

CI/CD Setup

Platform

Our CI/CD setup uses github actions as the CI/CD platform, as our code is already available in github and setting up github actions requires the least efforts compared to alternatives.

Pipelines

We only require one pipeline to automate all the testing set by our test requirements.

Pipeline steps

The pipeline first checks out the github repository to gain access to the most recent code.

Because the pipeline runs on Pull Request this code is the already merged code of the main branch and the one to-be-merged.

The pipeline then installs godot in the version of the project onto the runner. The code required to run the testing framework is already part of the repository and does not need to be installed.

The pipeline then starts a headless version of Godot. The headless version runs without a display, which is necessary because the runner on github has no access to a display.

Then the pipeline starts the GUT framework, which then executes all unit tests. It creates an xml file in the junit report format.

This file is then parsed by another step of the pipeline, which succeeds if all tests passed and fails if they don't.

Problems

Sadly, the pipeline does not always run correctly. There are still some bugs with headless godot, which sometimes causes the pipeline to stop working. In this case the pipeline has to be stopped manually and be started again.