

Usability Testing

Goal:

Is the system and provided material sufficient to play the game with no external interaction?

Additional goals:

Is the game fun?

Do the AI stand a chance of winning?

Are there any issues?

Methodology:

1. Find someone who has never played the game before
 2. Ask them to play and show them the user manual beforehand
 - a. If they have any questions, answer them but also make a note of the questions asked
 3. Have them play the game with you or with AI, play to completion if possible
 4. Record any questions or issues they have with the game
 5. After the game get any thoughts and opinions they have on the game
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Review process:

Any and all findings from these tests should be implemented if possible to improve end user experience and ensure the game is appropriate for the setting. This stage should then be repeated to ensure the changes have improved the situation.

Results (Round 1):

Kieran

User: 2nd year History student (Suitable as similar age group to client's end use goals)

Comments on the user guide:

- Unclear how to place Roboticons
- Aim of the game is unclear
- Use of market is unclear
- Use of auction is very complicated
- Win conditions are unclear
- Needs more screenshots

Comments on the game:

- It's of a reasonable length for a short demo

Observations & remarks:

- The user was able to access all functions of the game. They were unsure with the market and auction. More explicit explanations with screenshots would be useful.
- As the user was reading the manual it became clear that a user guide on the longer side might be useful. Provided navigation was made available. Perhaps with a contents page for each phase and detailed explanations.

Jack

User: 2nd Year Geography Student

Comments on the user guide:

- At first it wasn't very intuitive on how to complete certain actions such as buying roboticons but the diagram at the end made it clear
- Maybe put the the end diagram at the start of the manual so they can refer back to it
- Auction not very clear
- Maybe a few more screenshots, such as roboticon upgrade screen

Comments on the game:

- Selling/Buying Ore is buggy
- Tile animation is nice
- Wasn't clear you had to select a tile in order to advance in phase 1
- Chancellor moves way too fast!
- The time was about right as it wasn't too short that they didn't get a taste of the game or too long that they would find it repetitive

Observations & remarks:

Nico

User: 2nd year Drama student

Comments on the user guide:

- Explain market more, particularly supply and demand economics aspect.
- Make clear that only one roboticon is permitted per tile
- Make clear that there are only 12 available roboticon in the game
- Explain timer
- Explain more about game pause

Comments on the game:

- Should change phase 3 name to include the notion of upgrading of roboticons
- Should link victory message back to vice chancellor narrative
- Phase system is confusing, it should allow you to do anything at any point in the round
- It was fun to play

Observations & remarks:

- Upgrade purchasing was buggy, sometimes disallowing purchases even with sufficient funds

Round 2:

Joe

User: 2nd year Computer Science student

Comments on the user guide:

- Page 2 of the User Manual is a little overwhelming, especially given how unintuitive it is to match the numbered markers up to their associated descriptions

Comments on the game:

- The chancellor moves way, way too quickly
- Tiles' yields should be shown on the upgrade screen
- Randomisation of tiles' yields doesn't seem to be too impactful: most tiles offered yields of 5, 5 and 7 in various configurations
- Game was otherwise very easy to follow and engaging enough

Observations & remarks:

- The order of resources on the upgrade screen does not match the order shown on tiles' tooltips, making it somewhat confusing to check tiles' yields and then apply appropriate upgrades to them
- The production phase should be changed such that it doesn't run on a timer and only ends when the current player closes their imposed effect's overlay

Martynas

User: 2nd year Computer Science student

Comments on the user guide:

- In the beginning it is confusing what action should be taken but after a while player adopted and got used to UI

Comments on the game:

- Game is involving
- It was fun to play a minigame
- Graphics is nice. Liked university's landmarks.

Observations & remarks:

- Took some time to master how to use market and auction
- Game pace is not too fast, which is good
- Game theme is interesting
- Game does not require too much effort to understand basic options

Consequent Changes

After two rounds of usability testing (one to establish issues, the second to confirm they were fixed), the comments and issues gathered from users were considered, resulting in the following:

Additions to User Manual

- Introduction added: explains setting of the game and how to win
- The market was explained in more detail, including supply and demand economics aspect
- Screenshots added to each subsection (where appropriate)
- Gameplay Screen diagram was moved closer to the beginning of the manual
- Roboticons were explained in more detail; mentioning the amount available, and that only one can be placed per tile.
- Timer explanation was added along with explanation of timed phases.
- Pause function was made clearer

Additions to Code

- The win message links back to background story, stating that the winner is now the Vice-Chancellor of the colony.
- Chancellor move period was reduced as it was too difficult to catch.
- The Upgrade overlay was revamped to list upgrade options in the correct order (so that they line up with the order in which tiles' yields are displayed in their tooltips) and to list tiles' yields and roboticons' levels alongside upgrade prices.
- The production phase was changed to require manual advancement rather than going through to the main market phase straight away.

Rejected Changes:

Some issues and ideas that our test users commented on were rejected. The following justifies those decisions:

- One user suggested that the phase 3 name should include the aspect of upgrading the roboticons, not just placing them. This idea was rejected due to the fact there was no way to fit such a long name in the panel on screen however the description of this phase was made clearer in the user manual.
- One user suggested that the phase system should be removed and the user should be allowed to do any function from all 5 phases at any point in the round. This idea was rejected as it would involve rejecting the requirements given by the stakeholder and would require a complete rework of the game.