

NOTE: This summary must be 500 words maximum!

GAME NAME:

- TurtleSmash

TIME TO CODE:

- Approx. 70 hours
- Extra at home? – all done at home, no work in class.

DESIGN:

- Characters / players / sprites involved:

Turtles, shells, webs.

- Explain how your game ‘works’

This is a fast-paced LAN multiplayer 2D game. It is downloadable from <https://seerbird.github.io/TurtleSmash/download.html> and starts correctly on machines with Windows operating systems. Upon starting the game, the user is presented with options to host a game or to discover a game hosted on their LAN.

A list of games hosted on the LAN will display upon discovering. After connecting to a game, the list of players currently in that game will be displayed, and the user(client) will have the choice to enter the game itself, at which point they will be able to play with the other users.

If the user decides to host a game, a screen with a “Play” button and a textbox will appear. The textbox allows the user to change the name that displays when other users discover the server on the LAN, and the button starts the game itself, letting connected users play as well.

At the start of the game, all player turtles are created outside of the screen boundary and thrown towards the center of the screen. A turtle has a body and a shell, and the shell can come off on significant collision. Shells can merge into bigger shells when they. All players can control their turtles using left and right mouse button clicks, throwing a web and detaching a thrown web. “Webs” are lengthy ropes that connect to their source at one end and stick with another, growing out of the source until they reach a particular length or are detached. When deformed too much, turtles die and respawn shortly after. Each time a player turtle dies, the player’s score is increased by one, where the initial score is zero. Users can see the scores of all players by pressing S. Collisions, shells coming off, turtle deaths, and web throws are accompanied by their corresponding sounds and animations(particle bursts, screen shakes, screen flashes).

STAGES TO COMPLETING CODE:

I had to make many revisions to the code, especially the network module. First, I made sure the main cycle and the window/canvas worked. Then, I coded the physics engine. Then, I coded the network module and the GUI and added all the minor mechanics of other modules. You can find the complete development history at <https://github.com/SeerBird/TurtleSmash/commits/master/?before=6e35c643dbae7625bef660f1edf37ced5c5e8746+35>.

OUTCOME:

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-Happy with your game?

Yes, although I haven't been able to optimize it much and so the client lags on older routers.

- Finished? Proud of your work?

The whole thing is functional and downloadable on Windows, and looks like an actual game, so that's nice.

- Fun? (Yes!)

Yes. I've been able to learn loads.