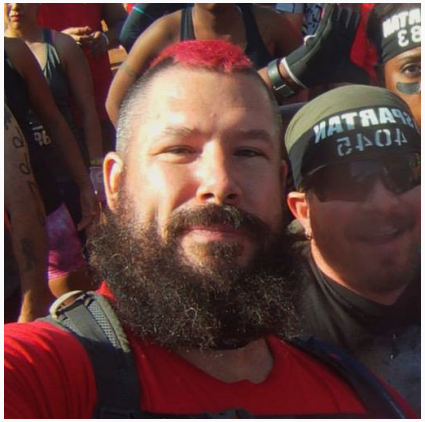

INVENTIVE

INVENTIVE

inventive.io
@InventiveGroup
facebook.com/InventiveGroup

Andrew Siemer



(512) 387-1976
@asiemer
andy@inventive.io

http://www.linkedin.com/in/AndrewSiemer
http://www.andrewsiemer.com
http://www.developerspringboard.com
http://www.lostechies.com/AndrewSiemer

Quick Activity

Parking lot simulator

- Model a car:
  - Make, year, plate
  - Time spent in the parking lot
- Model a parking lot:
  - Number of spots, cars that are parked there
  - Ability to park a car
  - Ability for a car to leave the lot after its time
  - Ability to get the lot status (who is parked currently?)
- There'll be less spots than cars when you start
- You can only park a car when a spot is open
- 10 parking spots
- 100 cars to park
- **You need to be able to programmatically park all cars over time**

INVENTIVE

Step 1 - write down the problem

INVENTIVE

- Model a car
- Model a parking lot
- Park as many cars as there are spots available
- Each parked car should leave the lot after 4-10 seconds
- When a car leaves the lot park another car
- Park cars until all cars have been parked
- Run the program until all cars have left the lot

Step 2 - break the big problem into smaller problems

INVENTIVE

Model a car

- Car should have the following properties
  - Make, Year, Plate
- Demonstrate creating an instance of a car object

Create a collection of cars to park

- Build a list of instances of car objects

Step 2 - break the big problem into smaller problems

INVENTIVE

Model a parking lot

- Create a parking lot object
- The lot should have parking spaces
- There should be 10 parking spaces

Park a car in the lot

- You should be able to park one car

Park 10 cars in the lot

- You should be able to park 10 cars in the lot

Step 2 - break the big problem into smaller problems

INVENTIVE

Car leaves a parking spot

- One car should be able to leave a parking spot after it has parked for a specified amount of time

When a spot is available, park a car

- You should be able to park a car as parking spots become available

All cars leave the parking lot

- All cars should be able to leave in their own time

Step 3 - solve each small problem with pseudo code

INVENTIVE

Model a car

- Car should have the following properties
  Use constructor function.
  - Make, Year, Plate
- Demonstrate creating an instance of a car object
  var car = new Car(make, year, plate);

Create a collection of cars to park

- Build a list of instances of car objects
  Create an array of cars to be parked.
  Use a loop.

Step 3 - solve each small problem with pseudo code

INVENTIVE

Model a parking lot

- Create a parking lot object
  Use constructor function.
- The lot should have parking spaces
  Could use an array.
  Could model a parking space.
- There should be 10 parking spaces
  Add 10 parking spaces to the lot.

Park a car in the lot

- You should be able to park one car
  Add car to first parking space in the lot.

Park 10 cars in the lot

- You should be able to park 10 cars in the lot
  Add a car to each empty space in the lot.

Step 3 - solve each small problem with pseudo code

INVENTIVE

Car leaves a parking spot

- One car should be able to leave a parking spot after it has parked for a specified amount of time
  Set a timer when a car is parked.
  Remove the car from the space when timer goes off.

All cars leave the parking lot

- All cars should be able to leave in their own time
  Timer should work when parking a car.

When a spot is available, park a car

- You should be able to park a car as parking spots become available
  Get the next car when a spot becomes empty.

Step 4 - put it all together, test each change frequently

INVENTIVE

- Build each piece in small chunks of code.
- Test as you go.
- Make sure your changes do what you expect.
- Commit to github.com frequently!