CSE310 Final Report

Filthy Cell-Culture Dish

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Contents

1 Rationale for Including and Excluding Game Elements

1.1 Included

Those included elements might have slight change, comparing to original design.

1.2 Map

We used Diamond map instead of Hexmap, because budget constraint. The Hexmap package costs 50 dollars per computer. The game map is limited to be a pure square world instead of cylinder. This is due to data structure constraint. Other aspects are implemented.

1.3 Traits Tree

We implemented this elements faithfully in most cases, since this is the essential part of gameplay. However, for exploration trait, we use it for deciding population obtained by per exploration and threshold for expanding to nearby cells. The reason is that we did not implement an shadow system.

1.4 Camera

Zooming in/out and translation of map are all implemented.

1.5 Sound Effects

We have put a piece of music at the entering of the game, and at the time of winning.

1.6 Graphics

We successfully implemented an simple 2D graphical system for our game.

1.7 Excluded

Those elements are largely not implemented, mostly because of time limitation.

1.8 Animations

We have some sort of ppt like animation for scene besides the main game scene. The two subsection mentioned are not implemented.

1.8.1 Status Indicating Animation

We believe it is sufficient to use mixture of color and numerical information to indicate status.

1.8.2 Declaration of Gaining New Traits

We achieved this through color and text.

1.9 Artificial Intelligence

After some discussions, we found that it should technically feasible to implement it using convolutional network as [1] did for GO. However, we found it hard to implement an A.I. for this game within the time constraint.

1.9.1 Difficulty Choice

We did not make A.I., therefore it makes little sense to setup difficulty level. Currently, all three difficulty level in the game setting has no effect.

1.9.2   Other Values' influences

Again, we don't have A.I..

1.10   Networking

Not essential to gameplay, therefore we excluded this given time constraint.

2   Testing Player Feedback

2.1   Live Demo

Next turn button is not necessary.

2.2   Tester 1

Relate population and trait development to make it obvious that those are
linked.

It is confusing that choosing trait has no immediate feedback. This tester
prefer choosing trait after cumulating enough points.

More text tips for new player.

Map shape should be able to customize.

2.3   Tester 2

The game is not very friendly to new player.

3 Reflection on Development Experience

4 Ethical Issues

In terms of content, our game is perfectly healthy. It contains no violent content, nor gambling. As a non-Internet related game, it has no issue with ownership of virtue property. As for addiction, there is almost no risk for players being addicted to a brain consuming chess like game.

In terms of copyright and intellectual property, we put our source code in github, and therefore agree on everyone to view it. In addition, we used music licensed by Creative Commons license. We are therefore, required to credit the source and not allowed to use our game for commercial purpose.

References

[1] Christopher Clark and Amos J. Storkey. Teaching deep convolutional neural networks to play go. *CoRR*, abs/1412.3409, 2014.