

Introduction

A good portion of our project requirements were not needed yet for assessment 2, as only basic core game functionality was required. As such, we have left a some of them out. As for the requirements that were expected of us, we managed to implement them fully. The requirements will now be listed according to their level of implementation, along with a brief explanation about the implementation for each one.

Fully implemented

- #2 - All tiles are exactly the same size, as per the requirements.
- #4 - Roboticons can be installed on any tile the player owns, provided the player owns Roboticons.
- #5 - No plots of land belong to a player at the start of a game.
- #6 - Tiles owned by a player have their borders changed to be the same color. Also, when hovered over, the UI will display the name of the player who the tile belongs to.
- #8 - There is a market, which players can buy and sell resources to, depending on the current phase.
- #10 - If a tile is owned by a player, it will not produce resources in phase 4 unless there is a Roboticon installed on the tile.
- #15 - At the start of phase 4, players are presented with their total production for the past turn.
- #16 - The market starts with 0 Ore.
- #17 - Only one tile can be purchased per turn by each player, which happens in phase 1.
- #18 - There is a 40 second(hardcoded at the moment, but can be changed easily) time limit for phases 2 and 3, which are the phases that the players buy and customise Roboticons.
- #19 - Each player starts with 100 money, this can be easily changed if another value is required.
- #21 - All Roboticons with the same customisation have the same multiplicative effect on their resources.
- #22 - Any number of Roboticons can be removed from tiles that the player owns during phase 3.
- #32 - Tiles can be purchased regardless of position. The only condition being that it not already belong to a player.
- #33 - Essentially the same requirement as #18, phases 2 and 3 are time limited.

Partially Implemented (as required at this time)

- #7 - Ore and energy are implemented, but food is not. The only reason being that the brief told us not to implement it. With our architecture, it would be very easy to implement.
- #14 - Only 2 human players are supported at the moment, but with our architecture, via the use of AbstractPlayer, an AI player would be very easy to implement.

Not Implemented

#1, #3, #9, #11, #12, #13, #20, #23, #24, #25, #26, #27, #28, #29, #30, #31 - Assessment 2 did not require these features to be implemented. Auctions, a futuristic aesthetic, promoting the university, different types of tiles, game balance, score, landmarks, random events, gambling and the game actually ending will all come later on in the project.

New features

We also implemented the main menu, a feature that wasn't on the requirements list. The main menu is the first thing a player sees when they load the game, and allows both players to input their names before they start the actual game via a button. We added this because it was a nice personal touch and only took about half an hour to fully implement.