rubriks

GIT

Criteria

Commit messages

The messages of your commits need to be descriptive and follow the conventions that are described in https://www.conventionalcommits.org/en/v1.0.0/

Branch usage

Branches need to be used following the git flow methodology, using feature branches, bugfix branches and release branches. This in order to allow for CI/CD

Clean history

Use rebasing in order to create a clean history, so earlier messages that are not up to conventions are not left in the project

Conventions

Criteria

Naming

All of the files need to be named correctly and descriptively. The name of the file needs to indicate what it is for.

Folders

The project needs to be build up in a consistent and logical fashion

Separation of concerns

Files and functions should be separated by their functions

Documentation

Criteria

Function documentation

The entire project should be accurately documented, including params and returns

endpoints

a full documentation needs to be available regarding all the possible endpoints in the system. This includes body, and returns

Open source

Criteria

README

The readme should contain all the necessary elements to describe the project, including information to run it and history

License and other documents

The project should contain a code of conduct, an up to date changelog containing the releases, a contribution guideline and a license file

Docker

Criteria

Build and run

The project should be build-ready on cloning the repository, with clear instructions regarding the .env file and others in the README. The entire project should run upon following these instructions, without any installation

Dockerised

Every service should run in a docker container, with descriptive names. This includes database systems and storing mechanisms

Deployed [extra]

The docker setup should be deployed on the school servers, and published on the docker hub

Testing

Criteria

Test driven development

The project should be created using the TDD guidelines, where tests are defined before development is started, which is visible in the git history

End to end tests

The project should contain one part of an end to end tests, which shows that you understand complete testing of data retention and deletion across the project

Unit and integration tests

The project should contain unit tests for each function, and integration tests for the endpoints and functionalities. I need to see that you understand all the principles

CI/CD

Criteria

Deploy on PR

Make sure the project deploys when a merge or PR to main (or development) is triggered

Container management

Use the docker hub to keep your containers on the server up to date, including the build frontend, or run all the tests before pushing a container to the hub.

testing / production

Make sure there is a different setup for the production and development branch

[o] Threejs and shaders

Criteria

Frontend

Create a frontend using threejs to visualise an interactive scene

Shaders

Use shaders to create textures on interactive objects

Performance

Make sure the site runs without too much use of resources. Don't load what isn't necessary etc.

[o] Communication protocols

Criteria

Use of communication

The project needs to communicate with external hard- or software, using relevant communication protocols. Use a separate docker service to achieve this.

Clean entry and exit

The service needs to cleanly exit, and initiate connections. Either on demand or on startup. Make sure the connection resets when something goes wrong.

Data transmission practices

Make sure the transmitted data contains exactly what is needed, with regards to performance and overview

[o] React and webpack

Criteria

Built frontend

The frontend needs to be compiled and build using webpack. It needs to run in a docker container, and start with docker-compose

React

The frontend needs to be made in a modular fashion, using correct and up-todate functions like useEffect and state management

Best practices

The frontend needs to adhere to the best practices regarding style and performance. Use libraries to help you