

ARTSVIS 242L: Pseudo code (Week 4)

Zephyr Farah

Due: February 7th, 2019

Variables

- Load first level birdhouse image
- Load second level birdhouse image
- Load third level birdhouse image
- Load first level tree image
- Load second level tree image
- Load third level tree image
- Load blank happiness gauge image
- Load blank money gauge image
- Load blank energy gauge image
- Set up happiness variable
- Set up money variable
- Set up energy variable
- Load menu directions image
- Load bird image
- Load squirrel image
- Placeholder variable for chance, set equal to 0
- Set placeholder time variable
- Load shop-related images

Set up

- Set up canvas (window width and height)
- Black background

Draw

- Draw first level birdhouse
- Draw first level tree
- Draw menu directions image
- If statement: key pressing
 - wasd keys
 - * If w pressed, Fill with more birdseed (takes 30 realtime seconds)
 - Arrow keys
 - * If down arrow pressed, prune tree (takes 30 real time seconds)
 - if p key pressed, open shop
 - * if 2 pressed, buy next level bird house (which has more anti-squirrel measures than the last level, but also decreases acorn production) and replace previous bird house
 - * if 3 pressed, buy more birdseed
 - * if 9 pressed, get better fertilizer (which increases acorn production, but scares off birds with its stink)
 - If buy 3 fertilizer, upgrade tree
- Algorithmic part
 - If time 1 minute after game opened/time variable last updated, update time variable with new seconds value based on current time
 - Once time variable updated, run random() + percentage of max birds - percentage of max squirrels, and if it is less than 0.5, make the placeholder random variable =0, else make it =1
 - If placeholder random variable =0, decrease energy by random amount, and increase by random amount if =1
- Energy
 - Every time do an action, take up certain amount of energy
 - Once energy =0, have to "sleep" (aka, wait 10 minutes)
- Garden care

- If 2 minutes and birdseed hasnt been completely decreased, increase number of birds by 1, and increase happiness
 - If get (aka sell) more than 3 acorns every 10 minutes, happiness increases by half as much as adding one more bird
- If acorn grows (which is determined by `random()` + percentage of squirrels with regards to the max squirrels, and if more than 0.5 then an acorn grows at the next 30 second mark), it is automatically sold for certain amount of money