

The Last Of Humanity



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Introduction

This game would be about a man named John who lived in Los Angeles and barely survived an alien attack which the aliens infecting almost all of humanity. John heard a rumor going around that the United States government knew this might take place and how they built an alien proof sanctuary in Washington D.C. John met other survivors on the way there and they all wanted to save the Earth from the Zombie Aliens, even if they have to fight with zombie aliens

For the first level the player John is given several choices deciding on how they wish to proceed, and depending on the choice. If they choose the right weapons which are the knife/mini gun the players will be able to fight the undeveloped zombies with the other survivors and pass the first level. In level 2, the players have to figure out a way to get over the Potomac River that is filled with lava. They have to choose the right choice which is an UFO with a guessing number, if they out of the three guesses, the system will alert the aliens and the player will lose the game. Then the 3rd level needs to use collaboration using the more lethal weapons they found such as a futuristic machine gun in order to kill a group of alien minions who are fully developed, one of their power capabilities is that they can easily throw heavy objects. The 4th level is where John and the other survivors are now in Richmond, Virginia where they set up for camp before continuing on with their journey. However a scout notices that a horde is coming right for them, survivors now have to ready themselves to fend off the hoard before getting to Washington. How well they do is all going to be based on John's aim.

For the final level, John and the rest of them are really close to the sanctuary in Washington D.C. John and they had to quickly choose the weapons that are available to them which are a flamethrower or an alien machine gun to kill the parents to the pass finish the game.

Methods

Level 1

It begins with a print statement to show the intro of the game by showing the player (John) waking up to the sounds of chaos outside, with zombies and aliens running rampant. The first level, we try to implement chapter 5 for the first part of the level 1 by using the **def Function** to define the possible answers from the players. The player is given several choices deciding on how they wish to proceed. If they choose the right weapons, which are the Mini Gun or Knife that we implement the **Random Function** by using **random.randint** from chapter 3 to allow the players to either decide which weapon they would like to use and all of them will link to a different outcome of the game. The players will be able to fight the undeveloped zombies with the other survivors and pass the first level. However, if John and the survivors choose the tree branch as their choice of weapon they would barely cause any harm to the zombie aliens and the zombie aliens would overwhelm them and kill John and the survivors.

After the presentation and listening to the feedback for our group. What we think would be better for the first level is to show the players what is the percentage of their choice of weapon that could win the game. For example; John and the survivors choose “None” as their choice of their weapons, which is their hands they would have a 50/50 chance of survival and they would really have to use their strength to kill the zombie aliens and pass the level. So, it helps the players to think twice about choosing the weapon wisely to win against the undeveloped Zombie Aliens to pass level 1. However, the code is really complicated to run and we don’t want to have too much challenging storyline at the first level which will make the players lose interest to play the rest of the game.

Console of Level 1

```
Please enter your name: John
Welcome to The Last of Humanity John
You find yourself alone in an LA apartment, you hear a bunch of fighting outside, with bloodprints all over your windows!
You tune on the television and hear the piercing sounds of the emergency broadcast systems, the US IS IN DANGER.
Videos of UFOs and zombies roaming the streets are all over Fox news, you can't even believe it with your eyes...
You play as John, an ex military veteran who has been preparing for the worst.
You best hope your skills are sharp and your intuition are on par in order to deal with the situation.
Suddenly, you hear the screams of other people outside!

What do you choose to do, stay inside(1) or run outside and help(2)?1
You choose to stay inside and ignore the chaos that is going on outside. After all, it's not your problem.
Why should you risk your life if you are so comfy in your own home?
Congratulations, humanity is doomed but at least you'll be relaxing in your own home!
```

```
What do you choose to do, stay inside(1) or run outside and help(2)?2
You bolt open the door to the outside and find a bunch of zombies, what the hell?!
The news wasn't lying for once!
You see a bunch of other survivors running away and trying to fight off the undead aliens!
You quickly look around, your good natured self can't just let these people fight all by themselves...
After all, the zombies are coming for you too!
You look around frantically for a weapon... Bingo!
A lonely tree branch sits by itself next to a rustic looking combat knife.

What do you choose, knife(1) or tree branch(2)?2
Ah yes, the mighty stick, this will surely get those zombies good!
You run up to the first zombie you see and swing at it with all your might!
You expect glorious blood splattering and gore, only to be met with disappointment...
The tree branch breaks in half right upon impact as you stand there looking stupid.
Now that that dramatic sequence is over, the zombies quickly overwhelm you and you die.
Sorry, game over!

Would you like to try that again? (Y/N)
```

Level 2

In level 2, we first start to implement content from Chapter 3 and Chapter 4. It is divided into two parts of the game in which the players need to choose the correct answers to continue. The first path was implemented from the chapter 4 which covers in **Prompting Until a Match is found**, it consists of a basic `False` function that asks the player to get the right answer. It comes with 3 different kinds of options and it will continue to run the code until the player gets the right answer. After finishing part 1, it will follow up with other questions in order to pass the whole level 2. The second part includes the code from Chapter 3 covers on **Nested Branches** and **Relation Operation**. We implement the relation to the answer by using Equal to (`==`), it will link to a different answer which the player will ask to input their decision to finish the game.

However, we decided to change our games after hearing the feedback from professor and classmate during the presentation. We thought it would be better if we could implement the **Random Function** code that will increase the challenge for the players rather than keep the answers the same way as every time. Our team also discussed how not to make this game fall into the same concept and make every level have its own unique trick. We finally came up with a new idea to use the `random.randint` with the **range (1, 10)**. Although we still kept the first part the same, the second part is a new code that allows the players to guess the number between 1 to 10. With this, we used `int` to make sure that the players use only integers as a valid answer. Following a storyline that they are allowed to guess three times, we need to implement the **Counting Matches** (limit) to decide whether the players would fail or pass the level. Every guess counts as 1 try when the guesses remain 0, they will lose the game and get to see the right number with a printing stating the “Game over”. If the players got the right number within the 3

guesses, they could pass level 2.

Console of Level 2

Welcome to level 2!

**You have to figure out a way to get over a river that's filled with lava and rocks that would sometime burst into flames which used to be the Potomac River
Please choose your methods below

1. Using Special Alien UFO 2. Hopping on the rock 3. Swimming across the Lava
Hint: The lava is 2000 Fahrenheit

What is your method (Please write: 1, 2 or 3): 1
That's a great idea! Let's go...

**They realize that they need to have the key to start the engine
The key was hidden under few mysterious boxes
Only the aliens have crystal eyes that could see through everything

There are only 3 guesses for John and Survivors,
otherwise the system will alert the Aliens and you will die.
Now they will need to choose the right box to get a key!

Guess a number between 1 and 10: 5
Sorry, that is not the correct box. Try again!

Guess a number between 1 and 10: 2
Sorry, that is not the correct box. Try again!

Guess a number between 1 and 10: 3
Bravo! You guessed the correct box.
You are now passed level 2!

Welcome to level 2!
**You have to figure out a way to get over a river that's filled with lava and rocks that would sometime burst into flames which used to be the Potomac River
Please choose your methods below

1. Using Special Alien UFO 2. Hopping on the rock 3. Swimming across the Lava
Hint: The lava is 2000 Fahrenheit

What is your method (Please write: 1, 2 or 3): 2
The Lava is too hot, you can't get close to it or it will burn you to death
Failed! Please try again!

What is your method (Please write: 1, 2 or 3): 1
That's a great idea! Let's go...

**They realize that they need to have the key to start the engine
The key was hidden under few mysterious boxes
Only the aliens have crystal eyes that could see through everything

There are only 3 guesses for John and Survivors,
otherwise the system will alert the Aliens and you will die.
Now they will need to choose the right box to get a key!

Guess a number between 1 and 10: 2
Sorry, that is not the correct box. Try again!

Guess a number between 1 and 10: 1
Sorry, that is not the correct box. Try again!

Guess a number between 1 and 10: 3

You are out of guesses! The right box was: 8
The system is alerting the Aliens...

Game over!

Level 3

Level three continues to build upon the storyline developed in the two previous levels through the utilization of player-made decisions. Chapter three in our textbook acts as the foundation for this level, as it incorporates if statements, relational operators, and boolean operators which are all central to decision making. The use of these concepts allows the player to essentially make their own story within the perimeters of the choices provided. The first 35 lines of code get the level rolling with the player having to make three decisions. This first chunk of code includes functions, which we learned how to use in chapter 5, along with if statements and boolean operators. The storyline for level three diverges at this third decision, "Choice 1: Run OR Choice 2: get the gun!" At this point, depending on the player's input, they will be routed to

one of two main storylines.

Lines 50 thru 80 introduce a change in pace of the gameplay. We decided it would be best to break up the monotony of linear decision making with a good ole riddle game. Three riddles are presented to the user along with three corresponding inputs. The player must concentrate all of their brain power to break the code of these difficult riddles and then transfer the riddle answers (which are all integers) to three inputs acting as a combination lock. With the use of if and else statements, and especially the and operator, the console will either propel the user into the next function or send them back to the beginning of the level if they fail on their second chance.

Lines 81 through 123 were added after our group's presentation in response to the constructive feedback of adding randomness and making our game replayable. With that said, we looked towards chapter four to utilize randint. Randint was implemented to randomly choose a number from one to three. Whichever number the user gets is stored as "c4amt" which ends up playing a critical role in what decision the player makes down the road. The thought behind this was to set up the opportunity for how the player wants to play. Do they want to gamble by throwing (and possibly missing) C-4 explosives at the giant alien zombie or perhaps running up and placing the C-4 charge as a more surefire measure. The gamble of throwing the C-4 is employed through randint again, except this time the range is one to ten. This is displayed to the player in terms of rolling a 10 sided die, and if they roll atleast or above a six then they successfully hit the giant alien zombie and BOOM! As stated earlier, the amount of C-4 charges the player was randomly given ties into this challenge. In the chance the user misses all of their shots and runs out of C-4 charges, their storyline will integrate all the way back to where the

other main storyline starts at the third decision.

Lines 128 through 152 serves as the last section for this first storyline and includes the same concepts used before this level (chapters: 2,3,5, and 6). One of the helpful comments we received after our presentation was to include “real life test questions” and we thought what better way to do that than to add some history trivia. The user must correctly “remember” the origin of the Achilles mythology (Greece) and then input it. This is in correlation to the fact that the player is presented with the ultimatum that the C-4 charge must be placed on the Achilles heel of the giant alien zombie.

Lines 157 through 199 serve as the stage for the second storyline. In the case that the user missed all of their C-4 charges, this is where they will find themselves as well. As a text-based decision game through and through, much of the code here is founded on the same chapters as above. To add randomness and create a more diverse storyline the random module was used again. However, this time around random.choice was used to pick a random word off of a list, which we studied in chapter 6. The user must correctly guess the correct word in two tries in order to fire the alien gun and pass the level.

Taking a step back, text-based decision making games can be a great medium to tell a story. However, without choices to make, chances to lose or to have skin in the game the medium isn’t taken to its full potential. The feedback we received, specifically from Professor Conlon on level three showcased this. In order to rectify this we added three random aspects along with 120 new lines of code to branch out the storyline and ultimately make the game more well-rounded and replayable.

Console of Level 3

As John is slowly waking up, he feels the ground slightly rumble beneath him
However, John sees most of the other survivors still sleeping...

Should John look up the window to see what is making the ground shake or go back to sleep.
Type look or sleep: look

John cautiously walks to the window....

He leans toward the window and sees a gigantic zombie alien! John mutters under his breath that it must be at least the size of a four story building
John looks back to see the rest of the group and sees them now almost all woken up as the giant zombie alien stumbles closer and closer to them
John can only think of two choices! Go look for the weirdly-shaped alien laser gun or run outside to distract the big alien zombie
Choice 1: Run OR Choice 2: get the gun!

Enter 1 or 2: 1

John ran track in highschool but since then he's gained a few pounds, regardless he ran for his dear life!

John is huffin n puffin...he knows he won't be able to outrun the giant alien zombie

Choice 1: Run into an adjacent derelict building to hide from the giant zombie alien OR Choice 2: Hide underneath a old van

Enter 1 or 2: 1

John turns the corner and runs into the abandoned house!

The giant zombie alien attempts to reach inside to grab John but instead causes the front entrance to collapse and entrap John!

John looks over at the pile of debris now blocking the front entrance and then scans over to a lone metal door

You examine the door, a three digit lock built internally built into the door stops John from seeing if the doorway leads to the outside

On the floor next to door lies a ragged note which reads:

Level 4

For level 4 in order to develop this code for this particular level we had to implement content from Chapter 5, Chapter 3, Chapter 4 and lastly Chapter 2. We implemented the content that we learned from chapter 5 which is that we defined the functions in the beginning of our code for the level. The function names in this level are path 3 so that we can compose a set of instructions because of how complicated the code is for this level. So defining the function which in this case is Path 3 gives us a self-contained module to carry out a task which in order to

```
As my time is near...
what lies past this door is of
no use to me when I'm dead
perhaps it may help you...if you
can solve this riddle...
First number: I'm a number with a couple of friends, quarter a dozen, and you'll find me again.
Second number: Mom and dad have four daughters, and each daughter has one brother. How many people are in the family?
Third number: Three times what number is no larger than two times that same number?

Enter the first riddle's number in the lock : 3
Enter the second riddle's number in the lock: 7
Enter the third riddle's number in the lock : 0
Thunk...it seems John is quite smart and got the combination correct!

John pushes the door open and is greeted with a musty room filled with large wooden boxes and a tunnel entrance in the back corner
You start opening the crates and find them filled with C-4, explosives with built in fuses

You find 1 C-4 still in good condition and crawl through the tunnel

After pushing a manhole cover out of the way, you find yourself back in fresh air....but can hear screaming coming from where the group's building is!
Once you get closer you see one of the survivors trying to crawl towards the alien gun...but its directly underneath the giant alien zombie..
You have 1 C-4 charges and take a second to think of your available options....

Option 1: Go to the roof of the building across from the giant alien zombie and attempt to throw a C-4 charge at the alien's face
Option 2: Flank the alien zombie and put a C-4 charge on it's achilles tendon

Enter your 1 or 2: 1
You run up four flights of stairs and find yourself on the roof...just 20 feet across from you is the giant alien zombies head
John sets the fuse on the C-4 and readies himself to play C-4 dodgeball with the giant zombie alien!

When ready to throw, roll the 10 sided die. In order to accurately hit the alien you must roll atleast or above a 6! Enter Y when ready: Y
You rolled a 6 !
BOOOOOOM...the giant alien zombie's head exploded....if Earth ever goes back to normal, John might have a chance at going pro in dodgeball

Congratulations you passed the level and defeated the infamous giant alien zombie!
start here
```

actually run the tasks within the block of code we had to call the function by writing the function name which is path 3 followed by parentheses at the end of the code. The tasks in this case were the multiple if statements and print statements that we input into the level so that we can have a different scenario or output for the user when the dice rolls between a certain range of numbers which we implemented some of the content from chapter 3 . The type of function that we utilized for this part of the code for level 4 is a void function since we knew that we did not need to include a return statement since we were going to use multiple print statements instead which we learned from an outside resource(pitt.edu). Moreover, we learned from chapter 4 that we had to include a random module in the beginning of the code in order to generate random numbers for when the user rolls the dice. After defining the function path 3 we learned from chapter 4 that we have to set the variable diceRoll to the Random Randint() method. This is so that when the user rolls the dice it only returns an integer from a selected range which in this situation are numbers 1-6(w3school randit). Because without that type of method being included in the code there would not be a limit as to how high the number can go when the user rolls the dice, but in our case we do want a limit since the number determines how many zombies the user killed. In the end of our code we write multiple print statements so that the storyline of this level can be displayed onto the console for the user to read the storyline for this level. Lastly, following the multiple if statements we wanted to allow the user to input some information into our program so that they can roll the dice to determine how many zombies they killed and if they passed the level which we learned from chapter 2 that we had to include an input function. The reason we did not modify the code for this level is because we had the random aspect that we needed for this level and how the storyline flows with the previous level so we decided not to make any

modifications. Some of the challenges that came up when coding level 4 is that we had to find solutions on how to resolve the syntax and formatting errors that occurred but by utilizing some academic outside resources we were able to overcome the obstacle. Moreover, one other issue that came into our way is when we tried running the code the output would sometimes display that some of our variables were not defined, but we later figured that we had to include the random module in the beginning of the code for level 4. If we were given more time and resources I would have added another option so that the user can either choose to roll the dice or spin the wheel, but he would not know that if he chooses the spin the wheel option he would have a greater chance of killing more zombies/passing the level.

Console of Level 4

```
76 # level 4
77
78
79 import random
80 def path4_1():
81     diceRoll = random.randint(1, 6)
82     print("It looks like you rolled a %d" % diceRoll)
83     if diceRoll <= 2:
84         print("The zombies quickly overran the camp and killed everyone including you.")
85         print("That was very short lived, how about we try that again?")
86         while True:
87             path4_1_1 = input("Would you like to retry that? Yes or no? (Y/N): ")
88             if path4_1_1() not in ('Y', 'N', 'y', 'n'):
89                 print("Invalid input, please try that again.")
90                 continue
91             else:
92                 break
93             if path4_1_1 == "Y" or "y":
94                 path4_1()
95             if path4_1_1 == "N" or "n":
96                 print("Game over, thank you for playing. Maybe you should work on your aim hahaha!")
97
98     if diceRoll == 3:
99         print("Good job, you managed to kill half of the zombies in the horde, but you should work on your aim...")
100    if diceRoll >= 4:
101        print("You wiped out most of the hoard and were able to pick off the stragglers with ease, nice shooting!")
102
103
104    print("Your party rests at a nearby abandoned camp as you reach Virginia...")
105    print("Everyone is tired and weary, you yourself can barely stand.")
106    print()
107    print("Although its been a hard journey, you can't help but stare at the stolen alien gun in awe!")
108    print("The architect of the gun is definitely out of this world, it outclasses any technology made on this Earth.")
109    print()
110    print("Just as you start dozing off thinking about the gun, you hear yelling!")
111    print("There's a horde of aliens coming right for the camp, and these zombies aren't just any slackers!")
112    print()
113    print("You get up from your seat and ponder over the situation, these alien zombies are no pushovers.")
114    print("They look much more advanced than the previous horde that was killed, their bodies having")
115    print("multiple legs and arms, running faster than Usain Bolt!")
116    print()
117    print("You say a small prayer before readying your weapon...")
118    print()
119    path4 = input("Roll the six sided dice in order to see how many zombies are killed. Input 'Y' to continue: ")
120    path4_1()
```

```
Your party rests at a nearby abandoned camp as you reach Virginia...
Everyone is tired and weary, you yourself can barely stand.
```

```
Although its been a hard journey, you can't help but stare at the stolen alien gun in awe!
The architect of the gun is definitely out of this world, it outclasses any technology made on this Earth.
```

```
Just as you start dozing off thinking about the gun, you hear yelling!
There's a horde of aliens coming right for the camp, and these zombies aren't just any slackers!
```

```
You get up from your seat and ponder over the situation, these alien zombies are no pushovers.
They look much more advanced than the previous horde that was killed, their bodies having
multiple legs and arms, running faster than Usain Bolt!
```

```
You say a small prayer before readying your weapon...
```

```
Roll the six sided dice in order to see how many zombies are killed. Input 'Y' to continue: Y
It looks like you rolled a 4
You wiped out most of the hoard and were able to pick off the stragglers with ease, nice shooting!
```

```
In [3]: |
```

Level 5

Level 5 is the conclusion of the game and is fairly simple. The story goes that John and the survivors reach the sanctuary in Washington DC but they run into some aliens that they have to deal with along the way. Now to describe the story a large amount of print statements were used that were taught way back in the first couple chapters. If, else, and elif statements were also used that we had learned from chapters three and four. Chapters eight through nine were also implemented which were defining functions and constructors. This was needed to be able to seamlessly transverse and code the levels instead of being one giant code. It was easily the most helpful chapter in designing the game, as it made for player interactivity going through the levels much more trivial to code. Without defining the paths it would have been a jumbled mess all under a while loop.

Moving on, since it was the conclusion of the game, we did not want to make it very challenging so there is not much of a random factor in the level. It is more-so instead set paths that the player would take with a limited amount of choices. The player must choose what weapon to fight the alien zombies with, and also the body part to shoot. Now looking back and along with the feedback that was given by both the professor and peers, we should have added some type of challenge at the end. Whether it be an interactive game such as tic tac toe or perhaps a maze that the player must traverse through instead. If we had more time we would have preferred to instead set a maze for the player such as one of the groups did in their project, it would have fit the story perfectly since they were traversing unknown territory. The player would have to pick different paths throughout the maze which would have been randomized, and would fight zombies along the way. I also would have implemented a health system as well for the player starting at 100. The health would slowly diminish as the player would go through the maze and take wrong turns.

There is a youtube video linked in the references that shows the guide that we initially were going to use when we were going to change the code. A lot of the material we covered in class, however the implementation of ascii art would have been new for us, so that would have been another learning curve to overcome.

The level ends once the player makes only two correct decisions, that is picking the alien

machine gun as well as aiming for the head instead of the leg. This was a rushed ending and is of course a disappointment to us that we did not get to code as much as we wanted to. However it was still a fun experience to go through, and if given more time it would have been a much more fun game.

Console of Level 5

```
def levels_1():
    print("John and the rest of them are really close to the sanctuary in Washington D.C but when walking")
    print("to the entrance of the sanctuary they accidentally walked near a nest of alien eggs with the parents still there!")
    print()
    print("You could tell the aliens were agitated... John better act quickly before he's taken out!")
    print("Currently you have an alien machine gun and a flame thrower, what are you going to use?")
    print()
    firstPath = input("Alien machine gun or Flamethrower?: ")
    if firstPath == "Alien machine gun":
        print()
        path1()
    elif firstPath == "Flamethrower":
        print()
        path2()
    else:
        print("Invalid input, please try again!")
        levels_1()

def path1():
    print("You have chosen the Alien machine gun! Good choice, the rate of fire will do some damage to these damn aliens!")
    print("John takes aim at the parents who are quickly making their way at him, readying themselves to pounce and attack!")
    print()
    print("Where would you like to fire?")
    bodyTarget = input("Head or Leg?: ")
    if bodyTarget == "Head":
        print()
        path5_2()
    elif bodyTarget == "Leg":
        print("You did minimal damage to the parents who shrugged off the shots like they were nothing!")
        print("They pounced you and murdered your entire squad, you will be forgotten.")
        choice = input("Would you like to choose again? (Y/N)")
        if choice == "Y":
            path1()
        else:
            print("GAME OVER. Thank you for playing!")
    else:
        print("Invalid input, please try again!")
        path1()

def path2():
    print("You have chosen the deadly flamethrower, feared by both man and alien!")
    print()
    print("Unfortunately for you, these aliens are actually invulnerable to flames...")
    print("Let's switch back to the machine gun instead.")
    path1()

def path5_2():
    print("John took aim at the sprawling alien creatures right for their weakpoint!")
    print("The guts and blood of the alien zombie creatures splatter the background and floor, covering the entire scenery.")
    print()
    print("Congratulations, you killed the source of the aliens! Thank you for playing Last of Humanity!")

levels_1()
```


Victory

```
.... level_1()
John and the rest of them are really close to the sanctuary in Washington D.C but when walking
to the entrance of the sanctuary they accidentally walked near a nest of alien eggs with the parents still there!

You could tell the aliens were agitated... John better act quickly before he's taken out!
Currently you have an alien machine gun and a flame thrower, what are you going to use?

Alien machine gun or Flamethrower?: Alien machine gun

You have chosen the Alien machine gun! Good choice, the rate of fire will do some damage to these damn aliens!
John takes aim at the parents who are quickly making their way at him, readying themselves to pounce and attack!

Where would you like to fire?

Head or Leg?: Head

John took aim at the sprawling alien creatures right for their weakpoint!
The guts and blood of the alien zombie creatures splatter the background and floor, covering the entire scenery.

Congratulations, you killed the source of the aliens! Thank you for playing Last of Humanity!
```

Loss

```
John and the rest of them are really close to the sanctuary in Washington D.C but when walking
to the entrance of the sanctuary they accidentally walked near a nest of alien eggs with the parents still there!

You could tell the aliens were agitated... John better act quickly before he's taken out!
Currently you have an alien machine gun and a flame thrower, what are you going to use?

Alien machine gun or Flamethrower?: Flamethrower

You have chosen the deadly flamethrower, feared by both man and alien!

Unfortunately for you, these aliens are actually invulnerable to flames...
Let's switch back to the machine gun instead.
You have chosen the Alien machine gun! Good choice, the rate of fire will do some damage to these damn aliens!
John takes aim at the parents who are quickly making their way at him, readying themselves to pounce and attack!

Where would you like to fire?

Head or Leg?: Leg
You did minimal damage to the parents who shrugged off the shots like they were nothing!
They pounced you and murdered your entire squad, you will be forgotten.

Would you like to choose again? (Y/N)N
GAME OVER. Thank you for playing!
```

In [4]: |

Conclusion

On a final note, *The Last of Humanity* offered our group a wealth of practical experience. Looking back, it's easy to identify what we could've done better but as a group we are proud of the end product. One of the deficiencies which we could've improved upon would be to spend more time on the planning phase. Once we decided on our storyline, we began to immediately dive into the coding aspect, but translating each level verbatim to Spyder resulted in numerous setbacks and ultimately led to the alpha version of the game to be somewhat awkward in its progression from level to level. If we were to go back this would definitely be a point of concern which would be an easy fix...plan more! Although after our presentation and the constructive feedback from the class and Professor Conlon, we developed *The Last of Humanity* to be a more comprehensive and replayable game. Undertaking this project allowed our group to see computer science from a new perspective of respect for the work and time it entails in extensive coding projects. As College of Business students, we may never become software engineers but the practical experience gained from this project and the course as a whole has developed each of us into more well-rounded business professionals one step closer to being ready to excel in the corporate world.

Appendix

```
# Level 1
import random

def path1Choice():
    path1 = input("What do you choose to do, stay inside(1) or run outside and help(2)?")
    if path1 == "1" :
        path1_1()
    elif path1 == "2":
        path1_2()
    else:
        print("Invalid input, please try again!")
        path1Choice()

def restartChoice():
    restart = input("Would you like to try that again? (Y/N)")
    if restart == "Y":
        path1_2()
    elif restart == "N":
        print("Shame, bye bye!")
    else:
        print("Invalid input, please try again!")
        restartChoice()

#in the list of weapons, "none" is a choice
#hand of Fate will determine whether you live or game over
#it is completely random
def handofFate():
    fate = random.randint(1,2)
    if fate == 1:
        print("Sorry, game over!")
        restartChoice()
    else:
        print("You survived.")
```

```

def path1_1():
    print("You choose to stay inside and ignore the chaos that is going on outside. After all, it's not your problem.")
    print("Why should you risk your life if you are so comfy in your own home?")
    print("Congratulations, humanity is doomed but at least you'll be relaxing in your own home!")

def path1_2():
    print("You bolt open the door to the outside and find a bunch of zombies, what the hell?!")
    print("The news wasn't lying for once!")
    print("You see a bunch of other survivors running away and trying to fight off the undead aliens!")
    print("You quickly look around, your good natured self can't just let these people fight all by themselves...")
    print("After all, the zombies are coming for you too!")
    print("You look around frantically for a weapon... Bingo!")

#assuming that knife is the only right answer,
#you will have to keep playing until you are given the option of "knife"
#or until you have the option of "none", which is a 50/50 chance random survival
#if you want to always have the right option tho,
#you may want to consider making two lists like the one on level 5 with correct and incorrect body part
    weapon = ['knife','tree branch', 'pebble', 'soil', 'left shoe', 'right shoe','none']
    num = random.randint(0,len(weapon)-1)
    newNum = random.randint(0,len(weapon)-1)
    while num == newNum:
        newNum = random.randint(0,len(weapon)-1)
    one = (weapon[num])
    two = (weapon[newNum])
    print("What do you choose,", one,"(1) or", two,"(2)?")
    path2 = int(input("Choice:"))
    if path2 == 1 and one == "knife":
        print("The obvious choice, how boring! But practical.")
        print("John quickly dives to grab the combat knife, and does a quick 180 to stab the zombie that was")
        print("apparently coming up behind him!")
        print("You make your way to the other survivors and quickly dispose of the zombies due to them being")

```

```

    print("distracted with the other humans.")
elif path2 == 2 and two == "knife":
    print("The obvious choice, how boring! But practical.")
    print("John quickly dives to grab the combat knife, and does a quick 180 to stab the zombie
that was")
    print("apparently coming up behind him!")
    print("You make your way to the other survivors and quickly dispose of the zombies due to
them being")
    print("distracted with the other humans.")
elif path2 == 1 and one == "none":
    print("Guess you are going for close combat.")
    print("Wish you the best of luck.")
    print("Sometimes in life there is no right choices...")
    print("Your fate is in your hands.")
    handofFate()
elif path2 == 2 and two == "none":
    print("Guess you are going for close combat.")
    print("Sometimes in life there is no right choices...")
    print("Your fate is in your hands.")
    handofFate()
elif path2 == 1:
    print("Ah yes, the mighty %s, this will surely get those zombies good!" %one)
    print("You run up to the first zombie you see and use it with all your might!")
    print("You expect glorious blood splattering and gore, only to be met with
disappointment...")
    print("The %s is rendered useless upon impact as you stand there looking stupid." %one)
    print("Now that that dramatic sequence is over, the zombies quickly overwhelm you and
you die.")
    print("Sorry, game over!")
    restartChoice()
elif path2 == 2:
    print("Ah yes, the mighty %s, this will surely get those zombies good!" %two)
    print("You run up to the first zombie you see and use it with all your might!")
    print("You expect glorious blood splattering and gore, only to be met with
disappointment...")
    print("The %s is rendered useless upon impact as you stand there looking stupid." %two)
    print("Now that that dramatic sequence is over, the zombies quickly overwhelm you and
you die.")
    print("Sorry, game over!")

```

```

restartChoice()

path1Choice()

name = input("Please enter your name: ")
print("Welcome to The Last of Humanity %s" % name)
print("You find yourself alone in an LA apartment, you hear a bunch of fighting outside, with bloodprints all over your windows!")
print("You tune on the television and hear the piercing sounds of the emergency broadcast systems, the US IS IN DANGER.")
print("Videos of UFOs and zombies roaming the streets are all over Fox news, you can't even believe it with your eyes...")
print("You play as John, an ex military veteran who has been preparing for the worst.")
print("You best hope your skills are sharp and your intuition are on par in order to deal with the situation.")
print("Suddenly, you hear the screams of other people outside!")
path1Choice()

# level 2

##Level 2
print("Welcome to level 2!")
print("You have to figure out a way to get over a river that's filled with lava and rocks that would\nsometime burst into flames which used to be the Potomac River" )
print("Please choose your methods below\n")
print("1. Using Special Alien UFO", "2. Hopping on the rock", "3. Swimming across the Lava")
print("Hint: The lava is 2000 Fahrenheit")

methods = False
while not methods:

    methods = input("What is your method (Please write: 1, 2 or 3): ")

```

```

if methods != "1":
    methods= False
    print("The Lava is too hot, you can't get close to it or it will burn you to death")
    print("Failed! Please try again!")

else:
    print("That's a great idea! Let's go...\n\n\n\n")
    print("**They realize that they need to have the key to start the engine")
    print("The key was hidden under few mysterious boxes")
    print("Only the aliens have crystal eyes that could see through everything\n")
    print("There are only 3 guesses for John and Survivors,\notherwise the system will alert the Aliens and you will die.")
    print("Now they will need to choose the right box to get a key!")

right_box = random.randint(1,10)

guesses_remaining = 3

keep_playing = "true"
while keep_playing == "true":
    guess = int(input("\nGuess a number between 1 and 10: "))
    guesses_remaining = guesses_remaining - 1
    if guess == right_box:
        print ("Bravo! You guessed the correct box. ")
        print("You are now passed level 2!")
        keep_playing = "false"
    else:
        if guesses_remaining == 0:
            print ("\nYou are out of guesses! The right box was:",right_box)
            print("The system is alerting the Aliens...")
            print("\n\n Game over!")

            keep_playing = "false"
        elif guess != right_box:
            print("Sorry, that is not the correct box. Try again!")

# level 3

```

```
import random

def start3():
    print("As John is slowly waking up, he feels the ground slightly rumble beneath him")
    print("However, John sees most of the other survivors still sleeping...")
    choice = input("Should John look up the window to see what is making the ground shake or go back to sleep.\n Type look or sleep: ")
    if choice == "look" :
        print()
        path1()
    if choice == "sleep" :
        print("When John went back to sleep, he had a great dream but unfortunately never woke up again")
        print("Good luck next try! \n")
```

```
start3()
```

```
def path1():
    print("John cautiously walks to the window....")
    print("He leans toward the window and sees a gigantic zombie alien! John mutters under his breath that it must be at least the size of a four story building")
    print("John looks back to see the rest of the group and sees them now almost all woken up as the giant zombie alien stumbles closer and closer to them")
    print("John can only think of two choices! Go look for the weirdly-shaped alien laser gun or run outside to distract the big alien zombie")
    print("Choice 1: Run OR Choice 2: get the gun!")
    answer2 = input("Enter 1 or 2: ")
    if "2" in answer2:
        path3()
```

```
else:
    print("John ran track in highschool but since then he's gained a few pounds, regardless he ran for his dear life!")
    print("John is huffin n puffin...he knows he won't be able to outrun the giant alien zombie")
    print("Choice 1: Run into an adjacent derelict building to hide from the giant zombie alien")
```

```

OR Choice 2:Hide underneath a old van")
answer3 = input("Enter 1 or 2: ")
if "1" in answer3:
    print("John turns the corner and runs into the abandoned house!")
    print("The giant zombie alien attempts to reach inside to grab John but instead causes
the front entrance to collapse and entrap John!")
    locked()

```

```

def locked():
    print("John looks over at the pile of debris now blocking the front entrance and then scans
over to a lone metal door")
    print("You examine the door, a three digit lock built internally built into the door stops John
from seeing if the doorway leads to the outside")
    print("On the floor next to door lies a ragged note which reads: ")
    print("As my time is near...\n")
    print("what lies past this door is of\n")
    print("no use to me when I'm dead\n")
    print("perhaps it may help you...if you")
    print("can solve this riddle...\n")
    print("First number: I'm a number with a couple of friends, quarter a dozen, and you'll find me
again.")
    print("Second number: Mom and dad have four daughters, and each daughter has one brother.
How many people are in the family?")
    print("Third number: Three times what number is no larger than two times that same number?
\n")
    answercombo1 = input("Enter the first riddle's number in the lock : ")
    answercombo2 = input("Enter the second riddle's number in the lock: ")
    answercombo3 = input("Enter the third riddle's number in the lock : ")
    if "3" in answercombo1 and "7" in answercombo2 and "0" in answercombo3:
        print("Thunk...it seems John is quite smart and got the combination correct! ")
        combopath()
    else:
        print("The numbers you put in didn't seem to unlock the door, perhaps try again")
        answercombo1 = input("Enter the first riddle's number in the lock : ")
        answercombo2 = input("Enter the second riddle's number in the lock: ")
        answercombo3 = input("Enter the third riddle's number in the lock : ")
        if "3" in answercombo1 and answercombo2 == "7" and answercombo3 == "0":

```

```

print("Thunk...it seems John is quite smart and got the combination correct! ")
combopath()
else:
    print("Maybe John wasn't as smart as he thought....after putting in the last set of numbers
he seems to have broken the lock")
    print("With the lock broken and the entrance blocked off with debris...John has
unfortunately met his final resting place\n")
    start3()

def combopath():
    c4amt = random.randint(1,3)

    print("John pushes the door open and is greeted with a musty room filled with large wooden
boxes and a tunnel entrance in the back corner")
    print("You start opening the crates and find them filled with C-4, explosives with built in
fuses")
    print("You find",c4amt, "C-4 still in good condition and crawl through the tunnel")
    print("After pushing a manhole cover out of the way, you find yourself back in fresh air...but
can hear screaming coming from where the group's building is!")
    print("Once you get closer you see one of the survivors trying to crawl towards the alien
gun...but its directly underneath the giant alien zombie..")
    print("You have",c4amt,"C-4 charges and take a second to think of your available
options....\n")
    print("Option 1: Go to the roof of the building across from the giant alien zombie and attempt
to throw a C-4 charge at the alien's face")
    print("Option 2: Flank the alien zombie and put a C-4 charge on it's achilles tendon")
    combopathchoices = input("Enter your 1 or 2: ")
    if "1" in combopathchoices:
        print("You run up four flights of stairs and find yourself on the roof...just 20 feet across from
you is the giant alien zombies head")
        print("John sets the fuse on the C-4 and readies himself to play C-4 dodgeball with the giant
zombie alien!!")
        roll = input("When ready to throw, roll the 10 sided die. In order to accurately hit the alien
you must roll atleast or above a 6! Enter Y when ready: ")
        boom = random.randint(1,10)
        while c4amt > 0:
            if roll == "Y" and boom >= 6:
                print("You rolled a",boom,"!")

```

```

print("BOOOOOOOM...the giant alien zombie's head exploded....if Earth ever goes
back to normal, John might have a chance at going pro in dodgeball\n")
print("Congratulations you passed the level and defeated the infamous giant alien
zombie!")
lvl4()
break

elif boom <=5 and c4amt > 0 :
    boom = random.randint(1,10)
    print("Darn, you only rolled a",boom,"and the timing was off.")
    c4amt = c4amt -1
    print("You have",c4amt,"C-4 charge(s) remaining \n")
    print("You attempt to throw another C-4 charge")
if c4amt == 0:
    print("You ran out of C-4...\n")
    print("Your only other option is to go get the alien laser gun\n")
    print("John runs down the stairwell and sprints out of the building entrance directly to
the alien laser gun in the street...")
path3()
break

if "2" in combopathchoices:
    flank()

def flank():
    print("While the giant alien zombie is distracted trying to grab one of the survivors, you run
into an alleyway until you just past the giant alien zombie")
    print("You catch your breath and then prime the C-4 charge")
    print("In order to be effective, the C-4 must be placed directly on the zombie's achilles.")
    print("John is trying to remember where the Achilles tendon is...perhaps if he thinks of where
the Achilles mythology originated from he might remember...")
    trivia = input("Hmmm where did the story originate from? Was it France/Egypt/Greece/Persia.
Type your answer: ")
    if trivia == "Greece" or "greece":

```

```

print("John must be a history buff! After thinking of where Achilles story came from, he
now knows where to put the C-4 /n")
print("You sprint at full speed while the giant alien zombie is looking the other direction and
place the C-4 in the exact right spot!")
print("John quickly runs away and hops a barricade and then uses it to take
cover.....BOOOOM")
print("Once the giant alien zombie fell and was unable to chase the group, John and the
others escaped....")
print("Congratulations you passed level 3")
else:
    print("Well that wasn't right...John thinks of when he was back in 8th grade learning about
Homer, the Odyssey, and Plato")
    tryagain = input("Your running out of time...this is your last shot before its too late: ")
    if tryagain == "Greece" or "greece":
        print("You sprint at full speed while the giant alien zombie is looking the other direction
and place the C-4 in the exact right spot!")
        print("John quickly runs away and hops a barricade and then uses it to take
cover.....BOOOOM")
        print("Once the giant alien zombie fell and was unable to chase the group, John and the
others escaped....")
        print("Congratulations you passed level 3")
    else:
        print("The correct answer was Greece! If only John had paid attention to his 8th grade
history teacher")
        print("Since John didn't know the best place to put the C-4, he put it between the giant
aliens toes but got squashed right after...")
start3()

```

```

def path3():
    print("John grabs the laser gun and looks up to see the giant alien zombie quickly approaching
but the trigger on the alien gun is nowhere to be found")
    answer3 = input("What should John do? Choice 1: ditch the gun and run or Choice 2: Shout to
the other survivors for help? Type 1 or 2: ")
    if answer3 == "1":
        print("John dropped the alien laser gun and ran into the building with the other frightened
survivors...")

```

```

print("Within being in the building for 15 seconds, the giant alien zombie devoured John and
all his group as none of their bullets could stop the alien!")
print("Good luck next try!")
start3()
if answer3 == "2" :
    path4_1()

def path4():
    words = ["boom", "bang","execute"]
    shoot = random.choice(words)

    print("John shouts to the other survivors for help....")
    print("One of the original members of the group, Ted, a scientist from the secret U.S. military
base Area 51 screamed back at John")
    print("There is no trigger! The aliens fire the gun telepathically!")
    print("John doesn't have many options, the giant zombie alien is now within 40 yards ")
    answer4 = input("What word should John think of to fire the alien laser gun: boom, bang, kill
or execute?: ")

    if answer4 == shoot:
        print("John focused intensely,", shoot,"...",shoot, "...",shoot)
        print("BOOOOOM.....with one shot from the big alien gun, the giant zombie alien reverted
to a pile of burning flesh")
    else:

        print("hmm it doesen't seem to be working...")
        input("What other word can John think of to get the alien laser gun to fire?: ")
        if answer4 == shoot:
            print("John focused intensley", shoot)
            print("BOOOOM.....with one shot from the big alien gun, the giant zombie alien
reverted to a pile of burning flesh")
            print("Congratulations.....you passed level 3!")
            path4_1()
        else:
            print("John realized it was the wrong word right before the giant alien zombie grabbed
him...")


```

```

print(shoot)
start3()

start3()

# level 4

import random
def path4_1():
    diceRoll = random.randint(1, 6)
    print("It looks like you rolled a %d" % diceRoll)
    if diceRoll <= 2:
        print("The zombies quickly overran the camp and killed everyone including you.")
        print("That was very short lived, how about we try that again?")
        while True:
            path4_1_1 = input("Would you like to retry that? Yes or no? (Y/N): ")
            if path4_1_1() not in ('Y', 'N', 'y', 'n'):
                print("Invalid input, please try that again.")
                continue
            else:
                break
        if path4_1_1 == "Y" or "y":
            path4_1()
        if path4_1_1 == "N" or "n":
            print("Game over, thank you for playing. Maybe you should work on your aim hahaha!")

    if diceRoll == 3:
        print("Good job, you managed to kill half of the zombies in the horde, but you should work on your aim...")
    if diceRoll >= 4:
        print("You wiped out most of the hoard and were able to pick off the stragglers with ease, nice shooting!")

print("Your party rests at a nearby abandoned camp as you reach Virginia...")
print("Everyone is tired and weary, you yourself can barely stand.")
print()
print("Although its been a hard journey, you can't help but stare at the stolen alien gun in awe!")

```

```

print("The architect of the gun is definitely out of this world, it outclasses any technology made
on this Earth.")
print()
print("Just as you start dozing off thinking about the gun, you hear yelling!")
print("There's a horde of aliens coming right for the camp, and these zombies aren't just any
slackers!")
print()
print("You get up from your seat and ponder over the situation, these alien zombies are no
pushovers.")
print("They look much more advanced than the previous horde that was killed, their bodies
having")
print("multiple legs and arms, running faster than Usain Bolt!")
print()
print("You say a small prayer before readying your weapon...")
print()
path4_1_1 = input("Roll the six sided dice in order to see how many zombies are killed. Input 'Y'
to continue: ")
path4_1()

```

Level 5

```

def level5_1():
    print("John and the rest of them are really close to the sanctuary in Washington D.C but when
walking")
    print("to the entrance of the sanctuary they accidentally walked near a nest of alien eggs with
the parents still there!")
    print("You could tell the aliens were agitated... John better act quickly before he's taken out!")
    print("Currently you have an alien machine gun and a flame thrower, what are you going to
use?")
    print()
    firstPath = input("Alien machine gun or Flamethrower?: ")
    if firstPath == "Alien machine gun" :
        print()
        path1()
    elif firstPath == "Flamethrower":
        print()
        path2()

```

```

else:
    print("Invalid input, please try again!")
    level5_1()

def path1_5():
    print("You have chosen the Alien machine gun! Good choice, the rate of fire will do some
damage to these damn aliens!")
    print("John takes aim at the parents who are quickly making their way at him, readying
themselves to pounce and attack!")
    print("Where would you like to fire?")
    bodyTarget = input("Head or Leg?: ")
    if bodyTarget == "Head":
        print()
        path5_2()
    elif bodyTarget == "Leg":
        print("You did minimal damage to the parents who shrugged off the shots like they were
nothing!")
        print("They pounced you and murdered your entire squad, you will be forgotten.")
        choice = input("Would you like to choose again? (Y/N)")
        if choice == "Y":
            path1()
        else:
            print("GAME OVER. Thank you for playing!")
    else:
        print("Invalid input, please try again!")
        path1_5()

def path2():
    print("You have chosen the deadly flamethrower, feared by both man and alien!")
    print("Unfortunately for you, these aliens are actually invulnerable to flames...")
    print("Let's switch back to the machine gun instead.")
    path1()

def path5_2():
    print("John took aim at the sprawling alien creatures right for their weakpoint!")
    print("The guts and blood of the alien zombie creatures splatter the background and floor,
covering the entire scenery!")
    print("Congratulations, you killed the source of the aliens! Thank you for playing Last of
Humanity!")

```

level5_1()

References

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