GD50
Lecture 7: Pokémon

Colton Ogden
cogden@cs50.harvard.edu

David J. Malan
malan@harvard.edu

GEODUDE
:L19
HP: ▭▭▭▭▭▭▭▭▭▭

WEEPINBELL
:L25
HP: ▭▭▭▭▭▭▭▭
71/ 71

▶ FIGHT ^PᴷᴹN

ITEM   RUN

SENTRET :l3 ♀
HP:

CYNDAQUIL :l5 ♂
HP: 20/ 20

▶FIGHT ᴾₖᴹ
PACK   RUN

BUIZEL ♂ Lv8

CHATOT ♂ Lv18
56/60

What will CHATOT do?

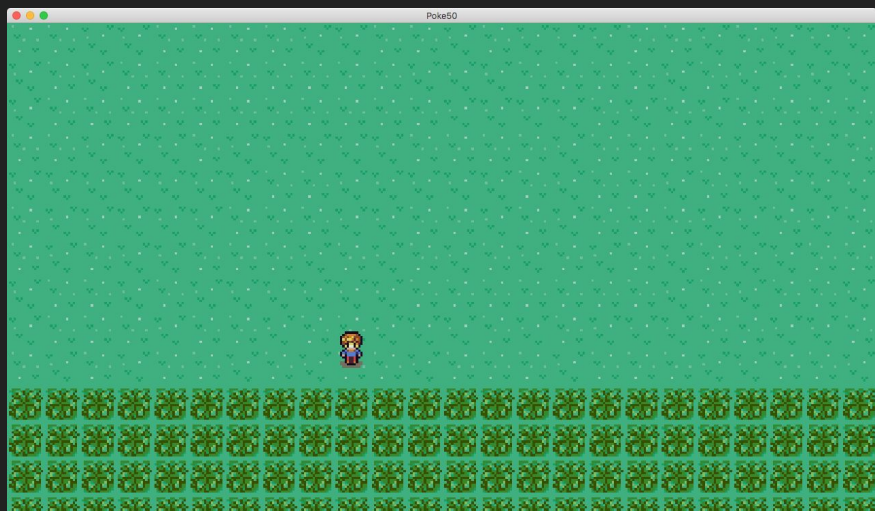| Growl NORMAL PP 40/40 | Mirror Move FLYING PP 20/20 |
| Sing NORMAL PP 15/15 | Fury Attack NORMAL PP 18/20 |

CANCEL

Pidove ♂ Lv.11

Roggenrola ♂ Lv.20
54/55

What will Roggenrola do?

18 49   IR   ONLINE   WIRELESS

Rock Smash
FIGHT   PP   14/15

Rock Blast
ROCK   PP   6/10

Headbutt
NORMAL   PP   15/15

Mud-Slap
GROUND   PP   10/10

Topics

- StateStacks
- Turn-Based Systems
- GUIs
- RPG Mechanics

But first, a demo!

Our Goal

A wild Agnite appeared!

https://howtomakeanrpg.com/

StateStack

- Allows us to return back to states as they were when we left them, rather than create new ones.
- Can allow us to render multiple states at once.
- Only the top-most state on the stack is being updated at once, though this could be changed if we wanted it to.

GUIs

- Short for "graphical user interface"
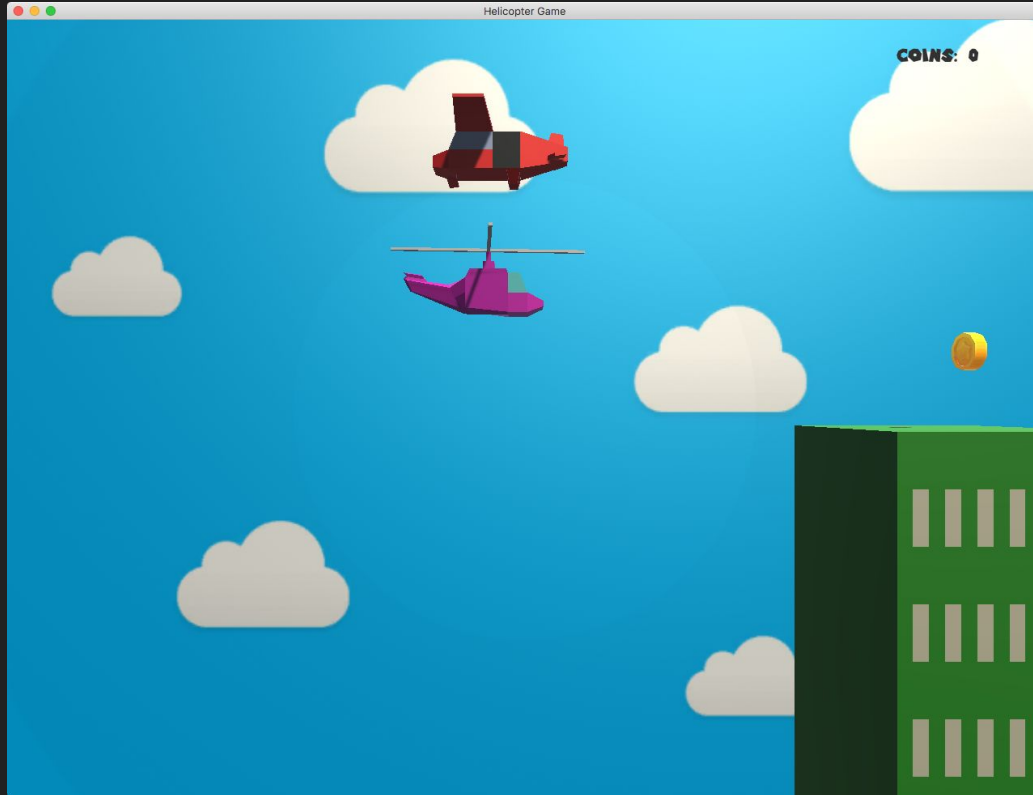- Common widgets and elements include Panels, Labels, Textboxes, Scrollbars, and others

Some Missing Features

- Detailed Level-Up Screen
- Monster Catching
- Field Menu For Browsing Pokemon
- Item Inventory
- Different Abilities
- Other Trainers to Fight
- Monster Evolution
- Towns, Routes, and Other Levels
- Breeding
- Day/Night Cycle

Assignment 7

- When the player's Pokemon levels up, display in a Menu all of the stat increases.
- The Selection class will need to be tweaked such that the cursor is optional, as there's nothing to actually select here.
- The "levelUp" function in the Pokemon class returns all of the stat increases, which you can use alongside the Pokemon's stats prior to leveling up.
- Most of this will be implemented in the "victory" function of the TakeTurnState class.

Next Time...

See you next time!