Programmer Guide

The treasure Hunter

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ICS4U

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# UML Diagrams:

|  |
| --- |
| TheTreasureHunter |
| + main(args : String[]) : void |

|  |
| --- |
| Inventory |
| + pass : Boolean  + cm : Boolean  + spass : Boolean  + mineral : Boolean |
| + Inventory()  + Inventory(thePass : Boolean, newCm : Boolean, mineral1 : Boolean, Boolean spass1)  + Inventory(x : Inventory)  + getPass() : Boolean  + getCm() : Boolean  + getSpass() : Boolean  + getMineral() : Boolean  + setPass(p : Boolean) : void  + setCm(c : Boolean) : void  + setMineral(m : Boolean) : void  + setSpass(s: Boolean) : void  + checkInventory(s : Boolean) : void |

|  |
| --- |
| Room |
| + num : Int  + name : String  + description : String  + object : String  + pass : Boolean  + cm : Boolean  + mineral : Boolean  + spass : Boolean  + visited : Boolean  + event : String  + northExit : Int  + southExit : Int  + eastExit : Int  + westExit : Int  + objectiveEvent : Int |
| + Room()  + Room(number : int, theName : String, theDescription : String, theObject : String, thePass : Boolean, newCm : Boolean, mineral1 : Boolean, spass1 : Boolean, newVisited : Boolean, northExit2 : Int, southExit2 : Int, eastExit2 : Int, westExit2 : Int, objEvent : int)  + Room(x : Room)  + getNum() : Int  + getName(): String  + getDescription() : String  + getObject() : String  + getPass() : Boolean  + getCm(): Boolean  + getMineral() : Boolean  + getSpass() : Boolean  + getVisisted(): Boolean  + getEvent() : Boolean  + getNorthExit() : Int  + getSouthExit() : Int  + getEastExit() : Int  + getWestExit() : Int  + getObjectiveEvent() : Int  + setNum(n : Int) : void  + setName(na : String) : void  + setDescription(d : String) : void  + setObject(o : String): void  + setPass(p : Boolean): void  + setCm(c : Boolean): void  + setMineral(m : Boolean) : void  + setSpass(s : Boolean) : void  + setVisited(v : Boolean) : void  + setEvent(e : String) : void  + setNorthExit(ne : Int) : void  + setSouthExit(se : Int) : void  + setEastExit(ex : Int) : void  + setWestExit(we : Int) : void  + setObjectiveEvent(objEvent : String) : void  + printExits() : void |

|  |
| --- |
| Game |
| + Room[] : solarSystem  + int : currentRoom  + Inventory : inventory  + Boolean : cloakedMode  + Boolean : givenMineral  + Boolean : givenPass |
| + Game()  + Game(sS : Room[], cR : Int, inv : Inventory, cm : Boolean, gM : Boolean, gP : Boolean)  + Game(x : Game)  + getSolarSystem() : Room[]  + getCurrentRoom() : int  + getInventory() : Inventory  + getCloakedMode() : Boolean  + getGivenMineral() : Boolean  + getGivenPass() : Boolean  + setSolarSystem(sS : Room[ ])  + setCurrentRoom(cr : int)  + setInventory(inv : Inventory)  + setCloakedMode(cm : Boolean)  + setGivenMineral(gm : Boolean)  + setGivenPass(gP : Boolean)  + startGame(parser : Parser) : void  - proccessCommand(command : Command) : Boolean  - printHelp() : void  - lookObject(command : Command) : void  - takeItem(command : Command) : void  - giveItem(command : Command) : void  - flyRoom(command : Command) : void  - askPerson(command : Command) : void  - randomTeleport() : void  - printLocationInfo(): void  - warpHome(command : Command) : Boolean |

|  |
| --- |
| Parser |
| + commands : CommandWords |
| + Parser()  + Parser(vC : CommandWords)  + Parser(x : Parser)  + getCommands() : CommandWords  + setCommands(c : CommandWords)  + getCommand() : Command |

|  |
| --- |
| CommandWords |
| + validCommands : String[ ] |
| + CommandWords()  + CommandWords(vC : String[])  + CommandWords(x : CommandWords)  + getValidCommands() : String[ ]  + setValidCommands(v : String [ ])  + isCommand(aString : String) : Boolean |

|  |
| --- |
| Command |
| + commandWord : String  + secondWord : String  + thirdWord : String |
| + Command()  + Command(firstWord : String, secondWord1 : String, thirdWord1 : String)  + Command(x : Command)  + getCommandWord() : String  + getSecondWord() : String  + getThirdWord() : String  + setCommandWord(cW : String) : void  + setSecondWord(sW : String) : void  + setThirdWord(tW : String) : void  + isUnknown() : Boolean  + hasSecondWord() : Boolean |

# The Space Treasure Hunter Storyline

This story begins in outer space where you’re all alone on a spaceship far away from your home in search of treasure to use the wealth to help someone you love. You began your journey when you heard of rumors of a treasure in a distant asteroid field in the solar system of PI by Christopher. But the place is rumored to be full of pirates and a common place for ambushes. These pirates are after the same thing you are looking for, but they do not know where the treasure is. The location where you know the treasure is located on the only planet within the asteroid field. But the location of the planet in the asteroid field is unknown so; you must find Christopher to find the treasure.

You’re entering on the south side of solar system where you’re instantly warned by your AI computer that the area is dangerous. But you accept the fact and tell the computer to give you info about the solar system and where is Christopher. The computer tells you that the universe is full of pirates and that they are known to ambush merchants. However, there is a merchant space station located somewhere within the asteroid field despite huge number of pirates roaming around that’s where you can find Christopher. This is station is where you think you could find Christopher who has information on the planet. Anyways you go north into the asteroid field where you encounter a ship. You knew that there was a chance that this was a pirate ship, but you talked to it anyways. The ship was friendly and was a local security guard ship it told you that you required a pass to enter the space station, but you didn’t have one. So, you went on your way to the west in search for a pass. Where you encounter a ship after talking to it you realized it was friendly. This ship was very nice and offered you a pass to enter the station, but it left it in its hideout. It tells you to go to the far west sector of the solar system to reach his hideout. You traveled to the hideout following the instructions and you look around till you find the hideout in an abnormal asteroid and you grab the pass. After that you head towards the space station and show your pass to the guards and they let you through. You enter the space station and you look around for help, you meet Christopher who tells you where the planet is. But he also tells you that the north side of the space station where the entrance to the planet was blocked off by pirates. So, you must go find a cloak to get past the pirates. You head east then north to meet a friendly ship that tells you the location of a certain rare metal in exchange for clocking module that can be used to get past the pirates. You head back then to the east to grab the metal from the unusual asteroid and exchange it for clocking module. After you got the clocking module you head back to the station. This is when you discover out that you don’t know how to install it onto your ship. So, you again ask Christopher for some advice on how you can install the clocking module. He says he can install it and turns on the cloak mode. You agree then you start heading out the north entrance of the station and use your cloaking module to get past the pirates. You now are passed the pirates and you finally now heading towards the treasure planet. But what you discover is that the treasure was not on a planet but a spaceship that was close to the size of a dwarf planet. When you entered and look around the ship, you notice it was full of the treasures waiting to be claimed and a warp engine. You’re now on the ship where you use its computers to boot up its hyper warp engines and head back to earth, your home.

# 

# The Space Treasure Hunter Game Map

The map below represents the solar system that the game space treasure hunter takes place in.

ST= is the **starting room** this room is where the player starts the game in.

G= is the **guard room** this room prevents the player from moving to the station without giving a pass.

SR= is the **ship room** there is a ship here that tells the player of the **location of the pass**.

PA= is the **station pass room** this is where the player finds the **pass** in order to enter the station.

S= is the **station room** this is where the player forwards the story by talking to a shady guy.

C= is the **cloak room** this is where the player can get a **cloak** from a friendly ship.

M= is the **mineral room** where the player grabs a unique mineral in exchange for the **cloak**.

H= is the **hidden room** this is only accessible if you have the **secret pass**. This room allows the player to teleport.

SP= is the **secret** **pirates** **room** which is a room full of pirates and asteroids; this room can only be accessed by having a cloaking module but hidden in an asteroid holds the **secret pass** to the hidden room.

T= is the **treasure room** this holds the **treasure** that the player seeks and is the room to end the game.

* This symbol represents free movement to a room without a required object
* This Symbol represents restricted movement and requires a certain object to pass.

**T**

**Ending**

**C**

**Cloak Item**

**Merchant**

**SP**

**Secret Pass**

**Mineral Room**

**Mineral Item**

**G**

**Guard**

**S**

**Station Room**

**PA**

**Pass Item**

**G**

**Guard**

**H**

**Hidden Room**

**Teleporter**

**SR**

**Spaceship Room**

**G**

**Guard**

**ST**

**Starting Room**

# Future additions for game that developer should know:

* Plans to add the back story to the game as the beginning part then to the space part
* I have plans to add a drop command to the game
* I have plans to add an open command to the game
* I have plans to add an input command to the game
* Player spaceship will be able to attack in the future
* The “spaceship” in the game will have a specific name in the future
* Plans to have unique Easter eggs
* Player will be able to name their spaceship
* Plans to add three different solar systems in the game that the player can travel between
* Game will have currency feature added in the game
* Player will be able to purchase items from a new shop feature in the game
* This will add a sell feature for the shop in the game
* Player will be able to customize their spaceship with unique weapons
* Player will be able to save the game and load game saves

# Future Code Improvements:

* If I had more time I would have added a character class to hold specific events for each character object or NPC in the game.
* If I had more time I would have combined the parser, commandWords and command classes together.
* Instead of nested if statements I would have used switches or case statements which would be used to make it more efficient when looking for a specific first word, second Word or third word.