Trading Game Project

Milestone Report

The group:

* Jack: Front end – Canvas graphics, animation, game representation and controls.
* Milan: Back end – Database, sessions, chat. Front end – game set up, page layout.
* Craig: Artwork for the game (almost done), Front end – General.

We chose to use a library utilizing HTML5 (Paper.js) for the game graphics, because it is supported by many browsers and operating systems, is a new technology and is fast (unlike Flash). We are also using jQuery to simplify working with JavaScript. We chose to use Django (for Python) for making back-end of the game because of prior experience with this framework. It is going to be deployed on Heroku which, again, some of us have used before.

Our game is a survival game, where players (represented by magical ghosts wearing hats) must last as long as they can inside a house, which is being attacked by giant evil snails. The game is turn-based, and so can be multiplayer; players are distinguished by the colour of the hats worn by their ghost characters.

Game rules:

* On their turn, a player may perform one of the following actions (all player actions take 1 turn):
  + Move into an adjacent room
  + Build a barricade in a room entrance, preventing movement through it until it is destroyed
  + Destroy an adjacent barricade
  + Repair an adjacent barricade (unless the barricade is under attack / there are snails in the adjoining room)
  + Shoot at snails in adjacent rooms (players may shoot through barricades), provided they are carrying at least one ammo clip.
  + Pick up ammo from the ammo box
  + Pick up or drop the ammo box (while the ammo box is carried, the player may only move, or drop the box. Other players cannot pick up ammo from a carried box)
* Snails will move towards the players, not necessarily taking the shortest path, and destroy barricades in their way. The time taken to destroy barricades depends on the number of snails attacking it, and the strength they have, which may be increased as the game continues to increase difficulty).
* Snails will be spawned in groups, all snails in a group will move and act together.
* Players (Ghosts) cannot move through walls or barricades, this is because they need to be wearing their magical hat in order to interact with the real world (carrying a gun, building barricades etc, this is also what makes them vulnerable to attacks by the snails).
* Players are killed when they are in the same room as any number of snails.
* Once a player is killed, they cannot be resurrected. If they were carrying the ammo box it will be dropped where they were killed.
* The game is over when all players are dead, a score is calculated based on factors such as number of players, number of snails killed, and number of turns survived.

There is also a chat feature for the multiplayer games, with which players can co-ordinate their turns. For example, if multiple people try to pick up the ammo box, only one will succeed (this will likely be randomly determined). Similarly, two people building a barricade in the same place will not make it any stronger.

The game will slowly get harder, too. As yet, we haven’t decided how this will happen, but it will most likely be one of two things: either there will be more snails per group / more groups spawned, or the snails will simply be stronger (harder to kill, will destroy barricades faster, etc).

Milan write something.