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ENAE380 Final Project

Documentation PDF

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This project is a text-based adventure game that covers choosing characters stats and an assortment of rooms/areas that you can interact with. The game itself tells you how to play in some senses, including walking you through choosing stats, but to be thorough I will go over it here as well. The only libraries needed to run the program are random and sys.

```
def d(sides):  
    roll=int(random.randint(1, sides))  
    return roll
```

Fig. 1

```
class actions():  
    def strcheck():  
        s=d(20)+strmod  
        return s  
    def dexcheck():  
        dexteritycheckeroo=d(20)+dexmod  
        return dexteritycheckeroo  
    def concheck():  
        c=d(20)+conmod  
        return c  
    def intcheck():  
        i=d(20)+intmod  
        return i  
    def wischeck():  
        w=d(20)+wismodifier  
        return w  
    def chacheck():  
        c=d(20)+chamod  
        return c
```

Fig. 2

All of the game is based on output and input directly from the terminal and a simulated dice roller function shown in figure 1. The game has set situations in each room and can take inputs from the user about what they want to do next. At the start of the game, you will be prompted to allocate values from a set list to certain statistics that describe your character. These stats are Strength, Dexterity, Constitution, Intelligence, Wisdom, and Charisma, each associated with a separate random number function based on the dice roller, shown in figure 2. Each of these stats are used throughout the game to determine skill checks or other secondary attributes of the character. You will assign values of 15, 14, 13, 12, 10, and 8 to each of these statistics, which will determine how high of a bonus you get to skill check rolls using that statistic, following this chart:

Score	15	14	13	12	10	8
Bonus	+3	+2	+1	+1	+0	-1

Every time you trigger a roll using that stat, the bonus above will be added to the total, which will determine the outcome of the action. Rolling higher usually nets better results than a lower roll, such as noticing more detail when rolling to look around or being able to lift something heavy that you otherwise wouldn't have been able to, so choosing which stats are higher at the beginning of the game can often affect your pathway through the story. Constitution is unique in that it is not associated with

any skills, but it instead affects your health, which can be the difference between life and death when taking damage or being attacked.

Some of the most common rolls associated with each stat:

- Perception: The most common roll in the game, uses Wisdom and should often be the first thing you roll in every room. Can be triggered by saying 'look around', depending on your roll will give you more details about your surroundings.
- Investigation: Uses Intelligence, is used when looking closely at something or trying to discern details. Very common. Can be triggered by saying 'investigate...'
- History/Arcana: Use Intelligence, are used to discern details regarding historical events or people or when trying to recall esoteric knowledge about magic or monsters, respectively. Not very common. Can be triggered by saying 'history of...' or 'arcana of...'/ 'arcana on...'
- Athletics: Uses Strength, used to break down doors or lift heavy objects. Not very common but can come in handy. Can be triggered by asking to break down doors occasionally or lift things like rubble.
- Lockpicking: Uses dexterity, used to open doors or other locked objects. Can be triggered by saying 'pick lock' or similar phrases regarding specific objects.
- Stealth: Uses dexterity, used to sneak past enemies. Only used very sparingly.
- Persuasion/Deception: Used when dealing with people to lower prices, prevent them from attacking you, or get out of certain situations by lying. Based on Charisma, unique in that you do not ask to trigger them, but rather they trigger on their own when certain dialogue options are chosen.

Throughout the game, when you are given information, sometimes words will be in all capital letters. This denotes that they are important details in the room that can lead to other rooms, more interactions, or special bonuses to be discovered. When a word is highlighted like this, it is also a hint that you should use whatever word is highlighted in your action request when you type it into the terminal. You should avoid using capital letters in your action requests, as it will most likely not read correctly.

If you get stuck, you can always use the help button to be given a hint about what to do. If a command doesn't work when it feels like it should, try rewording what you said. Usually, if you can say something more directly, you should. To move on to the next area, you can usually say 'go to...' or you can say 'take...' if it makes sense, like 'take main road' or 'take stairs' for example. You can also always go backwards by simply saying 'go back' in most cases. If information seems difficult to find, always remember that you can ask for a hint by typing 'help' as your action request, or you can scroll up and read the information you were given again. Sometimes, there is too much information being given, so the paragraph gets cut off by the size of the terminal, so scrolling up to read the whole block might be beneficial.