Benni's Forest – A serious game on the challenges of reforestation

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Domain

The forests of the world are under pressure, while they are vital for biodiversity and climate stability. They are in need of restoration.

Problem

It is often misunderstood that disappeared forests can just be regrown. Most people think of reforestation projects as one-dimensional, simply consisting of planting trees. In reality, a reforestation project takes into account a wide variety of factors.

Solution

Benni's Forest is a management game in the intersection of the 'Education' and 'Entertainment' domain.

Benni's Forest gives the player a simplified, yet challenging, experience of managing a rain reforestation project.

The main goal of the game is to inform players about reforestation and reforestation projects while playing an entertaining game that keeps the attention of the player during the span of a playthrough.
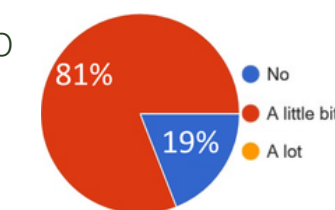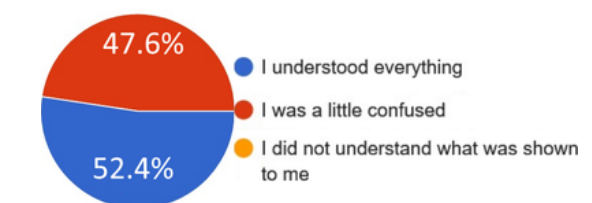
Game loop

The player tries to restore the forest by fertilizing ground, planting trees, or digging fire ditches. Meanwhile, wildfires, illegal logging, and invasive pogon grass threaten your progress. This gives the player a vivid experience of the complexity of the project. As you progress, several scores indicate the quality of your performance, most notably a biodiversity score, representing the amount and variety of trees in the forest. In this way, players receive clear hints to strategize and face each situation with the appropriate measures to grow a biodiverse forest.

Events

Forest fire

Illegal logging

Low fertility

Invasive grass

Results / Verification

We asked 21 players to play our game and fill in a survey to assess:

- Whether they understood the complexity of reforestation

47.6% — I understood everything
52.4% — I was a little confused — I did not understand what was shown to me

- Learned anything new about reforestation

66.7% — No more than before playing this game — A bit more than before playing this game
9.5% — A lot more than before playing this game
19% — I'm already involved with reforestation projects

- Would be more likely to get involved in reforestation projects

81% — No — A little bit — A lot
19%

Players expressed an increased knowledge and a greater understanding of the complexity of reforestation after trying it for themselves in their game.
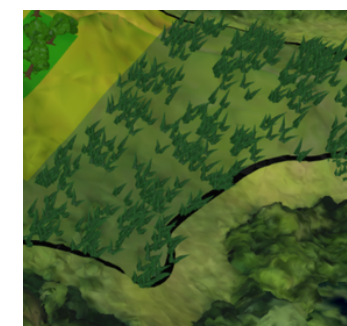
Play Now!

https://bennisforest.gitlab.io/bennisforest/
https://www.youtube.com/watch?v=wfcCT8sF7hQ

Conclusion

There is a correlation between playing our game and improving the knowledge and engagement to rain reforestation projects