Catalyst Engine Documentation

Defines

- **CATALYST_ENABLE_OCEAN** – Enables ocean rendering.
- **CATALYST_ENABLE_VOLUMETRIC_FOG** – Enables volumetric fog rendering.

Naming

- Member variables start with an underscore. Every subsequent word begins with a capital letter, the rest lower case. Example: `_MyMemberVariable`

- All other variables is written in camel case, i.e. the first word starts with a lower case letter and subsequent letters are all lower case. The subsequent words starts with upper case. Example: `myVariable`

- Constant variables are all in upper case, with underscores separating words. Example: `MY_CONSTANT_VARIABLE`

Update Phases

The Catalyst Engine is updated in a number of distinct phases. Updates for game-specific logic can be injected during these phases via the **UpdateSystem**, both in synchronous and asynchronous passes. Every object that inherits from the **Updateable** class can be updated by the update system. Below follows a summary of what happens during these phases on the engine side. The results of what is done during each of these phases can only be assumed to be available in subsequent phases. That is, for example, if input is updated in the setup update phase, then retrieval of input states can only be done in phases after this phase.

Opening Update

During this phase, data that will be used during the frame is set up. Input states are updated, so that they are fresh for subsequent passes.

Logic Update

This is where the core logic update happens.

Render Update

During this phase, rendering happens.

Closing Update

During this phase, data that has been used during the frame is cleaned up.