Dungeons and Dragons Inventory Manager

Scope of work in Distributed Systems project

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1 Introduction

The goal of this project is to create an inventory manager application for a tabletop game called Dungeons and Dragons (from now on DnD). According to most DnD players and dungeon masters, handling and managing a character's inventory can become a messy job. Usually an inventory is printed out on paper and managed from there during the game, but as time goes on the managing can get difficult.

The biggest downside to inventory management on paper is passing on inventory from one character to another due to a character's death. Bad handwriting and other such reasons can mean the loss of some notes that might become crucial at some point. That is why the author is also planning a feature in the application to pass on selected items from a character's inventory.

The scope of this project is to create a usable product for DnD inventory management. Dungeon masters with a lot of experience and other players will be consulted with regarding this work. The author will plan on testing the application in real life dungeons and dragons gaming sessions as it develops.

2 ERD Schema

Character Inventory

USER

DND_CHARACTER
Id:VARCHAR
Name:VARCHAR
Level:INTEGER
WeaponProficiency:VARCHAR
ArmorProficiency:VARCHAR
Comment:VARCHAR
GoldPieces:INTEGER
PlatinumPieces:INTEGER
SilverPieces:INTEGER
CopperPieces:INTEGER
TotalTreasureInGp:INTEGER

CHARACTERS_MAGICAL_ITEM
Id:VARCHAR
MagicalItemId:VARCHAR
CharacterId:VARCHAR

CHARACTERS_EQUIPMENT
Id:VARCHAR
CharacterId:VARCHAR
EquipmentId:VARCHAR

MAGICAL_ITEM
Id:VARCHAR
Name:VARCHAR
MaxCharges:INTEGER
CurrentCharges:INTEGER
Spell:VARCHAR
Quantity:INTEGER
Comment:VARCHAR

CHARACTERS_ARMOR
Id:VARCHAR
ArmorId:VARCHAR
CharacterId:VARCHAR

CHARACTERS_WEAPON
Id:VARCHAR
WeaponId:VARCHAR
CharacterId:VARCHAR

OTHER_EQUIPMENT
Id:VARCHAR
Name:VARCHAR
ValueInGp:INTEGER
Quantity:INTEGER
Comment:VARCHAR

WEAPON
Id:VARCHAR
Name:VARCHAR
ToHit:VARCHAR
Damage:VARCHAR
AttackType:VARCHAR
Range:INTEGER
WeaponType:VARCHAR
WeaponSize:VARCHAR
Silvered:BOOLEAN
Finesse:BOOLEAN
TwoHanded:BOOLEAN
ValueInGp:INTEGER
Quantity:INTEGER
Comment:VARCHAR

ARMOR
Id:VARCHAR
Name:VARCHAR
Type:VARCHAR
BaseAC:INTEGER
Weight:INTEGER
StealthDisadvantage:BOOLEAN
ValueInGp:INTEGER
Quantity:INTEGER
Comment:VARCHAR