2018].
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- [6] HACS "Lecture 09 Design Patterns and Principles" [Online]. Available: <u>https://vle.york.ac.uk/bbcswebdav/pid-2364069-dt-content-rid-5868245\_2/xid-5868245\_5\_2</u> <u>5\_2</u> [Accessed: Jan. 17 2017].
- [7] SEPR "Game Manual" Risky Developments [Online]. Available: <u>http://www.riskydevelopments.co.uk/documents/UDGameManualPDF.pdf</u> [Accessed: Feb. 18 2018]