Leden

Opdracht

Hoe op het idee gekomen

Korte samenvatting van de uitwerking

Welcome to the analysis report of “Project Stars”, a simulation by Bryan Van Huyneghem, Michiel Mortier, Jonathan Van Damme, Robin Goussey and Jelle Hamerlinck.

This simulation was commissioned by the University of Ghent as part of the Bachelor of Science in Information Engineering Technology education program. The exact assignment stated:

*“The students have to create an application that used a non-trivial algorithm in a Python version that exceeds version 3.0. This algorithm need to be constructed in such a way so it can be recycled for future work so other engineers with a similar background can understand and edit the code. Furthermore, there must be enough theoretical support from analysis and design diagrams so the general structure and functionality can be understood in a short period of time.”*

Within this assignment, the group quickly found common ground in our passion for gaming. After a short brainstorm, we agreed to create an interactive simulation of a star system. The central star of the system is on the brink of dying, so the local intelligent species battles against the universe in a race against the clock to evacuate the population from the planet and settle on a new home. The user is in control of the decisions the species make in their last 1000 years, all the while random events will either help or hinder the progression they make to escape their fate.

The algorithm creates an environment where all kinds of planet properties, species technologies and the random events interact with each other. After each turn in the simulation, every change is calculated in the background and then presented to the user through the visual interface. In this interface, the user can also adjust the focus of the species, according to what seems to be necessary.

Including the time spend working in the classroom, an estimated 90 hours were expected to be delivered from every team member. Outside of the classroom, about half the time, the team collaborated together through Teamviewer, Skype, GitHub and Google Docs, the other half being individual work.