Tower of Babel

Haoyan Wang, Poru Tseng

Dec 1, 2019

Introduction

Our game, Tower of Babel, is designed upon the idea that in ancient greek tale, people once tried to build a tower to reach the realm of god. The game let the player be the builder of the tower. By stacking building blocks (boxes) from the bottom to the top, the player can decide where and when to place the box, and the building boxes form a tower.

Game Demo

Thegame is configurated in the way that the boxes will constantly moving horizontally from the one side of the screen to the opposite side, and the next box will not stay on top if it does not overlap on the previous box. There will also be chances given to the player, and it costs one chances to build one level of the tower while the goal is to reach as high as the tower canget to.

When the game ends, you are shown the game-end dialog, which reports the height of your tower and additionally, it gives you the option to restart the game.

Why this project

First of all, this game is fun due to the infinite property of this game. The higher the tower, the harder to build it higher and it spurs you to take the challenges.

Secondly, the game is fun to work on.

Implementation

Game Datapath

Game Finite State Machine

I/O and Peripherals

Results

How did it go

Discussion

Playability

What We Learned

What could be improved

Conclusion

Appendix

formulaDemo

(a) $n > c$ and $n > k$

$$\begin{aligned} n^n = n \cdot n^{n-1} &> c \cdot n^{n-1} \\ &\geq c \cdot n^k \end{aligned}$$