



Mihail Manner, Mika Vuorinen and Andrei Vasilev

Game Design Document – Pizza-Hat Express

Helsinki Metropolia University of Applied Sciences

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Table of Contents

1	Game Overview	1
1.1	Game Concept	1
1.1.1	Feature Set	1
1.1.2	Genre	1
1.2	Gameplay	1
1.2.1	Game Progression	1
1.2.2	Mission/challenge Structure	1
1.2.3	Puzzle Structure	2
1.2.4	Objectives	2
1.2.5	Play Flow	2
1.3	Mechanics	2
2	Story, Setting and Character	2
2.1	Back story	2
2.2	Plot Elements	2
2.3	Game Progression	3
3	Characters	3
3.1	Main Character - Jack	3
3.1.1	Back story	3
3.1.2	Personality	4
3.2	President's wife - Princess	4
3.2.1	Back story	4
3.2.2	Personality	4
3.3	President	4
3.3.1	Backstory	4
3.3.2	Personality	4
3.4	Two agents	4
3.4.1	Backstory	4
3.4.2	Personality	4
3.5	Stranger on HIP-17710 planet 2	5
3.5.1	Backstory	5
3.5.2	Personality	5
3.6	Stranger on HIP-17710 planet 3	5
3.6.1	Backstory	5
3.6.2	Personality	5

3.7	An'gryhs Forces on Cernobog	5
3.7.1	Backstory	5
3.7.2	Personality	5
4	Levels	6
4.1	Level 1 - Homeland	6
4.1.1	Summary	6
4.1.2	Objective	6
4.1.3	Location description	6
4.1.4	Encounters	6
4.1.5	Map	6
4.2	Level 2 - Proteus	6
4.2.1	Summary	6
4.2.2	Objective	6
4.2.3	Location description	7
4.2.4	Map	7
4.3	Level 3 – HIP-17710	7
4.3.1	Summary	7
4.3.2	Objective	7
4.3.3	Location description	7
4.3.4	Map	8
4.4	Level 4 - Cernobog	8
4.4.1	Summary	8
4.4.2	Objective	8
4.4.3	Location description	8
4.4.4	Map	9
5	Parser	9
6	Walkthrough	9
7	Item List	11
8	Gamemap	12
9	ER-diagram	13
10	Database Desing	14
		14

1 Game Overview

This simple adventure text game takes you to year 2318. Main character of the game, Jack, is an ordinary pizza delivery guy. He unwillingly goes on a difficult and dangerous mission of national importance. Jack has to go through many difficult challenges and rescue the president's wife, also known as the princess of the holy empire.

1.1 Game Concept

Pizza-Hat Express is a text based adventure game. Player plays as an intergalactic pizza delivery guy whose life turns into a wild space journey.

1.1.1 *Feature Set*

Features include interactive inventory, with combinable items, multiple choice dialogs and outcomes and multiple game endings with different story elements.

1.1.2 *Genre*

Game's genre is heavily based on sci-fi and distant future.

1.2 Gameplay

1.2.1 *Game Progression*

Player starts at his home and receives an order from the government to rescue the president's princess from another solar system. The order is entitled to somebody with the same name, but surely there has been a mistake somewhere. After the government forces Jack to leave his home planet for the rescue mission with a poorly fitted space ship, he faces life threatening problems and emergency lands on a distant solar system. After this Jack has to make a decision if he wants to survive or die alone in the deep cold space. Jack soon realizes that failure is not an option for him. He must find a way to continue his journey and rescue the princess.

1.2.2 *Mission/challenge Structure*

Each planet has its own missions and challenges. Some of the challenges must be completed before advancing to the next planet or system.

1.2.3 *Puzzle Structure*

Player must find specific items and combine them. Conversations with other entities may be required to advance in the game.

1.2.4 *Objectives*

Main goal of the game is rescuing the president's wife to safety from the An'gryhs forces.

1.2.5 *Play Flow*

Game advances as the player discovers the world.

1.3 **Mechanics**

Player can explore the available universe with his space ship by flying between the planets. Game universe has different items that can be used or combined to acquire various effects.

2 **Story, Setting and Character**

2.1 **Back story**

Jack is working for intergalactic pizza company, when one day he receives an order from the government to rescue president's wife. The order is obviously delivered to a wrong person with the same name, but main character has problems opening his mouth.

2.2 **Plot Elements**

The government is known for their unyielding attitude and they won't revoke the rescue order. Therefore, Jack is forced to the journey against his will. The Government gives a poorly fitted space ship to complete the mission with. As the main character has minimal experience about spaceships, he soon crashes after leaving his home planet. Luckily the space ship is equipped with a decent flight computer. The machine demands an immediate emergency landing and repairs. Nearby there are six planets, three inhabited and two uninhabited. Jack must make a quick decision which planet to crash to.

After the emergency landing, it's clear that the ship needs some serious repairs. Jack must find a way to repair his ship. Some of the landing zones are populated by alien

species and may offer some crucial help. After the ship has been repaired, the journey can continue.

Some of the repairs were done in a hurry, so everything might not be where they should be and fuel consumption has dramatically increased. As the fuel is running very low Jack stumbles across an intergalactic fueling station. However, the “fuel” they are selling does not work with the governments poorly fitted space ship. Our hero must find something to combine the fuel with so he can use it to power his space ship. The station provides transportation services to nearby planets that can be explored. Maybe something to help the main character can be found. After getting the alien fuel to work the journey can continue to the An’gryhs system. There Jack must gather intel about the whereabouts of the evil forces. With the intel, he can defeat the forces and rescue the princess. When the character comes to the home planet he meets with agents in government house. You need to wait while the agent tells you something, after that agent gives you a lot of money and offer you a new post in government. You can agree or refuse the offer. After, go home, buy the beer and go to sleep. This was a mad week. Game Over.

2.3 Game Progression

Game starts at the main characters house. He is sleeping after a hard-working night at the pizza joint. As he wakes up he can explore the house for a while. The mail system soon alerts him about an unread mail. After he has read the mail, someone knocks on the door. Behind the door stand two government agents that have come to get the main character.

3 Characters

3.1 Main Character - Jack

He’s forced by the government to rescue the princess. He has no special powers or attributes. He’s just a common guy in the wrong place at the wrong time.

3.1.1 *Back story*

Jack is around 30 years old, working as a delivery guy for an intergalactic pizza company.

3.1.2 *Personality*

Working hard for someone else might not be the merit of this guy. He's not lazy, but rarely find's the reason to break a sweat.

3.2 **President's wife - Princess**

3.2.1 *Back story*

Been born into the royal family her life was never a struggle. She is the perfect target for abduction, as she is very precious for the president.

3.2.2 *Personality*

This might be the first time she has faced the cruel side of life. Though you can't blame her for that, due to her position she never had the chance to live a different life.

3.3 **President**

3.3.1 *Backstory*

He's the president of the player's home star system.

3.3.2 *Personality*

He loves his wife more than anything on this world. Known for his relentless leading and unforgivable attitude.

3.4 **Two agents**

3.4.1 *Backstory*

These two agents are brothers, all tough they don't resemble each other at all. On younger age, they used to be troublemakers, so their parents threw them out for being a nuisance. After a while they calmed down and started serving the government as agents.

3.4.2 *Personality*

They don't talk much if at all, sometimes even the most important things aren't said. They are always together day and night.

3.5 **Stranger on HIP-17710 planet 2**

3.5.1 *Backstory*

She likes traveling a lot, in fact she's almost never at home. She has a pet which she leaves in her home to "guard" it, although her pet is a traveling type too, so she needs to find him always when she comes back home.

3.5.2 *Personality*

She's a very careless person and she likes to talk with strangers, sometimes when she's heading home she even invites them to her home. She's also generous when somebody helps her for instance finding her pet.

3.6 **Stranger on HIP-17710 planet 3**

3.6.1 *Backstory*

Not much is known of this guy. He just sits in the bar and drinks beer almost every day and asks strange questions from anyone who happens to be near him.

3.6.2 *Personality*

He loves asking strange questions and drinking beer. It's almost like a job to him.

3.7 **An'gryhs Forces on Cernobog**

3.7.1 *Backstory*

It's one of the factions fighting in Cernobog civil war. Led by the famous warmonger An'gryh III. They were once leading the war by quite a lot, but allegedly lost a huge portion of their resources due to a nuclear accident, somewhere near the year 2292. The war has then come to a standstill between the factions, due to the lack of resources. An independent intergalactic data gathering company released a report in 2317 stating that they had found data that indicates An'gryh's forces preparing for a massive scale attack. Kidnapping the president's wife was no accident and is part of the bigger scale picture. There have been rumours, that the president had been funding the rebel factions on Cernobog, but no official evidence has been found.

3.7.2 *Personality*

Not many have seen the face of an An'gryhs fighter and are still alive. These guys are known for their lack of morale and clever tactics in the battlefield. They are always hungry and can eat up to a whole family in a day.

4 Levels

For level walkthroughs please refer to the walkthrough chapter.

4.1 **Level 1 - Homeland**

4.1.1 *Summary*

This is the first level of the game. Where player receives rescue mission from the government and is sent to it with a poorly fitted space ship.

4.1.2 *Objective*

Player must enter the space ship and begin his journey to rescue the princess.

4.1.3 *Location description*

Level starts from Jack's house. It contains objects like smart watch, shower, small bed, table, "food store" and a computer. This level also includes the government building and the poorly fitted space ship.

4.1.4 *Encounters*

Player is encountered with couple of government agents and government officials.

4.1.5 *Map*

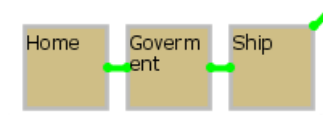


Figure 1: Map of the home system.

4.2 **Level 2 - Proteus**

4.2.1 *Summary*

Player crashes after the incident to an unknown planet and must find a replacement for the broken engine part. He has to come up with a creative solution as he doesn't speak the alien language.

4.2.2 *Objective*

Retrieve the engine part and install it to the poorly fitted space ship.

4.2.3 *Location description*

Proteus system has a total of six planets, two of which are lethal. Planets have the basic services needed for habitation. Although the planets seem to be exact copies of each other, they are not.

4.2.4 *Map*

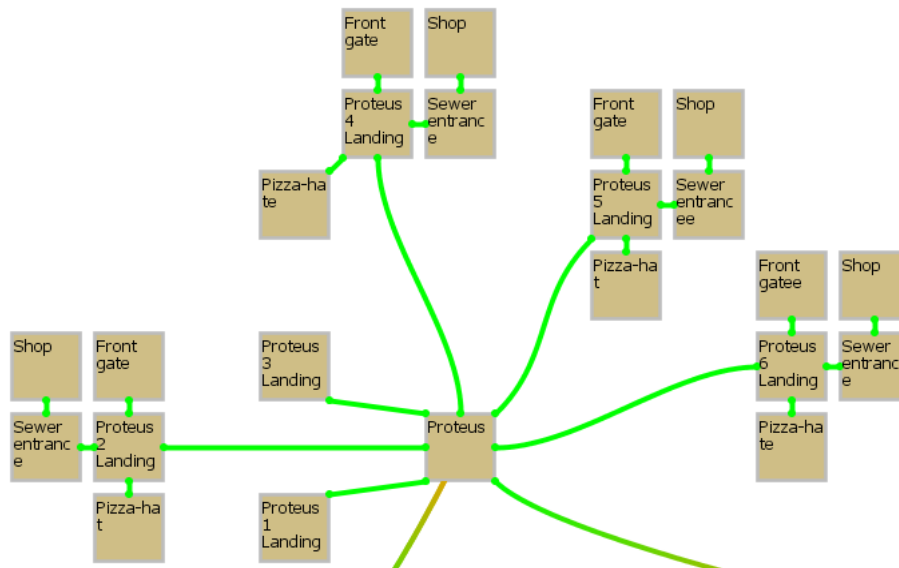


Figure 2: Map of proteus.

4.3 **Level 3 – HIP-17710**

4.3.1 *Summary*

Some of the repairs were done in a hurry. Player soon figures this out, as the engine starts to malfunction and the low fuel light turns on.

4.3.2 *Objective*

Player needs to refuel his ship to continue the journey. This might not be so easy, as the fuel the aliens sell is not compatible with the governments poorly fitted ship.

4.3.3 *Location description*

System includes three planets and a public transportation system. The public transportation system can be used to travel between the planets. HIP-17110 Planet 3 has Pizza-Hat store and a bar that sells alien beverages.

4.3.4 Map

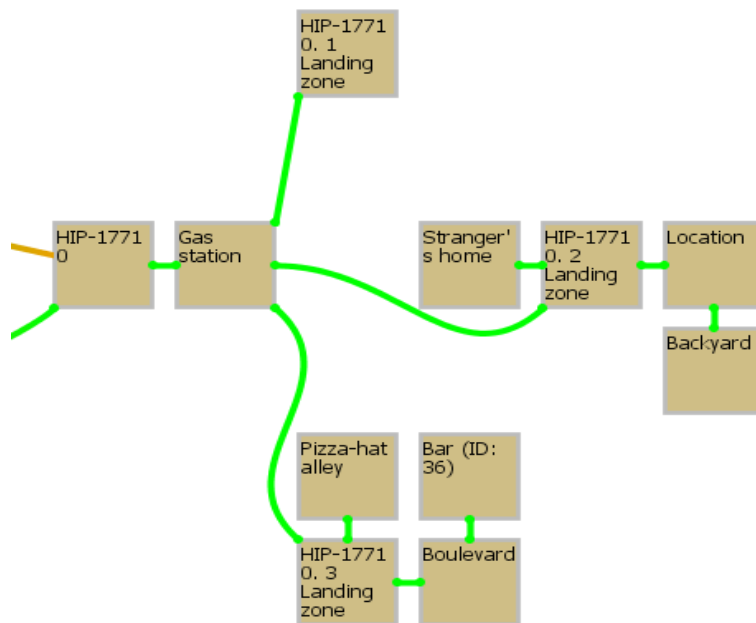


Figure 3: Map of HIP-17710

4.4 Level 4 - Cernobog

4.4.1 Summary

This is the last system and the princess is held captive somewhere in this hostile region. One of the planets is populated by a rebel faction, maybe they can help with the rescue.

4.4.2 Objective

Player must gather intel about the whereabouts of the An'gry forces and come up with a way to defeat them.

4.4.3 Location description

Cernobog system has three planets, one of which is deserted. Rebel faction has an outpost on one of the planets and is willing to let the player land on it. The radar on poorly fitted ship doesn't appear to be picking up any other planets than this. But the evil forces are present in this system, you can sense that.

4.4.4 Map

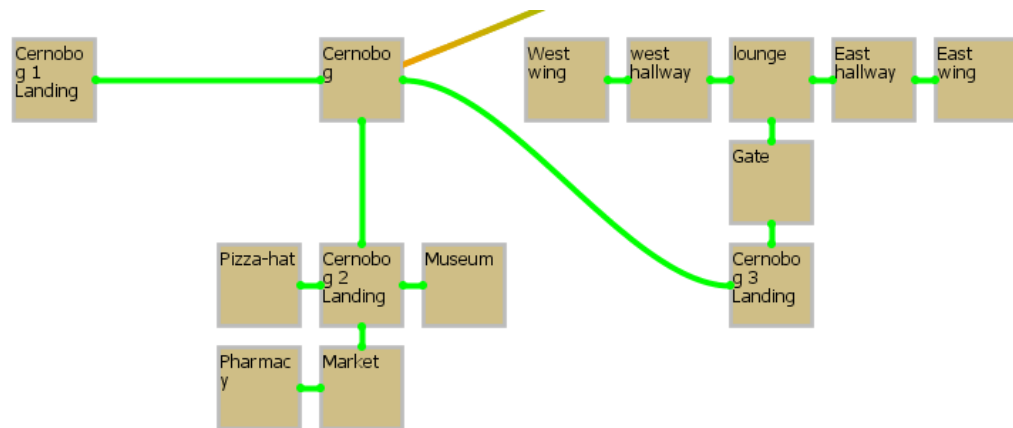


Figure 4: Map of Cernobog

5 Parser

Use these commands to interact with the game.

Command	Description
Quit / Exit	Quit or exit the game.
Get / Take	Take something and put it into inventory.
Drop	Drop items.
Look / Examine / View	Examine something.
Inventory	Examine inventory.
Use	Use items.
Press	Press buttons.
Fly	Fly with the ship.
Map	See the map.
Go / Move	Use with diagonals to move around the map.
N, S, W, E	Diagonals for moving around the map.
Combine X , Y	Combine item X with item Y.
Open	Open things.
Wait	To pass some time.

6 Walkthrough

This is the fastest possible way to beat the game. There are other ways to beat the game with different outcomes.

Use the smart watch to read the message. Open the door after the knocks. Take the driver's license from table and leave with the agents. When you get to the government

building hear what they have to say and enter the poorly fitted space ship. Use the given keys to start up the ship and press the big red button to start your journey.

After the meteorite crash choose planet number 5 to land on. Walk north and pick up the holographic device and use it. Return to your ship and head east, then north and enter the sewer. Wait for the conversation to end, then use the sewer ladder and take the engine part. Head back to your ship and go south. Use the cars keypad and press the correct sequence (1 – 2 – 3). Leave the scene after retrieving the tools. At the ship combine the tools with the engine part. Use the combined item to repair the ship. Press the big red button to leave this system and advance to the next one.

On HIP-17710 travel to planet 2 using the public transportation system. Go east then south, and then look in the dumpster. Take the animal and head back to the station and go west. Return the animal to its rightful owner. Take the quantum flux and go back to the station. Travel to planet 3. Go north and open the pizza box, take the note and head back south. Then go east and north. Use the beer and listen what the stranger has to say. Answer his questions correctly and if needed refer to the note. Take the glowing vial. Go back to the station and leave the planet. Head back to the fuel station and combine the items. Combine the outcome with the alien fuel and refuel your ship. Press the big red button to leave the system.

After landing to the last system take the government's credit card from the storage of your ship. Then go east to the museum and use the toilet. Go back to your ship and head down south. Buy pizza dough and alien mushrooms from the shop and then go west to the pharmacy. Buy the item of your liking, either eye drops or lethal poison3000. Go back to your ship and walk west. At the pizza place combine the two pizza making items you bought at the store. Take the pizza out of the oven and combine with the item from the pharmacy. Fly to planet 3 and head to north. At the gate press the doorbell and give the pizza to the guard. Wait a couple of turns then go north, then east and take the dungeon key card from the fallen guard. Walk two times west and open the dungeon door using the key card. Take the princess and go home.

7 Item List

Item list contains all the available items and their descriptions.

Item	Description	Location
Driver's licence	An ordinary driver's licence.	In home at the table.
Starship key card	Old dusty card.	Given to you by the two agents.
Engine parts	Pile of engine parts for your starship.	Backroom of the shop on Proteus planets 2, 4, 5 and 6.
Repair tools	Special repair tools for starships.	Trunk of the car on Proteus planets 2, 4, 5 and 6.
Animal	It's a cat or dog or something, difficult to say.	On HIP-17710 on planet 2, inside the dumpster in backyard.
Quantum flux	Strange running substance, not like anything you have seen before.	Given to you by a stranger, on HIP-17710 planet 2.
Note	Piece of paper with a number on it.	On HIP-17710 planet 3, found inside the pizza box in alley.
Beer	Cheap and tasty galaxy beer.	Sold in the bar on HIP-17710 planet 3
Glowing vial	Glowes with a faint blue light, might be radioactive.	Given to you by a stranger on HIP-17710 planet 3
Government's credit card	There might be some money left in this card.	Found in poorly fitted ships storage room.
Pizza dough	From this dough, a great pizza can be made.	Sold in market on Cernobog planet 2.
Alien mushrooms	Smells like your socks.	Sold in market on Cernobog planet 2.
Pizza	Freshly made pizza, it smells a bit odd.	Made in Pizza-hat on Cernobog planet 2.
Pizza with eye drops	Looks even worse now.	Made in Pizza-hat on Cernobog planet 2.

9 ER-diagram

Game consists of four different systems that have varying amounts of planets. Each planet has its own name, description and contains a map of places. Each place has its own location in x and y coordinates, so the player can navigate them how he likes. Objects are for example: Table, bed and NPCs. They are things inside places that can be interacted. Objects can also be story elements that when interacted with print out a piece of the plot. Items are found inside the objects and some are combinable with each other. The player has an interactive inventory and a max weight attribute that restricts how much the player can carry.

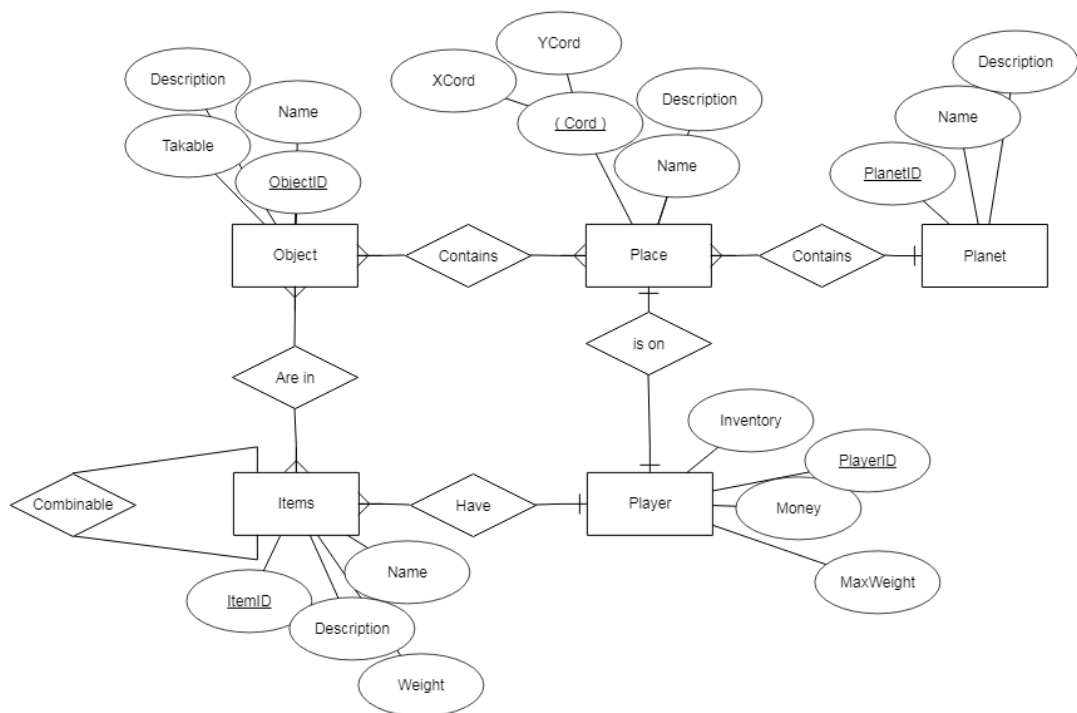


Figure 6: ER-diagram for database design

10 Database Design

Database designed for Pizza-Hat Express.

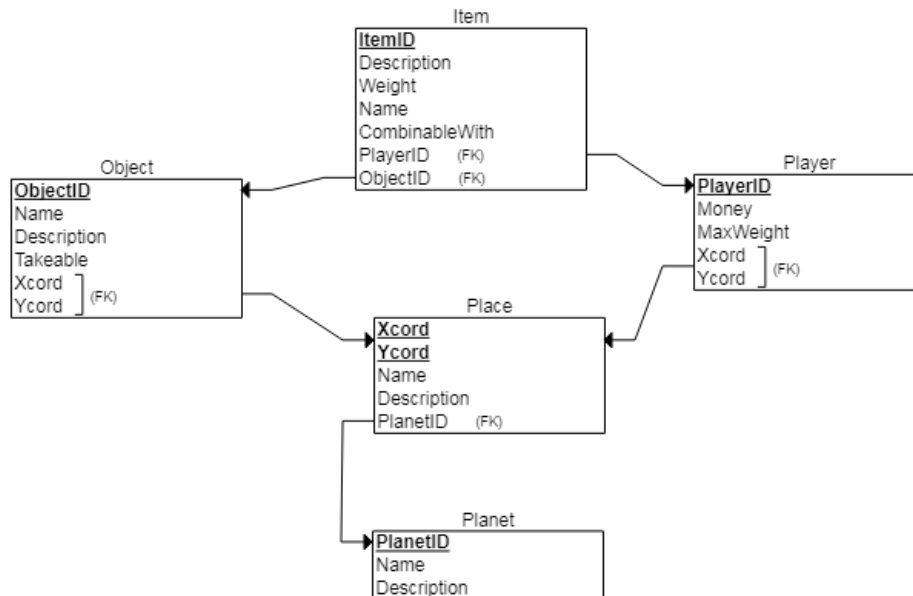


Figure 7: Database design

Database consists of five different tables. Each table has its own ID number that works as a primary key, excluding the Place table which has two primary keys Xcord and Ycord. Each Object has a BIT value either 1 or 0, depending if the item can be taken or not.

10.1 Datatypes

Attribute	Data type	Attribute	Data type
Object.Name	VARCHAR(n)	Planet.Description	VARCHAR(n)
Object.Description	VARCHAR(n)	Player.PlayerID	INT
Object.Takable	BIT	Player.Money	INT
Object.ObjectID	INT	Player.MaxWeight	INT
Place.Xcord	INT	Item.ItemID	INT
Place.Ycord	INT	Item.Description	VARCHAR(n)
Place.Name	VARCHAR(n)	Item.Weight	INT
Place.Description	VARCHAR(n)	Item.Name	VARCHAR(n)
Planet.PlanetID	INT	Item.CombinableWith	INT
Planet.Name	VARCHAR(n)		