



DungeonBots



> The Coding Education Game

Stewart Charles

Wesley Oates

Kevin Parker

Ken Richard

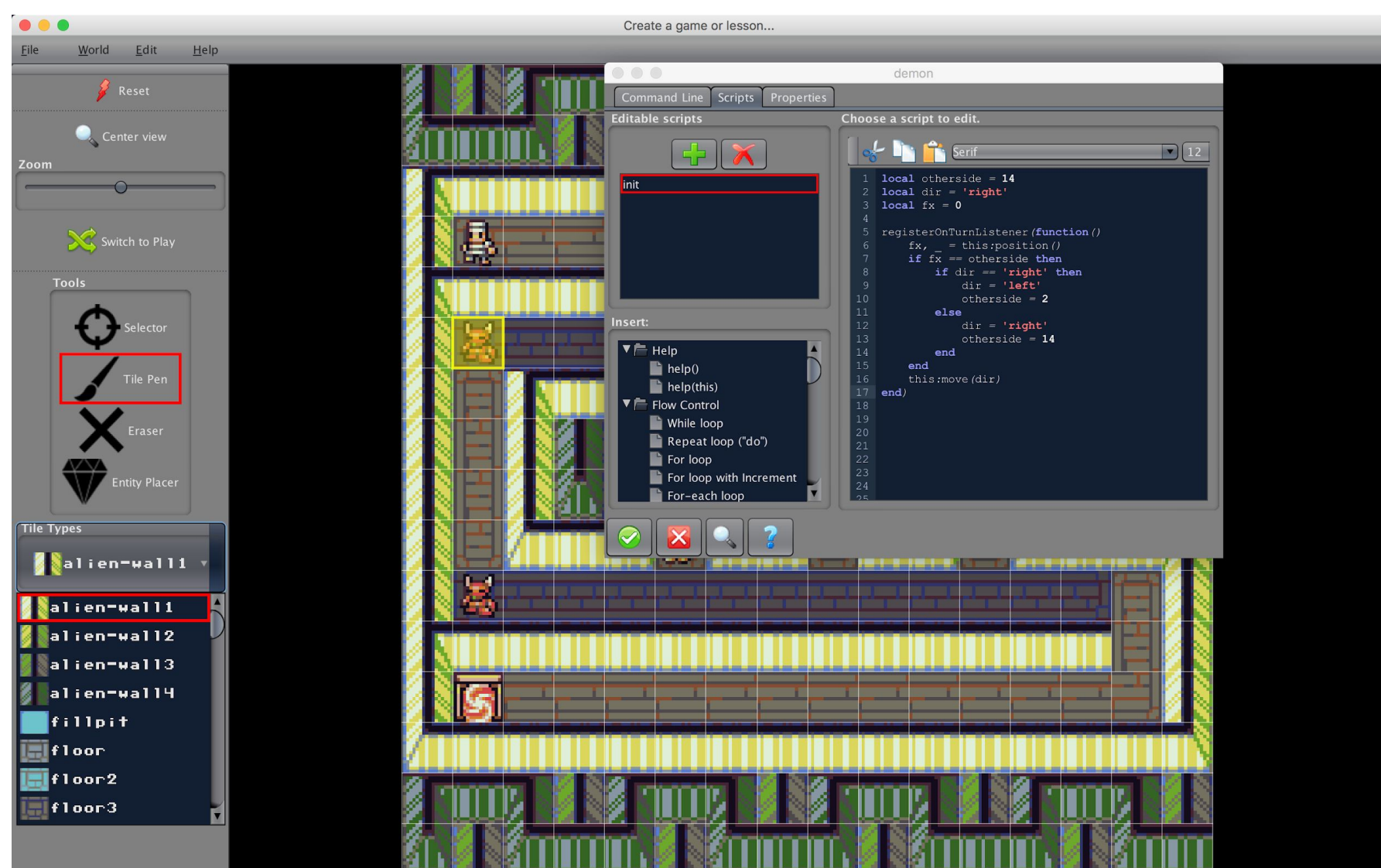
Abstract

DungeonBots is a fun, powerful gaming platform that facilitates coding education, allowing educators to write make game-like lessons that demonstrate programming principles.



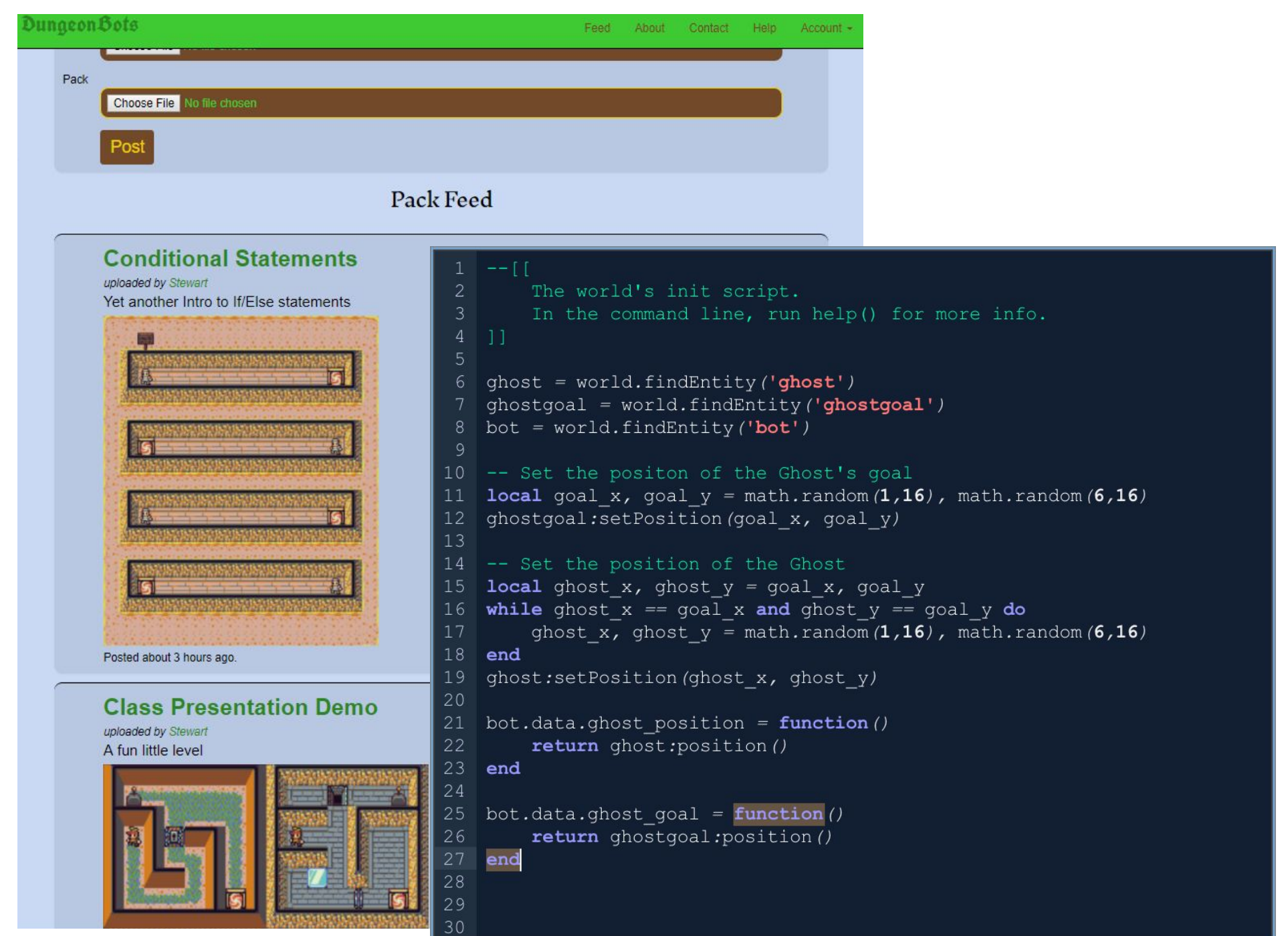
Key Features

- Level editor is a powerful tool for game designers and teachers to create unique programming challenges.
- Game is a visually appealing environment for solving challenges, and is customizable so the game can respond to key presses, command-line scripting, or runtime scripting.
- Community facilitates in-game downloads of lessons, links users to follow each other, and allows publication of new lessons.



Goals

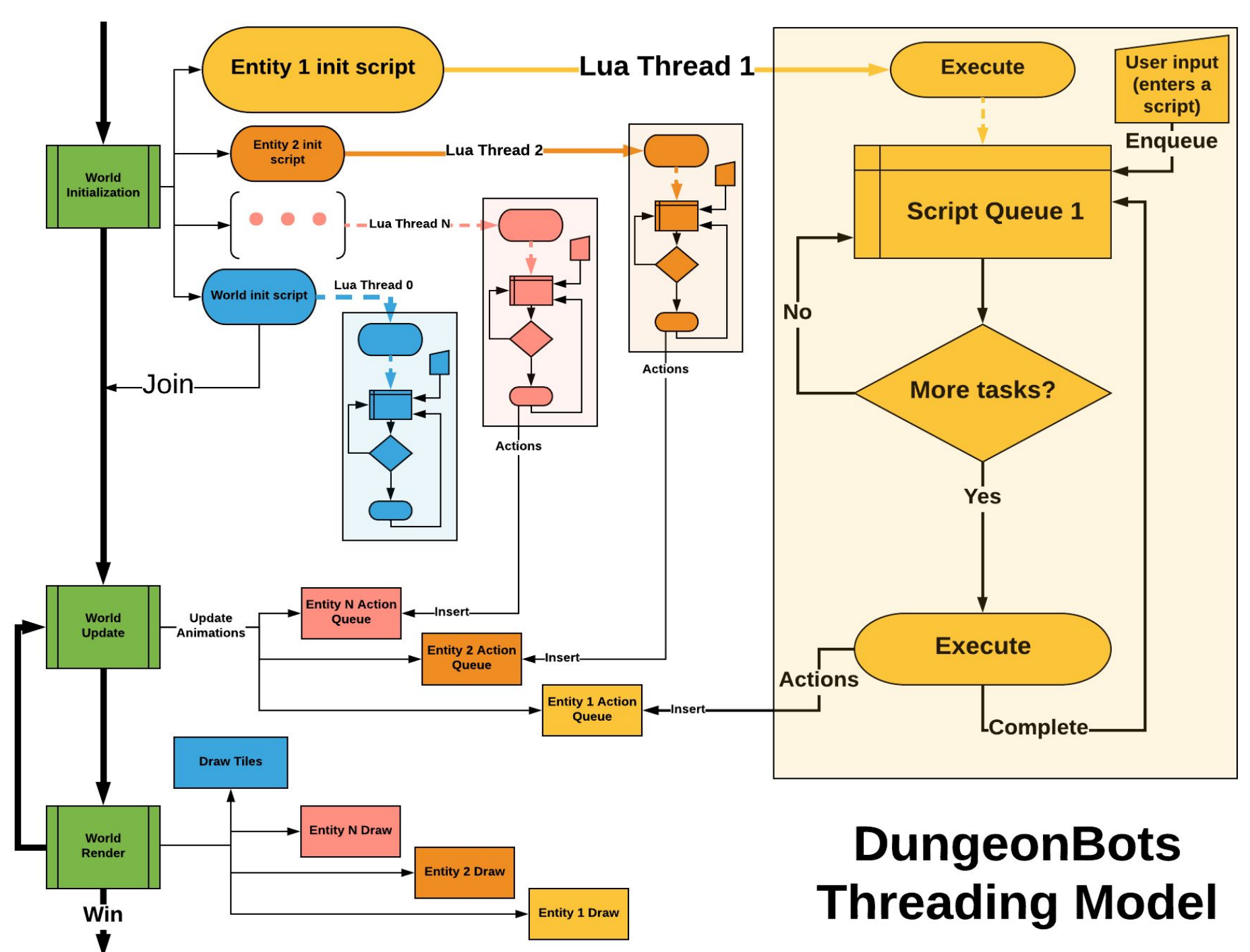
- Give level authors and educators an intuitive, flexible, and powerful development environment.
- Provide players and students fun and exercises that also teach programming principles.
- Provide a community space that facilitates sharing of games among players and teacher-to-student.



System Design

Using our own custom game engine

- Written in Java
- Highly concurrent architecture
- Integrated Lua scripting support



Utilized Technologies

