

Micro-Transaction platform for trading in game items

Abstract

Modern games have Purchasable In Game Items bought from real money, These items are also available for trading amongst players, In this project I plan to develop a Trading Platform, Similar to stock trading platform where players can use Real / In Game Currencies to trade for In-Game Items such as Skins , Power Packs or Weapon Upgrades.

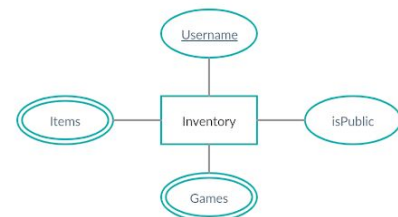
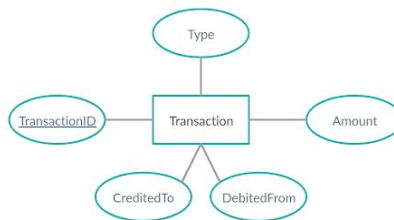
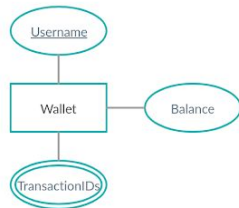
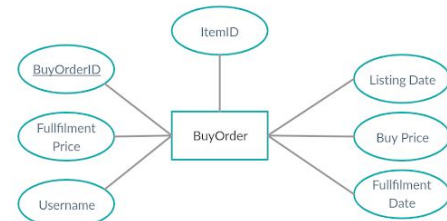
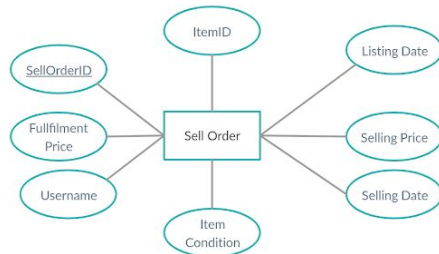
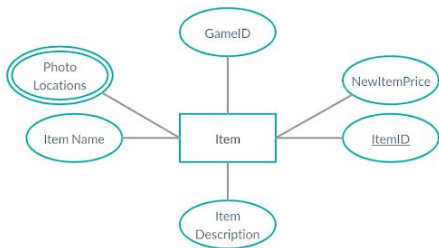
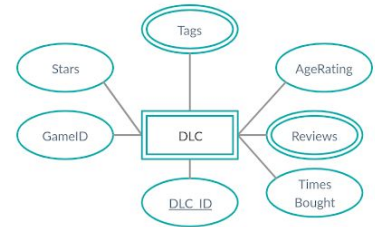
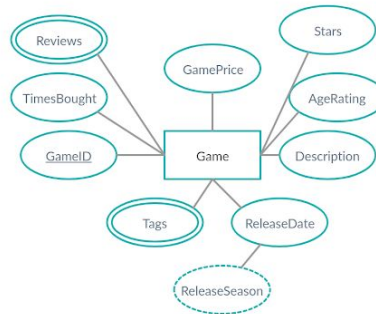
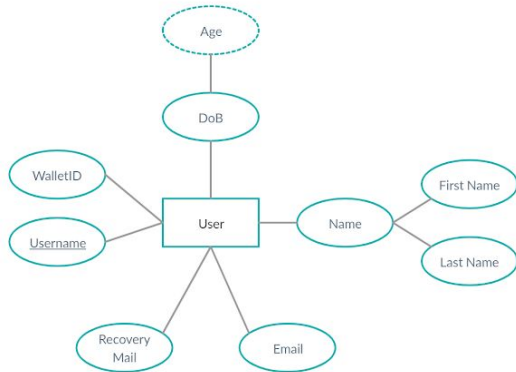
Players can place Sell Orders for items and set a minimum price to sell the items for and can also place buy orders for a set maximum price and have them fulfilled automatically when an item is listed on the community market.

The transactions are done with the funds from a digital wallet , which can be topped up by the player in case the funds are insufficient.

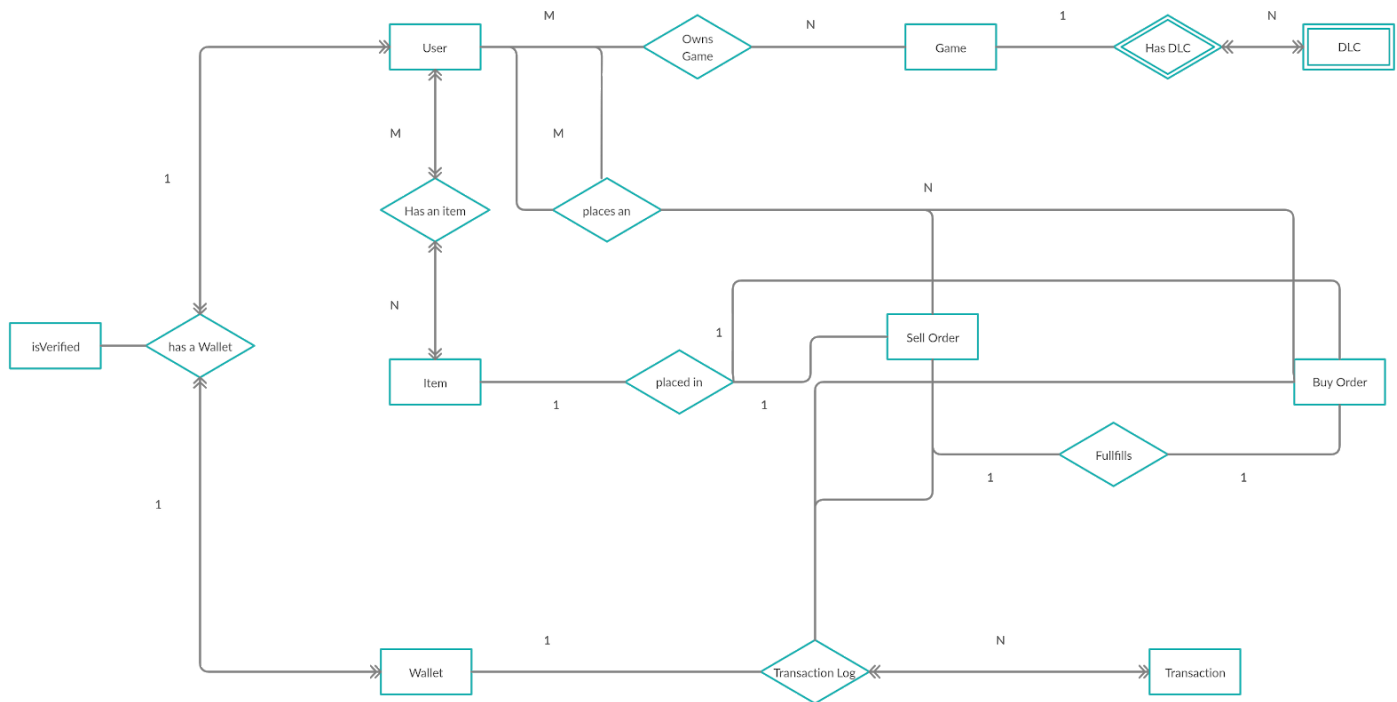
The marketplace also shows price trends of an item similar to stock prices.

Frontend: React Backend: Django DB: PostgreSQL

Entities



Relationships



Tables

User	
FirstName	Varchar
LastName	Varchar
DoB	Date
Username (PK)	varchar
Email	varchar
Recovery Mail	varchar

Game	
Name	Varchar
GameID(PK)	int
Release Date	Date
stars	int
Game Price	int
AvgRating	int
Description	varchar
Tags(TagID)(FK)	Int
Review(ReviewID)(FK)	Int
TimesBought	Int

Reviews	
ReviewID(PK)	Int
Review	Varchar

Tags	
TagID(PK)	Int
Tag	Varchar

DLC	
Name	Varchar
GameID(FK)	int
Release Date	Date
DLCId(PK)	int
Stars	int
Description	varchar
Tags(TagID)(FK)	Int
Review(ReviewID)(FK)	Int
TimesBought	Int

PhotoLocations	
PhotoID(PK)	Int
Location	Varchar

Item	
Name	Varchar
GameID(FK)	int
NewItemPrice	int
ItemID(PK)	int
Photos(PhotoID)(FK)	int
Description	varchar

UserHasItem	
Username(FK)	Varchar
ItemID(FK)	int

UserPlacesBuyOrder	
Username(FK)	Varchar
BuyOrderID(FK)	int

UserPlacesSellOrder	
Username(FK)	Varchar
SellOrderID(FK)	int

ItemPlacedInBuyOrder	
ItemID(FK)	int
BuyOrderID(FK)	int

ItemPlacedInSellOrder	
ItemID(FK)	int
SellOrderID(FK)	int

Sell Order	
SellOrderID(PK)	Int
GameID(FK)	int
Listing Date	Date
SellingDate	Date
SellingPrice	int
Condition	varchar
Username(FK)	varchar
Fullfillment Price	int

Buy Order	
BuyOrderID(PK)	Int
GameID(FK)	int
Listing Date	Date
FulfilmentDate	Date
BuyPrice	int
Username(FK)	varchar
Fulfillment Price	int
Fulfills(SellOrderID)(FK)	int

Wallet	
Username(FK)	varchar
Balance	int
Transactions(TransactionIDs)(FK)	Int

Transaction	
TransactionID(PK)	Int
Amount	int
CreditedTo(Username)(FK)	Varchar
DebitedFrom(Username)(FK)	Varchar
BuyOrderID(FK)	int
SellOrderID(FK)	int

Inventory	
Username(FK)	Varchar
isPublic	Bool
Games(GameID)(FK)	Int
Items(ItemID)(FK)	Int