Kylar’s vengeance

App Dev Frameworks

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# Overview of the Database:

Initially I had a far more thought out database design however my experience with database wasn’t sufficient to implement it. Here is a brief look at my initial attempt.

ACCOUNT

*Description:* Holds the starting balance and updated balance post game transactions. Starting balance for each new player is 1,000.

EQUIPMENT\_TYPE

*Description:* Provides details on the range capability of the item i.e. up-close, distance etc.

GAME\_LEVEL

*Description:* Levels in the game to how player progress.

ITEMS

*Description:* Items in the game that have providing details on purchase, sell and upgrade costs. The equipment type and both the damage and protection associated with the item.

PLAYER\_INVENTORY

*Description:* The current player inventory list. Initially in level 1 new players start with 3 default items. The player’s inventory items get updated showing the current inventory list after buy, sell or upgrades triggered as an option at the end of each level.

PLAYERS

*Description: Players first name and last name*

TRANSACTION\_TYPE

*Description:* Items transacted as either a purchase, sale or upgrade

TRANSACTIONS

*Description: In game transactions details for purchase, sales and upgrades including the item and the transaction amount within a given level for a player.*

This would have involved me using database techniques that I was unfamiliar with such as restrictions on the tables as a well as the use of foreign keys.

Even though it would mean more code in my application I had to pair back the design of the database. Instead I designed it this way:

PLAYERS

*Description: Player id, Players first name and last name. The primary key is the player id.*

Game Character

*Description: Character id, character class, character’s name, character gender, character name, characters kubits, characters inventory id. The primary key is the characters id.*

ITEMS

*Description:*  *Inventory id, item id, item (name), equipment type, protection, damage, purchase cost, sell value, upgrade cost. The primary keys are item id and inventory id.*

INVENTORY

*Description*: *Inventory id, up close, distance, shield and armour. Each storing the item id. The primary key is the inventory id.*

Player Game State

*Description: This table holds the paired primary keys. The player id, character id and inventory id.*

# Using the menu

On initial run the user must enter their name to match the data inserted for the player.

The game supports multiple players and each player can have multiple characters.

E.g. David Coughlan.

The logged in user can then select their character they wish to play with by selecting the corresponding number beside the characters and that character’s inventory print out.

This brings you to the main menu where the user has the options of viewing the characters inventory, entering the shop, starting the next round or exiting the game.

**View Inventory**: Prints out the items currently in the characters inventory as well as details about each item.

**Equipment shop**:

Here the player has three options. They are only allowed to avail of one of these per round. Option four is to return to the main menu.

1. **Buy Item**: The menu prints out what the player already has. Since you are only allowed one of each type of item a list of available items is printed to the user. Once one is chosen the player is charged and the item is added to their inventory. If the player has one of each item already in their inventory, then they are suggested to sell an item first to make room for the purchase of an item.
2. **Sell Item:** The player has a list of his inventory with the details of each item. They select the corresponding number and the item is removed from their inventory and their balance is credited with the sale value of that item. This enables them to purchase an item of that type after the next round has been played. They can press 0 to exit this doesn’t affect their round options.
3. **Upgrade Item:**  The player chooses an Item they wish to upgrade. Each item has their details displayed. Each item has an upgrade cost that is incremented each time they upgrade. When upgraded the items protection, damage, sell value and upgrade cost are all incremented. The player can press 0 to exit back to the main menu if they choose not to upgrade.

**Start next round:**

Here the player can choose to play the next round to be able to avail of the options of buying an item, purchasing an item or upgrading an item. These are reset upon selecting this feature. The screen informs the user the game is resetting their round privileges (this has a sleep to ensure the user can read the dialog) and they are brought back to the main menu again with their round privileges reset.

**Exit Kylar’s Vengeance:** This exits the java application. It notifies the player and gives them enough time to read the statement before closing.