

Grizzly Punk 2070

Software Requirements Specification

Draft 1

September 13, 2020

Georgia Gwinnett College

Roberto Salas Montoya
Syrone Robinson
Le Quang Greatzel Unabia

Powered By



www.construx.com

Revisions

Version	Primary Author(s)	Description of Version	Date Completed
Draft 1	Syrone Robinson, Roberto Salas Montoya, Le Quang Greatzel Unabia	This document is the current version of the Grizzly Punk 2020 Game. This document will contain details of the game such as features of the player, items, room, navigation and combat.	09/13/2020

Contents

1 INTRODUCTION	1
1.1 PURPOSE	1
1.2 SCOPE	1
1.3 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS.....	1
1.4 REFERENCES	1
1.5 OVERVIEW	1
2 OVERALL DESCRIPTION	2
2.1 PRODUCT PERSPECTIVE.....	2
2.2 PRODUCT FUNCTIONS	2
2.3 USER CHARACTERISTICS	2
2.4 CONSTRAINTS	2
2.5 ASSUMPTIONS AND DEPENDENCIES.....	2
2.6 APPORTIONING OF REQUIREMENTS	2
3 SPECIFIC REQUIREMENTS	3
3.1 OVER ALL GAME DESCRIPTION.....	3
Provide the game map here	
3.1.1 Table of Rooms.....	4
3.1.2 Table of Monsters.....	8
3.1.3 Table of Puzzels.....	10
3.1.4 Table of Items	11
3.1.5. Table of Navigation Command.....	13
3.1.6 User Interfaces.....	13
3.1.7Memory Pieces Story.....	13
3.2 SOFTWARE PRODUCT FEATURES (LIST ALL GAME FEATURES)	14
3.2.1 Player Feature.....	14
Purpose	14
3.2.2 Room Feature.....	15
Purpose	16
3.2.3 Item Feature	16
Purpose	16
3.2.2 Monster Feature.....	17
Purpose	17
3.2.2 Puzzle Feature.....	19
Purpose	19
4 ASSOCIATED FUNCTIONAL REQUIREMENTS.....	21
3.3 SOFTWARE SYSTEM ATTRIBUTES.....	21

3.5.1 Reliability	21
3.5.2 Availability	21
3.5.3 Security.....	21
3.5.4 Maintainability.....	21
3.6 LOGICAL DATABASE REQUIREMENTS	21
3.7 OTHER REQUIREMENTS.....	21

1 Introduction

This section should provide an overview of the entire document.

1.1 Purpose

The purpose of this document is the guide the game development team tasked to program this game from requirement to final product.

1.2 Scope

This document will only include the software requirements specifications of the text-based adventure game where the player is able to navigate between rooms, interact with items, solving puzzles, and fight monsters.

1.3 Definitions, Acronyms, and Abbreviations

Define all terms, acronyms, and abbreviations used in this document.

Hp = health points

Sp = Shield points

Stats = player statistics includes (player health bar, player shield bar, player equipped weapon damage, and current equipped items)

1.4 References

The Amazing Lunch Indicator (SRS) by Sarah Geagea, Sheng Zhang, Niclas Sahlin, Faegheh Hasibi, Farhan Hameed, Elmira Rafiyan, Magnus Ekberg.

The Quest for Software Requirements by Roxanne Miller, 2009, MavenMark Books, Milwaukee, WI

1.5 Overview

This document details the Software Feature Requirements of the text adventure game – Grizzly Punk 2070. The 1st section contains the purpose, the scope, definitions used in this document and the references. The 2nd section contains the overall description of Grizzly Punk 2070 – the product perspective, product functions, user characteristics, constraints, assumptions and dependencies, and apportioning requirements. The 3rd section contains the specific requirements such as the overall game description, software product features. Software system attributes, and logical database requirements.

2 Overall Description

This section will give an overview of the whole system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it. It will also describe what type of stakeholders that will use the system and what functionality is available for each type. At last, the constraints and assumptions for the system will be presented.

2.1 Product Perspective

This system will consist of 2 parts, the console in which the game will take place, and the text file in which the game data will be saved in. These are the minimum requirements, and the development team may use a GUI if their desire.

2.2 Product Functions

The game will allow the user to play a text base adventure game. The game will allow the player to save game progression. Loading previously saved games is another function that the user will be allowed to do. The player will be able to navigate through rooms, interact with items and fight monsters using the action commands in the game.

2.3 User Characteristics

The player will be this application's user. The player can be anyone at GGC.

2.4 Constraints

The only constraints that this document seems to have is that the game will be developed with JAVA programming language. The game will also be strictly a text-based adventure game. The game is limited to 20 rooms, 10 items, 7 monsters and 7 puzzles.

2.5 Assumptions and Dependencies

Not applicable.

2.6 Apportioning of Requirements

Not applicable.

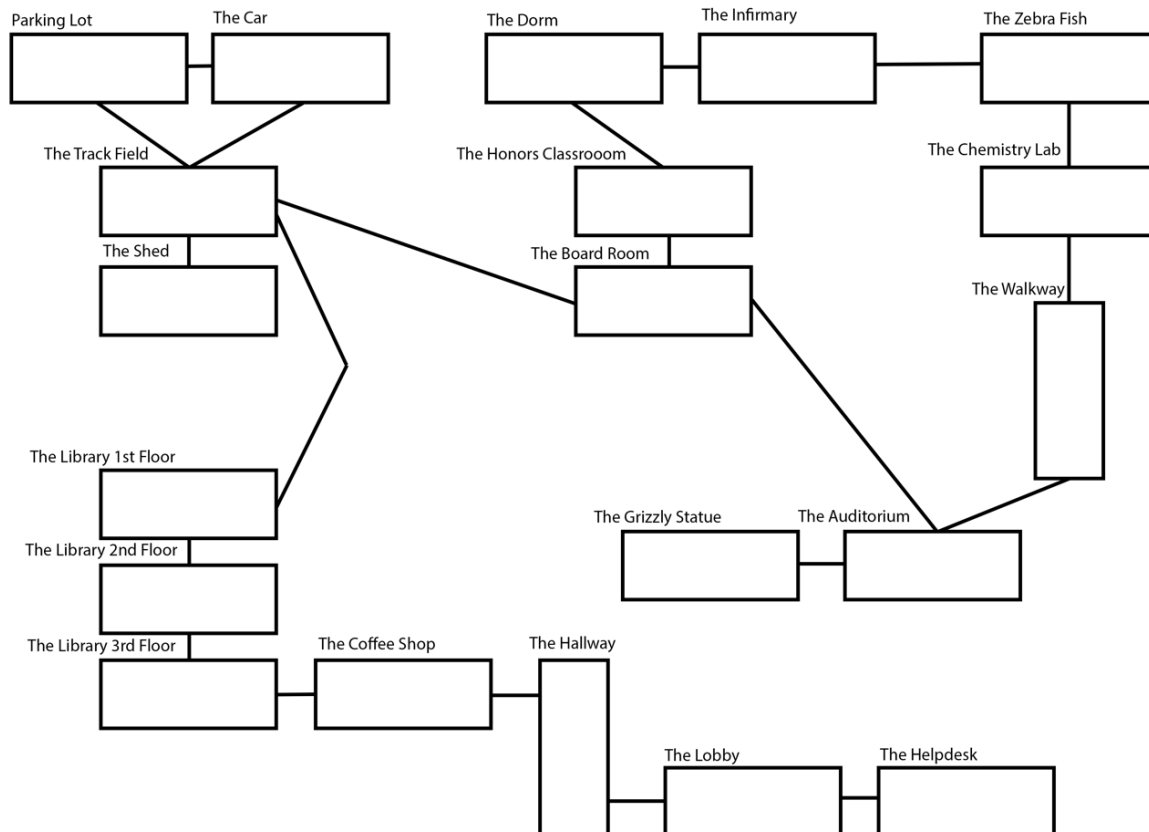
3 Specific Requirements

This section should describe all software requirements at a sufficient level of detail for designers to design a system satisfying the requirements and testers to verify that the system satisfies requirements.

3.1 Overall Game Description

Grizzly Punk 2020 is a cyberpunk themed adventure text game. The goal of the game is for the player to remember their past by collecting all memory pieces throughout the map by fighting monsters and solving puzzles. The player can keep track of how many they have collected by checking their inventory. After collecting all 10 memory pieces, the player will be able to enter a locked room to fight the boss of the game. Success in defeating the boss will result to game victory.

Map:



3.1.1 Table of Rooms (Gretzel)

Provide a detailed description to the 20 rooms you have in your game including exists etc....

Room Name	Room ID	Monster Included	Items Included	Puzzle	Room Description
Parking Lot	R1		<ul style="list-style-type: none"> •Memory Piece (Itm10) •Plasma Sword (Itm6) 		Wide, lot uneven rough terrain. Filled with boulders of different sizes. They seem to have some letters on them. Filled with car of olden days, some rusty, some in better condition.
The Car	R2		<ul style="list-style-type: none"> • Plasma Gun (Itm7) 		Busted 4 door car. It looks like it was a shiny silver make gray car but now it a dull grayish color car with rusty spot creeping upside the car door and roof top. The vehicle has a couple of dents in the side and truck. The truck barely closed seem to hold by a thread.
The Dorm	R3	Bulldog(M1)	•Memory Piece (Itm10)	P1	Wide slightly broken wood door. Thin layer of dust covering the desk and counter-tops. The has busted Windows and is Slightly in disorder such as the person living there was in a rush to leave. Furniture turn over, clothes scattered all over the floor. The ceiling is caving in.
The Infirmary	R4		•Health Potion (Itm1)		Its ransacked. Broken glass and misplaced pills all over the floor. Furniture tossed everywhere. Miscellaneous stains on the bed.
The Zebra Fish Lab	R5		<ul style="list-style-type: none"> • Shield Potion (Itm2) 	P2	Busted out fish tanks. Remembrance of fishes. (their skeletons) Musty, murky water. Papers and book thrown everywhere. Desk and chairs turn over.

The Chem lab	R6	Owl(M6)	•Flashlight (Itm8)	P3	The room is in disarray. Chairs thrown all over. Papers scattered. Broken vases and vials. Projector hanging off the wall. One of the double doors is laying on the floor. Smell of Loose gas.
The Track Field	R7		•Grappling Hook (Itm9)		The field is patchy with dirt spots and random patches of grass. It seems like a building collapsed and fell in the field. It's kind of worn away. It's no longer smooth and flat, it's kind of lumpy and bumpy.
The Shed	R8		•Memory Piece (Itm10) • Body Armor (Itm3)		The small room was dim and barely enough light came through the broken holes of the ceiling. You walk around looking for anything to help you. You were careful though; debris of all kinds were on the floor. You notice a glow behind a trophy shelf. A glint in the darkness behind the debris, you see a glint of a something shiny. You explore it.
The Board Room	R9	Hawk(M3)	•Memory Piece (Itm10)	P4	The lights were dimmed in this room. You notice large talon like depressions on the marble floor. You see a shine at the edge of the room. You explore it.
The Honors Classroom	R10		• Plasma Short Bow (Itm7)		The room was well lit, and you see a broken white board and broken furniture. There seemed to have been a struggle here. You search the room for anything that can

					<p>help you and you stumble upon a case.</p> <p>You open it.</p>
The Auditorium	R11				<p>You push through two big doors and find yourself in a large auditorium. Every step and sound you made echoed within its empty walls. You only source of light was from a broken projector showing static. The lines of chairs were barely intact and the podium that you supposed to have been there is missing.</p>
The Grizzly Statue	R12	Panther(M2)	<ul style="list-style-type: none"> •Memory Piece (Itm10) •Health Potion (Itm1) 	P5	<p>You open an exit door and the light from the outside blinded you. How'd it become so bright all of a sudden? Is it noon? You look down and see the grass and as your vision returned, you notice a large create appear behind the grizzly bear statue.</p>
The Library 1 st Floor	R13	Buzz(M4)	<ul style="list-style-type: none"> •Memory Piece (Itm10) 		<p>You approached the library, but it seems that the doors are boarded shut from the outside. You take look around a bit more and notice an opening large enough for a person your size to enter. You crawled into the opening, stood up and dusted the dirt off of you. You look around and saw that most of the shelves and the books were destroyed and scattered. But a good portion was also still there. You hear a rhythmic buzzing sound. You decide to explore.</p>
The Library 2 nd Floor	R14				<p>The door was once again shut closed and you look once more to see if there's an opening. Luckily, the board nailed</p>

					to door was loose. You pry it open and entered. The second floor of the library was spotless. It was completely different from the other places of this campus you are in. It was well lit, and the shelves of books were mostly intact. You notice 2 doors.
The Library Floor	R15		<ul style="list-style-type: none"> • Memory Piece (Itm10) 		You pry open the small door and it revealed a dim room. Like the room before it, it was mostly clean and untouched. The books were still neatly placed on the shelves and the lights worked properly. Further inside the room you see pile of books on a desk. Looks like someone has been reading some zoology books. Go figure. Behind the books you find something glowing.
The Coffee Shop	R16	Wolf(M5)	<ul style="list-style-type: none"> • Memory Piece (Itm10) • Shield Potion (Itm2) 	P6	<p>Smells like coffee and like wet dog.</p> <p>There is wolf behind the bar all and ready to attack. There is a shield Potion to you are able to pick up. The entrance top R15 is blocked by all the tables and chair that the wolf setup.</p>
The Lobby	R17				This room is extremely dark you need to use the flashlight upon entering there is couple of vending machines and tables to each side there seems to be a glass wall and sounds something growling and laughing. If you keep walking forward, there will be a glass door with a puzzle to let you in and investigate the growling

The Helpdesk	R18	Grizzly Bear(M7)		P7	This room looked dark from R17 but upon entering it the lights turn on and reveal the Grizzly bear it is time to fight the final boss. The grizzly bear chose this room because of the thigh space since there is a bar with multiple computer equipment therefore you must fight him in tight spaces.
The Hallway	R19		• Memory Piece (Itm10)		This room is a long hallway that has a giant hole as an obstacle for the player. The hole is 15 feet deep and 12 feet long. There is memory piece on the other side on the hallway after crossing the hole.
The Walkway	R20		• Memory Piece (Itm10) • Head Armor (Itm4)		The walked way is calmed place there is not much her just a memory piece right in the middle and a head armor after the 90-degree turn. It is unnecessary to look around or explore the items can be seen at plane sight and can be pick up soon as you get through it.

3.1.2 Table of Monsters (Roberto)

Provide a detailed description to the monsters you have in your game etc....

Monster name	Monster ID	Room ID	Description	Attack name	Stats	Weakness	Drop item
Bulldog	M1	R3	A short, muscular anamorphic bulldog mascot. He is may be 5'4 -5'6 ft. He's in a slightly broken shoulder pads, it is covered in stains (dust or	Football charge	Health: 200 Damage: 25pa	Chop legs with plasma sword	none

			dust). He has metal wiring showing in lower thighs. He has glowing orange eyes.				
Panther	M2	R12	Its long, tall and lithe. He has few scars. Black piercing eyes. Large, sharp claws on both his hands and feet. Very agile can jump ay attacks that go to his body	Claw strike	Health: 150 Damage: 50pa	Hit nose with plasma sword	none
Hawk	M3	R9	Fly cannot be hit by swords or plasma tools	Claw Slash	Health: 200 Damage: 40pa	Hit wings with bow and arrow	none
Buzz	M4	R13	A large bee the side of a car that flies around the library. The bee has a menacing looking stinger with barbs of spikes protruding through it.	Sting mis-sile	Health: 200 Damage: 40pa	Hit Stinger with plasma gun	Health potion
Wolf	M5	R16	A large gray wolf the size of a tesla Cybertruck with fangs 6 inches long and claws the size of kitchen knives.	Charge bite	Health: 150 Damage: 50pa	Hit Mouth with plasma sword	none
Owl	M6	R6	A large white owl twice the size of a person with eyes as big as dinner plates that glow in the dark. Talons are as big as kitchen knives.	Eye Glare	Health: 200 Damage: 40	Hit wings with bow and arrow	Health potion
Grizzly Bear	M7	R18	The brown bear you met in the first part of the game. He is wearing the	Maul	Health: 250 Damage: 75pa	No weakness	none

			same GGC Jersey that he did before. He shows his true form and becomes a beast with menacingly long claws and sharp teeth.				
--	--	--	--	--	--	--	--

3.1.3 Table of Puzzles (Syrone)

Provide a detailed description to the puzzles and their solution

Puzzle Name	Puzzle ID	Puzzle Prompt	Puzzle Answer	Possible Wrong Answers
Dorm riddle	P1	I am the beginning of the end, and the end of Life.	E	Time God
Zebrafish riddle	P2	What has six legs but walks on only four.	A Person Riding A Horse	A spider spinning a web A wagon rolling on the street
Chem Lab riddle	P3	What word in the English language does the following: the first two letters signify a male, the first three letters signify a female, the first four letters signify a great, while the entire word signifies a great woman. What is the word?	Heroine	Pharaoh Angel
Boardroom riddle	P4	I have cities, but no houses. I have mountains, but no trees. I have water, but no fish. What am I?	A Map	A Dream A Metropolis
Bear Statue Riddle	P5	I will disappear every time you say my name what am I?	Silence	Mute Vanish

Coffee Shop Riddle	P6	You measure my life in hours, I serve you by expiring I'm quick when I'm thin and (P7) slow when I'm fat the wind is my enemy what am I?	A Candle	A Kite Light Bubble
Helpdesk (Final Boss) riddle	P7	You carry it everywhere you go, and it does not get heavy. What is it?	Your Name	Your Soul Love

3.1.4 Table of Items (Syrone, Roberto, Greatzel)

Provide a detailed description to Artifacts in your game

Item Name	Item ID	Type	Item Room ID	Item description	Functionality
Health Po-tion	Itm1	Consumable	R4 R2 R6 R13	Restore health points to the players health.	Adds 50 health points to the players health if health is missing.
Shield Po-tion	Itm2	Consumable	R5 R16	Restores shield of body armor and or head armor.	Adds 25 shield back to total armor space available.
Body armor	Itm3	Equippable	R8	Protects the player health bar if equipped can be recharge by shield potion.	Expands the shield capacity of the player by 25 shield points.
Head armor	Itm4	Equippable	R20	Protects the player health bar if equipped can be recharge by shield potion.	Expands the shield capacity of the player by 25 shield points.
Plasma gun	Itm5	Equippable	R2	The plasma gun is futuristic weapon that is effective at media range. The gun is too	The plasma gun deals 35 damage at enemies standing at media range, it deals no damage at

				heavy to be effective in short range.	long range and short range.
Plasma sword	Itm6	Equippable	R1	The plasma sword is a melee weapon it is only effective in close quarter combat.	The plasma sword deals 75 damage in close quarters fights. It deals no damage at any other distance.
Plasma bow & arrow	Itm7	Equippable	R10	The plasma bow is the long-range weapon good for killing enemies that can fly.	The plasma bow deals 100 damage in long range combat it deals no damage in any other distance because it is slow to reload and does reach is maximum projectile speed.
Flashlight	Itm8	Equippable	R6	Flashlight helps the player see in dark rooms.	Allows players to go through and access dark rooms.
Grappler	Itm9	Equippable	R7	The grappler is tools that grasp and anchor to surfaces such as walls or structures.	The grappler helps the player cross over obstacles.
Memory Piece	Itm10	Collectible	R1 R3 R8 R9 R12 R13 R15 R16 R19 R20	The memory piece item gives player story background.	Once the player has collected all the memory pieces the player is able to fight the final boss.

3.1.5 Table of Navigation Command (Greatzel)

In the game Grizzly Punk 2070, Navigation Command is limited to the Room Feature” Go to [Room ID]”.

Command	ID	Description
Go to “Room ID”	GTL	The player will be able to move to the room they selected.

3.1.6 User Interfaces

The game’s choices will be selectable/clickable words displayed in the console. It will be multiple choice. The player can only choose one selection at a time.

3.1.7 Memory Pieces Story (Greatzel)

Upon picking up the Memory Piece (Item10), the game will show the player a short narrative of a memory that they had lost.

Room ID containing Memory Piece (Itm10)	Brief Narrative
R1	When the player picks up this memory piece, they will receive a flashback of when they were called by their name “Jay” by different voices.
R3	The player will remember that they worked as a secret agent from a rebel group and their role played a huge part in mitigating a disaster – but the disaster itself they could not remember.
R8	A memory of when they learned how to fight with their teacher.
R9	The player will remember that they were in a van traveling to a location and that they were supposed to disrupt an experiment that the government was trying to conduct.
R12	The player will remember that a government facility had opened a portal of a dangerous dimension that had brought monsters into our world.
R13	The player will remember how they were treated by a friend from the past when he got wounded during a mission.
R15	The player will remember how leadership in leading the catastrophe was unorganized and the government was not able to help. Key individuals even sided with the monsters in order to keep wealth and power.
R16	The player will remember that in the middle of the mission, a new portal opened and a

	different version of the monsters they defeated had taken them into the portal.
R19	The player will remember being strapped to a chair, hands, foot and head bound. He was zapped with a ray of light and his glowing sphere of memories was extracted from him.
R20	The player will find out that the leader among all the enemies was the Grizzly bear and that one of his friends from the past has betrayed him.

3.2 Software Product Features

3.2.1 Player Feature (Greatzel)

1. Start new game

- a. **Req. ID:** PF1
- b. **Description:** The player must be able to start new game with “Start new game” command. Upon choosing the “Start new game” command the player will then be placed in the first room. The game will introduce the player to a friendly NPC named the Grizzly Bear. The Grizzly Bear character will give the player the synopsis of the game.

If the player chooses the “Start new game” command after a new game has started and the player did not save the game, the game will alert the player: “Your game is not saved” and will give the player options to “Save Game” or “No, I want to start a new game”.

- c. **Dependency:** The game must be opened by the player.

2. Save Game

- a. **Req. ID:** PF2
- b. **Description:** The player must be able to save their current location, current character statistics and current character inventory items with the “Save Game” command. The data will be saved in Upon choosing the “Save Game” command, the player must create a name for their saved game. The player will still be able to continue with the game. The game will repeat the last message that was sent to the player after using the “Save Game” command.
- c. **Dependency:** The “Start new game” or “Reload game” option should be selected.

3. Exit Game

- a. **Req. ID:** PF2
- b. **Description:** The player must be able to exit the game with “Exit game” command. Upon selecting the “Exit game” command the game will close.
- c. **Dependency:** The player must have opened the game.

4. Reload Game

- a. **Req. ID:** PF3
- b. **Description:** The player must be able to play a saved game. Upon selecting the “Reload Game” command, the game will give the player a list of all the saved games they can choose to continue. If the player does not have a saved game and the player uses the “Reload Game” command, the game will show the player an error saying, “There are no saved games!”. To select a game to reload in the list, the player must select the name of the game

in the given list. Upon choosing the name of the saved game, the player will then be transported to the current room and current player statistics of where the saved game left off.

- c. **Dependency:** The player must have at least 1 saved game.

5. Open Inventory

- a. **Req. ID:** PF4
- b. **Description:** The player must be able to see a list of current inventory items. Upon selecting “Open Inventory”, the game will show a message that says, “Please click on an item you want to select”. The player must be able to choose among the list of current inventory items by clicking on the item name in the list. Items in the list of current inventory list must be clickable. The player will only be allowed to use Item Features: “Use” for consumable type items, “Equip” for equipable type items, “Drop” for all types, “Help” command and the Player feature “Close Inventory”.

If player tries to use other Features while inventory is open, the game will give the player a message saying that they must close the inventory first.

- c. **Dependency:** The “Start new game” or “Reload game” option should be selected.

6. Close Inventory

- a. **Req. ID:** PF5
- b. **Description:** The player must be able to close inventory. Upon choosing “Close Inventory” command, the player will be able to use Room Features, but will not be able to use Item Features: “Use”, “Equip”, and “Drop”.
- c. **Dependency:** The “Open inventory” must be selected.

7. Check Player Stats

- a. **Req. ID:** PF6
- b. **Description:** The game will show how much health, armor and weapons damage the player has. Upon selecting “Check Player Stats”, the player will be shown a list of the following: Amount of health, amount of armor, amount of damage per weapon and number of memory pieces collected inside the player’s inventory.
- c. **Dependency:** The “Start new game” or “Reload game” option should be selected.

8. Help

- a. **Req. ID:** PF7
- b. **Description:** Upon choosing the “Help” command option, the player must be able to see a list of the name and description of all player, item, room, and monster commands.
- c. **Dependency:** None.

3.2.2 Room Features (Syrone)

1. “Go To” [Room ID]

- a. **Req. ID:** GTL
- b. **Description:** When Player chooses “go to” command, Player will be presented with a list of choices that previously visited location. This command gives the player the ability to quick travel to a location that he/she has already travelled through.
- c. **Dependency:** The player will only be allowed quick travel to rooms that they have previously visited. Player will not have access to rooms, they haven’t been visited by player.

2. Explore

- a. **Req. ID:** EX1

- b. **Description:** When the player chooses “Explore” command, this gives the player the ability to canvas the current room they are in. This command gives the player chance to interact with items in the room. By choosing this command player will be given a list of items in the room. After receiving list of option, player will be given a set of choices to interact with items. If there are no items in room the message “You search the room for anything that could help you in your journey but there is nothing”.
- c. **Dependency:** If “explore” command is not chosen by player in a room, the player will not be given the options to interact with equip able items.
 - When player chooses “Explore” command the player is given a “pick up” list of items in the room.

3.2.3 Item Features (Roberto)

1. Pick up

- a. **Req. ID:** IF1
- b. **Description:** upon choosing the command “pick up” the player will be given item description (descriptions are in the item table). The player will then be give given the command option to “keep” or “drop” unless the item is a memory piece. The player will only get the memory piece message and will not show in the inventory of player.
- c. **Dependency:** The player must choose the command “Explore” first after entering a room to find items.

2. Don't pick up

- a. **Req. ID:** IF2
- b. **Description:** upon choosing the command “don't pick up” the player will not pick up the item that the player was made aware of. The item will stay in the room. The item
- c. **Dependency:** The player must choose the command “Explore” when the player is given the option to be able to select the command

3. Equip

- a. **Req. ID:** IF3
- b. **Description:** Upon choosing the “equip” command the player will equip the item selected in the players' inventory.

If the item is body armor or head armor, the player shield stats will be update. The players maximum amount of shield will increase by 25sp. After this has taken an effect the player will be given the options to “explore” and “go to”.

Else If the item is a weapon the player stats will be update. The players damage should display the damage the weapon does. Also, player will be able to attack using the weapon equipped. After this has taken an effect the player will be given the options to “explore” and “go to”.

Else if the item is a flashlight and player is in “room 17” the following message will be displayed in the console: “I can see now and get through the room”. In the event the player is not in room 17 a message saying, “This item is not useful in this room might want try it later”. After either message is displayed the player will be given the options to “explore” and “go to”.

Else if the item is a grappling hook and player is in “room 19” the following message will be displayed in the console: “I will use this grappling hook to get to the other side of the hallway”. In the event the player is not in room 19 a message saying, “This item is not useful in this room might want try it later”. After either message is displayed the player will be given the options to “explore” and “go to”.

The player can swap an item that is already equipped by equipping a new item from the player's inventory.

- c. **Dependency:** Player must be in the inventory and must select an item to be able to use “equip” command.

4. Use

- a. **Req. ID:** I(responding ID to Item)
- b. **Description:** upon selecting the “use” command while in the players inventory the player will use the consumable item. If the item selected is a health potion and the player has 100hp the following message will be displayed on the console: “You already have 100 health points you cannot consume this item”. Else if the player health points are below 100 the player will be able to consume the health potion. The health potion will only recover 50hp of the players total health. The total amount of health a player can have cannot be greater than 100hp.

If the item selected is a shield potion and the player has 50sp the following message will be displayed on the console “You already have full shield you cannot consume this item”. Else if the player has less then 50sp the player will be able to consume the shield potion. The shield potion will only recover 25sp of the players' total shield. The maximum amount of shield the player can have is 50 sp.

- c. **Dependency:** This command is only able to be used when the player opens the inventory and select the consumable item. This command is available to use if the player has a consumable item in their inventory. The player will not be available to use the “use” command if the player does not need them. Ex. A Health potion.

5. Drop

- a. **Req. ID:** IF5
- b. **Description:** upon choosing the “drop” command the player will drop the item that the “pick up” command describe. If there is more than one item in the rom the player will be given the command options to “pick up” followed by name of the other item or items. Else if there are not more items the player will be given the option to choose between the “Explore” and “go to” commands.
- c. **Dependency:** The “drop” commands is given as an option after player choose “pick up” commands.

6. Keep

- a. **Req. ID:** IF6
- b. **Description:** Upon choosing the “keep” command the item picked up will go from the rooms inventory to the players' inventory.
- c. **Dependency:** An item must be picked up first using the “pick up” command option before a player can choose the “keep” command.

3.2.4 Monster Features

1. Attack (Greatzel)

- a. **Req. ID:** MF1
- b. **Description:** This command allow player to attack monster. If player enters room that has a monster, the game will show a message with the room description and the monster description. The player will then be prompted to attack. If the player selects “Attack” command option and the player does not have a weapon item equipped, the game will suggest to the player to equip a weapon by opening inventory. If the player selects “Attack”

command option and the player has a weapon equipped, then the player will be given hit command options: “Hit Head”, “Hit Legs”, “Hit Arms”. The monster's hp will get deducted based on which “Hit” command option the player selects.

If the player selects “Attack” command option and the player does not have a weapon equipped nor a weapon in their inventory, the player will not be able to deduct hp points of the monster. Then the monster will be able to attack the player and deduct player hp by how much damage the monster deals. The game will show the message “You must have a weapon equipped or in your inventory to attack! Monster did [Attack Name] and dealt [Amount of Damage]. Player health is now [Amount of Player hp]”. The player will keep getting prompted to attack. This will loop until the player will die. Player death will trigger the “Win Monster” Feature.

Upon dying, the player will respawn in the room before. However, if the player deducts the monster’s hp to 0 first, then this will trigger the “Win Player” Feature.

- c. Dependency:** The player must be in a room that has a monster.
 - 2. Hit Head: (Greatzel)**
 - a. Req. ID: MF2**
 - b. Description:** When the player selects “hit head” command option and the monster weakness is “head”, then the player will do 3 times the damage of the weapon that they have equipped. If the player selects “attack head” command option and the monster does not have a “head” weakness, then the player will do 1 time the damage of their weapon. After selecting “Hit Head” and deducting hp points of the monster, the game will show how much damage the player has done to the monster. Then game will show a message that the monster attacks the player and will show how much damage the player has taken from the monster. The message will be as follows: “Monster did [Attack Name] and dealt [Amount of Damage]. Player health is now [Amount of Player hp]”. Monster Attack Name is located in the Monster Table in Section 3.1.2. If the player’s current attack will get the monster hp to 0, then the “Win Player” feature will be triggered. Else the monster will attack the player again and deduct player hp points by how much damage the monster does. Then the player will be prompted to attack again.
 - c. Dependency:** The player must select “Attack” command option and must have a weapon equipped.
 - 3. Hit Legs (Syrone)**
 - a. Req. ID: MF3**
 - b. Description:** When the player choses to use “hit Legs” command. It forces player to attack monster on their Legs.
 - c. Dependency:** This command is only available after the player selects “Attack” and has weapon equipped, then the player won’t be able to use “Attack Legs” command.
 - 4. Hit Arms (Greatzel)**
 - a. Req. ID: MF4**
 - b. Description:** When the player selects “Hit Arms” command option and the monster weakness is “Arms”, then the player will do 3 times the damage of the weapon that they have equipped. If the player selects “attack head” command option and the monster does not have a “Arms” weakness, then the player will do 1 time the damage of their weapon. After selecting “Hit Arms” and deducting hp points of the monster, the game will show how much damage the player has done to the monster. Then game will show a message that the monster attacks the player and will show how much damage the player has taken from the monster. The message will be as follows: “Monster did [Attack Name] and dealt [Amount

of Damage]. Player health is now [Amount of Player hp]”. Monster Attack Name is located in the Monster Table in Section 3.1.2. If the player’s current attack will get the monster hp to 0, then the “Win Player” feature will be triggered. Else the monster will attack the player again and deduct player hp points by how much damage the monster does. Then the player will be prompted to attack again.

- c. **Dependency:** The player must select “Attack” command option and must have a weapon equipped.
- 5. **Win Player: (Syrone)**
 - a. **Req. ID:** MF5
 - b. **Description:** If The player manages to hit the monster enough that the monster hp has reached 0. Then the game will present a message saying “The monster has been defeated. You can now continue with your journey.”
 - c. **Dependency:** Player must deduct monster hp to “0”. Before message is displayed on “The monster has been defeated. You can now continue with your journey.”
- 6. **Win Monster: (Syrone)**
 - d. **Req. ID:** MF6
 - e. **Description:** If the monster manages to hit the player enough that the player hp has reached 0. Then the game will present a message saying “You have passed out;_you have been kicked out of the room”
 - f. **Dependency:** Monster must deduct player hp to “0”. Before message is displayed on “You have passed out, you have kicked out of the room”
- 7. **Weak point system: (Roberto)**
 - a. **Req. ID:** MF7
 - b. **Description:** Each monster must have a weak point. Each monster's weak point is stated in the monster table. Upon selecting the command “hit head”, hit legs”, or “hit arms” the game will check for a monster's weak point If the monster weak point matches the hit command the player selected the players will 3 times the damage of the weapon equipped. Else if the players hit command does not match with the monster's weak point the weapon deal the weapons regular amount of damage stated in the weapons table.
 - c. **Dependency:** if the player is fighting monster the weak point system should be checking for weak point hits.

3.2.5 Puzzle Features (Syrone)

- 1. **Interact with Puzzle**
 - a. **Req. ID:** P (corresponding number to riddle)
 - b. **Description:** When player chooses to “go to” [location] command, the player will head to the location, they have chosen. As the player leaves a specific location. The player will interact with a riddle. The player will be prompted “There seems to be a riddle or something, that’s preventing the door from opening” The player will be prompted with 2 options “solve puzzle” or “ignore puzzle”.
- 2. **Ignore Puzzle**
 - a. **Req. ID:** IP1
 - b. **Description:** When the player choses the “ignore puzzle” command. The Player will not be presented with a riddle. player can choose to “explore” the room or “move to ‘location’”.
 - c. **Dependency:** The “ignore puzzle” option is only available if the player has chosen to interact with puzzle.

3. Solve Puzzle

- a. **Req. ID:** SP1
- b. **Description:** When player chooses to the “solve puzzle” command. The Player will be presented with a riddle. After being presented riddle, they will be prompted with 3 options of answers [1 correct answer, 2 wrong answers].
- c. **Dependency:** Player must choose to explore the room in order to find the puzzle. The Player must be in a room that has a puzzle.

4. Select Right Answer

- a. **Req. ID:** RA1
- b. **Description:** If the player selects the right answer to the puzzle and the room is locked, the room’s door will be unlocked permanently. Else if the player selects the right answer and there is a hidden item in the room, then the game will give player “pick up” and “don’t pick up” item command.
- c. **Dependency:** Player must choose the” solve puzzle” command.

5. Select Wrong Answer

- a. **Req. ID:** WA1
- b. **Description:** If the player selects the wrong answer, the player will lose 10 life points and the player will be given a “Try Again” option. If player chooses “Wrong Answer” and player health reaches 0, then player will be respawned in the room before.
- c. **Dependency:** Player must choose the” solve puzzle” command. When player chooses wrong answer. The player will be told by the game that he/ she has choose the wrong answer.

6. Try Again

- a. **Req. ID:** TA1
- b. **Description:** This feature will allow the player to be presented with the puzzle once again. It will allow the player to answer the puzzle again.
- c. **Dependency:** Player must choose the” solve puzzle” command. This option is only available only if the player has chosen the wrong answer.

4 Associated Functional Requirements

4.1 Software System Attributes

The following items provide a partial list of system attributes that can serve as requirements that should be objectively verified.

Other possible options include scalability, portability, robustness, recoverability, etc.

4.1.1 Reliability (Greatzel)

- The Grizzly Punk 2070 probability failure on demand shall be 0.001 (1 out of 1000) when the game is launched by the player.
- The Grizzly Punk 2070 game crashing probability after game start should be 0.001 (1 out of 1000).
- The player's saved games probability failure in writing the data in the text file should be 0.001 (1 out of 1000).

4.1.2 Availability (Syrone)

- The Game must be available to be played as soon as the programs has been launched.
- The game should be able to launch without internet connection.
- If the game is non-operational, the game should display a message telling the consumer that system is unavailable.

4.1.3 Security (Roberto)

- The game source code should only be allowed to be modified by the game developers.
- Any change made the source code should be reported and recorded.
- Upon launch the user should not be able to see the source code.

4.1.4 Maintainability

- Not available.

4.1.5 Logical Database Requirements

- Not available

4.1.6 Other Requirements

- Not available.