PROJECT REPORT - Text based Adventure Game

1) Introduction:

This is a text based adventure game to kill the evil beast of Scranton. This game has a simple rule: "Everything has a price". I am a fan of the show Office so I used that to develop this project. The game uses a whole lot of functions and lists. The player is a secret agent which is inspired from a particular scene from the tv show. It has some complex functions which trigger different functions in order to move forward in the game.

For this project, I used this idea of a player getting to know the game better as they continue to play it more and more. I used the prompting method to proceed or do any action This game usually takes more than 15 mins to properly play (even after knowing it well). There is also day/night feature.

A player gets to enter their name and then navigate through all different locations, mini games, adding items to their inventory, fighting enemies, talking to people and, also sleeping! The characters and their occupations in the game are mostly based on the tv show.

This game created suspense on the identity of the 'beast'. Additionally, it has 2 different endings based on the choice a player makes at the end. The player doesn't have to play till the end, which can be daunting. Sometimes a player is out of the game due to a defeat in a fight by losing all the health. It is quite easy to navigate from one place to other. The player also get a certain amount of coins to get started with the game. They can decide the fate of the game after that.

But not everything is easy in the game. One should definitely play it more than once to understand what to do better the next time to get to the next level. In this way the complexity and the layers in the game are increased. A player continues to unveil all the mysteries and secrets in the game as they fully get how to proceed in future tries.

To understand the navigation, I made a flow chart which shows how one can play it typically. It also has some paths one can take to get to the end easily, signs which are not shown when you play and, symbols to help remembering important things.

A high level diagram or description of the structure and flow of the application: (is in the zip file):

This flow chart was created using Lucid.app. Most of the symbols are self-explanatory and are helpful to prioritise actions in a certain way. The chart shows two possible endings to the game. There are hints given before one enters a location to get a good sense on what to expect. This chart can also help in showing the unexpected fight sequences to prevent dying unexpectedly in the game.

Some more Tips:

When in the forest exploring, use the location 28 and the key is the 6+2 of the creator of the game (me).

There is no need to open the Blue door

Think twice before you pay the toll.

2) Project Results:

While making this game, I faced a lot of problems in making it shorter than I intended. After a lot of edits, re-edits and looking at references online, I finally came with the finalized one.

I had different ideas for the theme of the game – Space, Village, Vampire, Stone Age and then finally The Office. Taking a known theme helped me in creating character which suited the objectives of the game. I had problems in assigning the villain roles but it all worked out fine.

Pitfalls:

- Not able to get the flow between the day and night items in the inventory
- Fight sequences didn't go through as expected
- The Mystery box doesn't really have a purpose.
- Wanted to add more items for the mall but couldn't link them to anything more.
- Got lengthy

Success:

- Implementing Day/Night in the game
- Assigning a prize for all the amenities like a room/drink/mall items
- Creating a complex game with multiple levels which are just waiting to be unlocked

- Placing hints to get to unseen parts of the game
- Used python sleep functions

The following shows 2 tries of playing the game, the first one shows how unpreparedness can get you killed off and the second one shows how careful navigation and decisions lead to winning the game.

Try 1:

- 1. Go to mall and buy stuff Neon light, Armour (ask for reports too)
- 2. Go to Inn for contract in exchange for reports to enter the corporate
- 3. Wake up at night
- 4. Back to Scranton
- 5. Go to jungle for the glowing lilies
- 6. Explore the forest --- attacked --- die --- game over!

Try 2:

- 1. Mall for stuff get armour, neon light, beaumont adams gun, helmet, ask for reports.
- 2. Jungle Explore Ambushed by animal Winner Location: 28 Tomb of Robert Dunder KEY *joshirk* **Light Saber**
- 3. Schrute Farms Room Examine Get the holy grail wake up in the night
- 4. Scranton Jungle 1 glowing flowers 4 Scranton
- 5. Mall Get the **reports.**
- 6. Contest arena Fight Dragon Double deposit Win Get Mystery Box!
- 7. Scranton Schrute Farms Room Bed wake up in the Morning
- 8. Scranton Contest arena Double or nothing Play until you win Win! get Unknown Key!
- 9. Scranton Office 1 Darryl fight Win go deeper in the route Treasure Box Open Sealed with a peculiar lock (**private key needed**)
- 10. 2 Conference Room Locked **Unknown Key** is used open go deeper in the route old chest open **receive 20000 coins!!!!**
- 11. 3 Annex man made cellar needs a key!
- 12. Scranton mall legumes life ++
- 13. Corporate persuade inside central hall give the reports gain access
- 14. Jan's Office Talk give glowing lilies and armour she requests to bring her candle from the office she gives Private Key
- 15. Scranton Office 1 open with private key get the **candle** Scranton
- 16. Castle Jan's office talk give the **candle** tells you about the secret passage Scranton
- 17. Secret passage is opened now!!!!!!!!!
- 18. Schrute Farms bed night Scranton secret path explore peculiar sounds investigate further deep into path old door lock resembles to empress sigil open room full Jan's old stuff witness an old figure lurking behind **Creed's Hologram** –
- 19. The king is not who the people think he is..!!
- 20. Hologram: I have been branded as hologram for trying to expose the ceo's true self!!
- 21. Hologram: He then locks me here to die
- 22. Hologram: I want you to take revenge on the ceo
- 23. Hologram: You cannot kill him with normal weapons
- 24. Hologram: I can help you defeat him
- 25. Hologram: Will you do it, agent??
- 26. Help Expose the king ghost tell about the **Light Saber** and a **Shield** you need
- 27. Jan's Office as its is dark you sneak past guards Quarters Kings Quaters King sleeping **do** not take the risk! go back for a distraction instead
- 28. Corporate Central Hall empty and perfect for distraction ring the **phone** ceo and guards are alerted
- 29. Ceo Quarters distraction worked acquired the Cellar Key Jan's Office Secret path Scranton

- 30. Office 3 open beast sleeping wake the beast as you have the Light Saber Fight Win 2 doors **Red door** you see dead fighters who tried to kill the monster you take the **Steel Shield** (**Defence increased**)
- 31. Scranton Schrute Farms Room Bed morning Scranton Corporate Central Hall Challenge ceo Fight Win kill him or spare him????????
- 32. **Kill king** something feels wrong abolished from the kingdom bartender says the princess was kidnapped by the beast and never returned beast is someone else! play the game again exit.
- 33. **Spare king** King appears to be possessed sense a dark presence lurking behind beast is manipulating the king king is the puppet leap towards the beast fight win beast is actually....(random choice from the beast list) saved Scranton got coins credits exit.

Future Potential Improvements:

- Can include more items to buy from the mall
- Include more characters and maybe have a 3rd possible ending to the game (which can be very unexpected)
- Have a second character who is with the player at all times to fight their fights or do their work. Maybe a pet?
- Ability to change attires/weapons. Adding food items.
- Time displayed (amount of time they took to get to the end)

3) Division of Work:

I have contributed alone to the project. However, I have also looked at different available codes online to get started on ideas. The theme of the game revolves around the TV show The Office, and the code was inspired from many available codes on stackoverflow.com

I had the work divided into multiple weeks – for drafting the main premise, drawing connections between the locations and the small goals. It took some time to develop the main purpose of the game and also plan the script of the alternate endings.

I also made changes when I saw something didn't add much on to the purpose of the game. I also took time to polish the code finally to show what I want a user to experience while playing it. I contributed in making the flow chart from the start. The idea to include symbols was solely mine to make it look nicer and helpful in remembering.

Since this was a solo project, it was initially tough to get started on. But google has definitely been my friend. I used sites like stackoverflow.com, github.com, geekforgeeks.com and many more to understand how I could make a complex text based adventure game.

I was also responsible in writing this report.

I was responsible in cut shorting the code to make it faster and precise to the users. I worked approximately 2-3 weeks on this project – from exploring ideas to final adjustments and the report. I made some adjustments even at the last day on the final ending of the game. I am also in charge of removing the pieces of code which can work better elsewhere.

In this solo project, I made sure the work passed the threshold of complexity one expects from projects. I used repl.it to code this project and also sometimes the IDE on my desktop.

4) Bibliography:

I used the following sites to get an idea on how these games usually work:

https://www.derekshidler.com/how-to-create-a-text-based-adventure-and-quiz-game-in-python/

https://thecodingpie.com/post/make-your-own-text-based-adventure-game-in-python3

https://trinket.io/python/e5a03e7cbc

 $\underline{https://coding-grace-guide.readthedocs.io/en/latest/guide/lessonplans/beginners-python-text-based-adventure.html}$

Code libraries:

Time – to print instructions with a time lag

Random – for the mini games at contest arena

5) Code Appendix:

The code is available in the zip file this report is in.