Assignment 2: Adventure

Shangyuan Steven Niu sn522

Part 1 - Summary:
The most noteworthy parts in this documents are design choices. Generally, I found it really important to come up with a solid software design before you could implement it. The most challenging part for this assignment is to implement the repl – it's hard to use this structure to control the flow of the process without previous knowledge.

Part 2 – Specification:
    The following are the specifications that's not mentioned in the A2 official specification.

1. It is not required that every item has a treasure room. Those without a treasure room will not affect your score at all.
2. Yet an item can only have at most one treasure room. If an item has more than one treasure room, only one will be selected based on the order of the room within the json file.
3. All ids (room/item) should be unique and have lower case letters. Items with upper case ids will be permitted but ignored during execution. Non unique ids will lead to a confusion of different items.
4. Spaces before and after command are allowed.
5. It's ok to have in accessible room.
6. Commands like "quit" or "look" that only invoke print statements are handled within the repl and outside of do'. But you can still pass them into the do' function. It just output an unchanged state.
7. If you are using "go" with an invalid direction, it will trigger the illegal exception. Yet if you are trying to use the short hand command for an invalid direction, it will only be treated the same as general invalid commands.

Part 3 – Design and Implementation:
I have an independent repl function to handle all the commands that invoke print expressions, because it's more intuitive. All the state changing actions are done by the do' function. All the initializations are done by init_state and its helper functions.

Part4 – Testing:
All test cases passed.

Part5: Work plan:
This time I had a terrible work plan. I started looking at the write up one day before the deadline and it was a nightmare. Shouldn't happen again.

Part6 : Known problems:

No known problems other than a lack of polishing. There are some amazing functionalities I envisioned, yet I just don't have enough time to implement those.

Part 7 – Comment:
Overall the assignment is great. I enjoyed it a lot. The only bad thing is that I started too late.