**Greenfoot Game Engine**

**Introduction**

Greenfoot is a 2D game development engine. 2D games can be developed in Java as Greenfoot supports Java. Greenfoot teaches object orientation with Java. Developer can create actors which live in worlds to build games and for simulation. Greenfoot has visual and interactive tools built into the environment.

**IDE Features:**

The interface is a full IDE which includes project management, auto-completion, syntax highlighting, and other tools common to most IDEs. It also allows you to publish your work both on and offline. The interface is designed to be simple and easy to use; built with beginners in mind. Greenfoot provides easy transition into other environments, such as BlueJ and other professional IDEs.

**Deploy with environment**

Users can publish their projects online, where other Greenfoot users can play with them and provide feedback. Online sharing is built directly into the environment.

**Features and Benefits**

* Clean and Simple user interface
* 2D world grid can be adjusted to any number of cell down to single pixel size
* User Interface provides class diagram, which gives glimpse of design/architecture
* Easy to use IDE which helps in browsing, coding, compilation and debugging
* Its library contains useful methods for handling mouse or keyboard input
* Execution has features like pause, single stepped, speed up and slow down at runtime
* Greenfoot provides automatic thread management. It executed main method act() of each object in round robin way.
* Game engine manages graphic on its own for the most part

**Features Greenfoot Engine Lacking**

* Intellisense
* Version Control

**Reference:**

* <https://www.greenfoot.org/door>
* <https://www.cs.nmsu.edu/~kvillave/papers/Karen24P.pdf>