Text Based Adventure Game – Background Info

## Background Story

You have just been short listed for a job as a software developer for the firm “Geek Games”. The CEO of Geek Games, Mr Will Bates, has agreed to trial you for a month, after which he will decide whether you get the job or not. Mr Bates has informed you all the short listed applicants have been arranged into teams of 2 and have been given the same task to perform.

The task is to build a prototype game engine for playing Role Playing Games (RPGs), the game is to be played from the first person perspective with users typing commands at a text console and receiving information back from the game. Commands would typically allow a user to interact with their virtual world (eg: move to the north, pick up the sword, talk to the barman, attack the troll).

Mr Bates feels that this is the next strategic market for Geek Games and wants to hire programmers with a flair for this area. He suggests you research other games of this genre like Neverwinter Nights, Baldur’s Gate, Zork or any of the various MUDs (Multi User Dungeons) available on the internet.

Mr Bates has presented you with the following information to get you started:

1. An introductory story for the game, to set the scene and provide some context.
2. A series of rules to which the system must obey.

## Game Intro Script

Your eyes are glassy your head is pounding that sadist of a lecturer has you pulling an “all-nighter” to get your assignment in. Despite being on your 8th can of “Guarana Max” your eyes start to close and you drift off to sleep at the keyboard…….

You open your eyes but don’t believe what you see, you must be dreaming! Instead of finding yourself in front of your computer you appear to be lying in a clearing surrounded by a dark, menacing looking forest. A campfire burns to your left and opposite you with legs crossed sits another person who begins to speak…

“Greetings stranger my name is Jonesy. I had almost given up hope, but my prayers appear to have been answered”

You are too freaked out to say anything back.

Jonesy continues, “I used to be a software engineering student just like you, but my evil lecturer sucked the life force out of me and I am condemned to suffer under his dominion for eternity.”

You say “I’m hallucinating, must be the Guarana!”

Jonesy replies, “If you are hallucinating then it is one you will never wake up from! Your only hope of returning to your normal life is to defeat my old lecturer Gregor the Butcheror”

“How do I do that?” you ask.

“Many have tried and all have failed, Gregor lives in a well guarded castle to the north, the only entrance being a drawbridge. The drawbridge is locked and only opens when the guards spot a party approaching who carries the ITECH3201 banner.”

“How can I get a ITECH3201 banner”, you ask.

“Gregor’s henchman Philip the Enforcer and his gang of thugs can be found at the Inn of the Boar each night, if you defeat Philip and his gang you can take the banner and gain access to the castle, but be warned defeating Philip is tough he never travels alone. I suggest you find some well armed friends before taking him on.”

“But where do I find the Inn of the Boar?”

“The Inn is located in the town of Mount Helenis south of here, but the woods are not safe as Gregor’s thugs are everywhere. Take my sword as I am too week to use it”

With that Jonesy tosses a sword to your feet and you bend down to pick it up. When you look up again Jonesy is gone!

## Game Rules

### Character

Characters have the following attributes:

* Items holding,
* Items wearing,
* Name,
* Items carrying,
* Life points, (average starting life points for a player is 20 life points)
* Armour Class,
* Strength,
* Agility

### Player Character

Players have the attributes of characters but are controlled by the player

### Non-player Character

NPCs have the attributes of characters plus additional attributes:

* Hostile to player (yes/no)
* Conversation

### PlayerParty

The player controls a party containing:

* the player
* current location,
* any NPCs who have joined the player’s quest

### NPCParty

NPCs may be grouped into a party (might contain only one NPC). Contains:

* current location,
* list of NPCs in the party,
* Moveable (does the party move each turn or stay put?)

### Locations

Each location contains:

* exits,
* items,
* a description,
* any non-player characters (NPC)

### Blacksmith

Some locations are blacksmith’s forges where armour and weapons can be bought or sold.

* If bought player pays as per the weapon and armour table
* If sold player receives the value listed on the weapon or armour table less 20%

### Navigating the Maze

Each location can be potentially exited:

* north, south, east, west, northeast, northwest, southeast, and southwest, up or down.
* A player’s party may move from one location to another using a valid exit, exits may be locked in which case the player will need to unlock the exit before proceeding.

### Items

Items are used to unlock doors, restore life points, or to solve certain problems or to buy things (such as weapons or armour). Items have

* a value (gp[[1]](#footnote-1)),
* a weight (lb), (typically gold to the value of 100 gp = 1lb)
* description.

### Weapons

Each character can be equipped with different weapons.

* At any one time a player may only be armed with a single weapon, to change weapons costs a turn
* Refer to the weapon table.

### Armor

Each character may be wearing armour.

* Armor gives the player or NPC differing degree’s of protection from attack
* Players may wear armour plus carry a shield
* Refer to the armour table.

### Combat

If the player’s party encounters a hostile NPC (or group of hostile NPCs) they will engage the party in combat

* A player’s party can attack or flee
* If a player’s party flees they do so through a random exit

### Combat Turn

Each character in the location where combat is happening takes turns to attack:

* The player character starts the turn by attacking a single hostile character
* To score a hit that deals damage on your attack roll, you must “roll” the target’s Armor Class (AC) or better.
* If a hit is registered a damage roll is performed to determine the extent of damage
* If the damage leaves the victim with <1 life points the victim has been killed
* After the player’s turn each NPC in the room (with > 0 life points) is randomly selected and takes a turn to attack a randomly selected hostile character

### Attack Roll

Melee Attack Roll: 1d20 + Strength modifier = AC hit

### Damage Roll

If you score a hit, roll damage and deduct it from the target’s current hit points.

Add your Strength modifier[[2]](#footnote-2) to damage from melee and thrown weapons.

### Armor Class (AC)

A character’s Armor Class (AC) is the result you need to get on your attack roll to hit that character in combat.

Armor Class: 10 + armor bonus + shield bonus + agility modifier2

### Life Points

Life points represent how much damage a character can take before dying (<1 life points = dead).

### d4, d6, d8, d10, d12, d20

Represents dice throws. E.g. d4 represents throwing a 4 sided die, d20 represents rolling a 20 sided die.

## Reference Tables

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| AVERAGE STRENGTH SCORES | |  |
|  | Strength | Modifier |
|  | 1 | -5 |
|  | 2 | -4 |
|  | 3 | -4 |
|  | 4-5 | -3 |
|  | 6-7 | -2 |
|  | 8-9 | -1 |
| Average Human | 10-11 | 0 |
|  | 12-13 | +1 |
|  | 14-15 | +2 |
|  | 16-17 | +3 |
|  | 18-19 | +4 |
|  | 20-25 | +6 |
|  | 26-29 | +8 |
|  | 30-35 | +10 |
|  | 36-40 | +12 |
|  | 41-43 | +15 |
|  | 44-45 | +17 |
|  | > 45 | +18 |

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| --- | --- | --- |
| AVERAGE AGILITY SCORES | |  |
|  | Agility | Modifier |
|  | 1-3 | -5 |
|  | 4-5 | -3 |
|  | 6-7 | -2 |
|  | 8-9 | -1 |
| Average Human | 10-11 | 0 |
|  | 12-13 | +1 |
|  | 14-15 | +2 |
|  | 16-17 | +3 |
|  | 18-19 | +4 |
|  | 20-25 | +6 |
|  | 26-31 | +8 |
|  | > 31 | +11 |

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| WEAPONS | PRICE | DAMAGE | WEIGHT |
| Dagger | 1 gp | 1d4 | 2 lb. |
| Nunchaku | 2 gp | 1d6 | 2 lb. |
| Greatclub | 5 gp | 1d10 | 10 lb. |
| Longspear | 5 gp | 1d8 | 9 lb. |
| Handaxe | 6 gp | 1d6 | 5 lb. |
| Axe, throwing | 8 gp | 1d6 | 4 lb. |
| Flail, light | 8 gp | 1d8 | 5 lb. |
| Glaive | 8 gp | 1d10 | 15 lb. |
| Guisarme | 9 gp | 2d4 | 15 lb. |
| Sword, short | 10 gp | 1d6 | 3 lb. |
| Battleaxe | 10 gp | 1d8 | 7 lb. |
| Halberd | 10 gp | 1d10 | 15 lb. |
| Ranseur | 10 gp | 2d4 | 15 lb. |
| Warhammer | 12 gp | 1d8 | 8 lb. |
| Longsword | 15 gp | 1d8 | 4 lb. |
| Scimitar | 15 gp | 1d6 | 4 lb. |
| Trident | 15 gp | 1d8 | 5 lb. |
| Flail, heavy | 15 gp | 1d10 | 20 lb. |
| Scythe | 18 gp | 2d4 | 12 lb. |
| Rapier | 20 gp | 1d6 | 3 lb. |
| Greataxe | 20 gp | 1d12 | 20 lb. |
| Waraxe, dwarven | 30 gp | 1d10 | 15 lb. |
| Sword, bastard | 35 gp | 1d10 | 10 lb. |
| Greatsword | 50 gp | 2d6 | 15 lb. |
| Falchion | 75 gp | 2d4 | 16 lb. |
| Sword, two-bladed | 100 gp | 2d8 | 15 lb. |

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| --- | --- | --- | --- |
| Armor | Cost | Bonus | Weight |
| Padded | 5 gp | +1 | 10 lb. |
| Leather | 10 gp | +2 | 15 lb. |
| Studded leather | 25 gp | +3 | 20 lb. |
| Chain shirt | 100 gp | +4 | 25 lb. |
| Hide | 15 gp | +3 | 25 lb. |
| Scale mail | 50 gp | +4 | 30 lb. |
| Chainmail | 150 gp | +5 | 40 lb. |
| Breastplate | 200 gp | +5 | 30 lb. |
| Splint mail | 200 gp | +6 | 45 lb. |
| Banded mail | 250 gp | +6 | 35 lb. |
| Half-plate | 600 gp | +7 | 50 lb. |
| Full plate | 1,500 gp | +8 | 50 lb. |
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| Shields |  |  |  |
| Buckler | 15 gp | +1 | 5 lb. |
| Shield, small, wooden | 3 gp | +1 | 5 lb. |
| Shield, small, steel | 9 gp | +1 | 6 lb. |
| Shield, large, wooden | 7 gp | +2 | 10 lb. |
| Shield, large, steel | 20 gp | +2 | 15 lb. |
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| CARRYING CAPACITY | |
| Strength | Load |
| 1 Str | 6 lb. |
| 2 Str | 13 lb. |
| 3 Str | 20 lb. |
| 4 Str | 26 lb. |
| 5 Str | 33 lb. |
| 6 Str | 40 lb. |
| 7 Str | 46 lb. |
| 8 Str | 53 lb. |
| 9 Str | 60 lb. |
| 10 Str | 66 lb. |
| 11 Str | 76 lb. |
| 12 Str | 86 lb. |
| 13 Str | 100 lb. |
| 14 Str | 116 lb. |
| 15 Str | 133 lb. |
| 16 Str | 153 lb. |
| 17 Str | 173 lb. |
| 18 Str | 200 lb. |
| 19 Str | 233 lb. |
| 20 Str | 266 lb. |
| 21 Str | 306 lb. |
| 22 Str | 346 lb. |
| 23 Str | 400 lb. |
| 24 Str | 466 lb. |
| 25 Str | 533 lb. |
| 26 Str | 613 lb. |
| 27 Str | 693 lb. |
| 28 Str | 800 lb. |
| > 28 Str | 933 lb. |

1. GP = Gold Pieces [↑](#footnote-ref-1)
2. see tables for bonuses and modifiers [↑](#footnote-ref-2)