

Game Engine Rational

Why we built our own, and a little about it

Requirements

- Play a linear, single-player, story game
- Easily allow prototyping by making it easy to add new content to the game engine
- Simple enough to get a quick start, robust enough to avoid problems later

Why we built our own

Well I (Alex) wanted to do it for fun, but there are also better reasons. For one, at the time of making the game engine, we were all trying to learn createJS. I was confident that I could make a game engine with a simple API that wouldn't get in the way of the team's development. Also, at the time of considering alternatives, the specifications for the game were very loose; making our own engine gave us the flexibility we needed.

Overview of the game engine

It is capable of running a linear, single-player game. The engine provides facilities to add content to the game through the use of `GameEvent` objects. The engine is little more than an object containing an array of `GameEvent` objects, and some state variables.

`GameEvent` objects are simply pointers to some function that should be executed, along with a little bit of seldom used metadata. If you would like to add a new event at the end of the game, just make a new `GameEvent` object and point it to the function that implements your new event.

The game engine also has a set of state variables, which keep track of things such as the current turn, biome, progress in the game, etc. As javascript is a prototypical language, developers can add whatever variables need to be maintained across `GameEvent` objects to the game engine object at runtime.