Alpha Release Report

Development schedule - status

Functional minimum

- singleplayer
- multiple identical sheep
- sheep can jump over fence *(jumping animation and logics still in progress)*
- sheep walk away from player (no freewill movement)
- simple world, flat plane, simple fence
- static camera
- no character animation

Low target

- competitive multiplayer
- refined sheep movement
- split screen

Desirable target

- character animation
- different levels *(only two simple maps but different game modes)*
- improved graphics
- achievements/points for players *(simple sheep counting)*
- special sheep *(slight random variation in speed)*
- power-ups
- sound effects / theme song (songs still in the works)

High target

- extra creatures
- additional constraints (overpopulation mode)
- different difficulties (some aspect of the game can be configured)

Sheep movement

We now have a decent implementation of a flocking algorithm. It might need some fine tuning, but the movement looks natural and the driving of the sheep is fun.
We kept the sheep spawning at random locations, so the sheep don't need to move autonomously in order to distribute themselves. Since the camera is zoomed in enough that the player doesn't see a lot of sheep just standing around, we didn't implement random sheep movement.

Animation

The sheep and dogs (player characters) are rigged and animated. The jump animation for the sheep is created, but it still needs to be incorporated in the game (which involves some additional game logic for when a sheep enters the hot zone).

Modeling, level design

So far, we have improved the simple flat level by textures and fences. The walls to limit the game field are still missing (but the field is highlighted). We also added a grass texture.
To save time, we decided to only make a few very simple maps that mainly differ in size and number of fences. We however allow the player to modify some level options like the winning condition (number of sheep or time limit).
Instead of a little boy, the player is now a dog. The dog was much easier to model. Also, the fast speed of the player looks more natural for a dog.

Power-ups

So far, we have modelled two power-ups: a flower and a clover. A player can collect them by moving over them. The flower can be used as an attraction power up (attracting the sheep) and the clover can be used for faster speed of the player. Collected power ups are added to a player's power-up inventory and they can be activated by the player at a desired time.

Camera, HUD

The camera can now be rotated and moved in order to optimise the default settings.
The HUD now also displays the gametime and how the remaining powerups.

Game Menu

We built a simple hierarchical menu. It is used to change settings, configure the game, add and remove players and start a new game. We still need to make it more visually appealing, e.g. by adding a nice background.

Collision detection

We improved the collision behavior for the map borders (the sheep used to keep running towards the wall without moving). We also added a repulsive force at the map corners so the

sheep don’t get trapped there as often as they used to.

Game Modes

Instead of building many different maps, we decided to have only a few simple maps but let the player choose between different game modes. So far, we have:

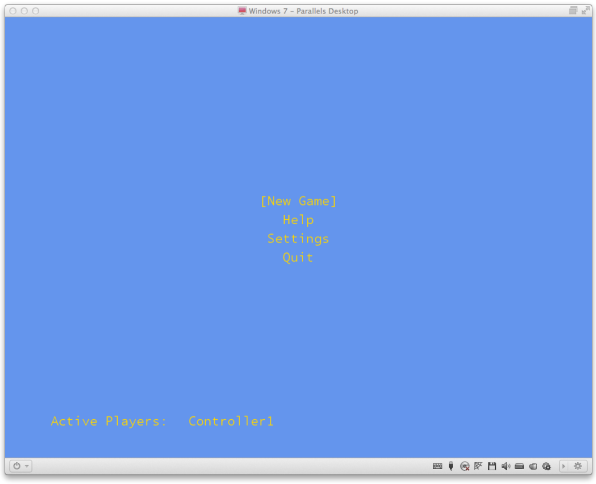
- **Time Limit:** the game ends after a certain time
- **Sheep Limit:** the game ends after one player reached a certain amount of sheep
- **Overpopulation:** the game ends if there are a certain amount of sheep on the field. the spawn rate increases over time.

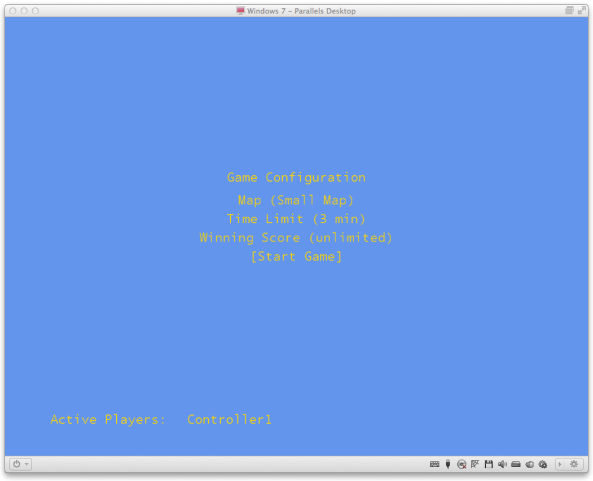
All the modes can be played by 1-4 players. For multiplayer, the overpopulation mode is cooperative, the other modes are competitive.

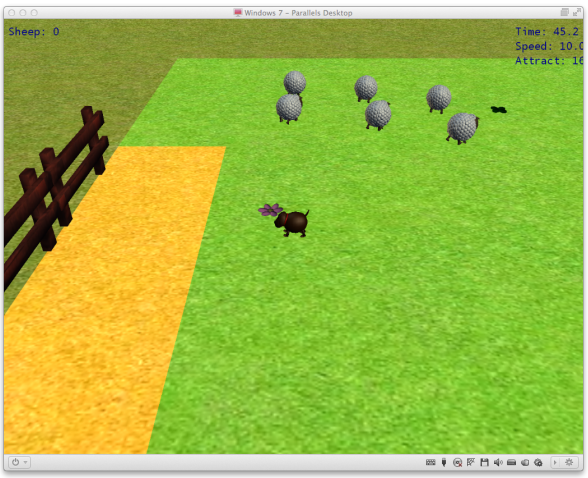
Overall progress

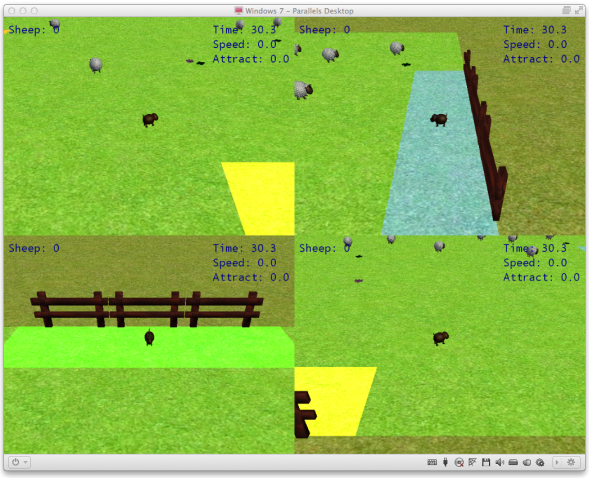
In order to be ready for the alpha release, we concentrated on the parts that are relevant for the actual gameplay. Since we are a little behind our task schedule, we skipped some features that are mostly visual improvements (stonewalls, sheep jump animation).

Screenshots






Windows 7 - Parallels Desktop
Sheep: 0
Time: 45.2
Speed: 10.0
Attract: 10


Windows 7 - Parallels Desktop
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Time: 30.3
Speed: 0.0
Attract: 0.0
Sheep: 0
Time: 30.3
Speed: 0.0
Attract: 0.0
Sheep: 0
Time: 30.3
Speed: 0.0
Attract: 0.0
Sheep: 0
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