

Top Right Corner

GUI Report

We wanted to make it immediately obvious which player, if any, owns each of the plots (requirement 4.1). The game highlights the AI's plots in yellow and the human player's in purple. These are complimentary colours so have a strong contrast making the plots visually distinct[1,2]. Unacquired plots are not highlighted in order to make all unacquired plots distinct from the acquired ones. The map has lake in the middle as it must somewhat resemble campus (by requirement 3.2) and the west campus has a big lake in the middle of it. (landmarks are not yet present but the assessment 2 brief said that they don't have to be).

(<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/1.png> and
<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/7.png>).

The bar across the top of the screen displays the player's inventory (see the first image linked above). The system must maintain an inventory for each player (requirement 1.5) and the player must know what they have in their inventory so that they can track their progress through the game (it would be confusing if they didn't know how much money they had when they wanted to make a purchase which would affect playability). The bar also tells the user what they should do which makes the system easier to learn and use (requirement 2.2).

Different plots must be better at producing certain resources (requirement 1.9). Therefore once the player has acquired a plot its specialism is displayed on it allowing them to make an informed decision about what type of roboticon to place on it and they will know why a given plot is producing a different amount of a given resource to another when both plots have them same type of roboticon on it (increasing ease of use and understanding). (<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/7.png>).

Once the all plots have been acquired the game should end (requirement 1.10) and each player's score should be calculated should be reported who is the winner (requirements 1.22 and 1.23). The gameover window displays this information. (<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/7.png>).

Players must be able to purchase roboticons only after acquiring a plot (requirement 1.12), similarly they must only be able to customise roboticons after buying them (requirement 1.13) and may only buy and sell resources to and from the market right after plots have produced resources (requirements 1.17, 1.20 and 1.19). This is why the various market windows are only accessible at these times, only display the information relevant to the given tasks and only allow users to perform those actions. This also makes the game easier to play as we have constrained the actions that a user can carry out at any one time, so that it's easier for them to see what actions they should be carrying out (requirement 2.2). It's worth noting here that players must be able to make the market produce roboticons (requirement 1.27) which is why the produce roboticon button (and the label above it stating how much the market uses to produce a roboticon) are present on the buy roboticons market window. (<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/2.png>
<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/3.png>
<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/6.png>).

Requirement 1.14 stated that players should only have a fixed amount of time to purchase and customise their roboticons. So during these phases we place a timer in the menu bar at the top of the screen to make it clear that they only have a limited time to perform these actions and so that the user understands why when the timer runs out if they haven't finished they are taken straight to the roboticon placing stage. (<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/2.png>
<https://sepr-topright.github.io/SEPR/documentation/assessment2/images/3.png>)

Requirement 1.15 stated that players must be able to place customised roboticons in their inventory only on plots that they own when they don't have roboticons on them. This is why when during this stage when they click on such a plot a menu opens allowing them to place ore and energy roboticons on the plot. This is also why when they only have energy roboticons only the place ore roboticon button is shown and similarly for when they only have ore roboticons. Also when the user clicks on a plot that they don't own no menu is opened, when they click on one that they own that already has a roboticon on it the menu only contains text informing them that this plot already has a roboticon and when click on a valid plot but have no customised roboticons the menu only contains text stating that they have no customised roboticons. The markets inventory is displayed in the buying and selling resources market window as players must know what resources are available for purchase (1.7).

References

[1]"Color Wheel - Color Calculator | Sessions College", *Sessions College*. [Online]. Available: <https://www.sessions.edu/color-calculator/>. [Accessed: 23- Jan- 2017].

[2]c. Dictionary, "contrast Meaning in the Cambridge English Dictionary", *Dictionary.cambridge.org*, 2017. [Online]. Available: <http://dictionary.cambridge.org/dictionary/english/contrast>. [Accessed: 23- Jan- 2017].