

Crab Simulator progress report:

Crab simulator now features a terrain represented as a grid whose square spaces are populated probabilistically by three types of game object, all inheriting from a generic GameObject class:

- Buildings now replace the concepts of Walls and Cities making the grid terrain one complete cityscape with boxes (buildings) of variable height.
- Cars and People are represented by red and pink boxes respectively, sized down to a fraction of a grid unit for symbolic scale.
- An Empty class has been created to account for empty spaces in the grid terrain and are factored into the probabilistic object positioning scheme.
- Schools are yet to be implemented, but are not considered to be a major contributing feature of the Rampaging Crab Experience that is now the core design pillar of Crab Simulator's gameplay.

The Crab construct now has the ability to destroy all types of game objects (buildings, cars and people) causing them to disappear on collision detection. Upcoming planned updates to this feature include visual & sound effects for object destruction, as well as a win-state and restart conditions upon destroying all objects. As a technical note; game objects are currently not removed from the grid row arrays containing them, instead they merely stop displaying on screen. Any technique to check object persistence in the simulation will likely require the objects to be removed and the array lengths to be checked against zero.

A corrupted Q-bit now appears every second at a random position within the screen's boundaries with a random rotation speed on their local position along the X and Y axis. The Crab construct is intended to be imbued with the ability to absorb these q-bits, subtracting them from their array, in a similar way than when destroying game objects. A fail state condition for critical q-bit corruption levels is still a part of the development plan.

Most technical problems so far have arisen from the need to convert 3D coordinates to grid-space coordinates when positioning elements or checking for collisions between them, that on top of tweaking global translate values to center the scene in the XY plane.

The focus of Crab Simulator has shifted to favor the gameplay mechanics in support of the Rampaging Crab Experience pillar. However; a menu flow featuring 2D crab template art or another incorporation of the original concept art, and the substitution of the Crab with a 3D model are still within scope for the final piece as a secondary priority.