CS6400: Phase 1 Report

Team65  
Summer 2022

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# Tradeplaza data types

## User

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Email | Varchar(320) | Yes | Not allowed |
| Nickname | Varchar(30) | Yes | Not allowed |
| Password | Varchar(128) | No | Not allowed |

## Administrator

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Email | Varchar(320) | Yes | Not allowed |
| Nickname | Varchar(30) | Yes | Not allowed |
| Password | Varchar(128) | No | Not allowed |
| Last Login Time | Smalldatatime(YYYY-MM-DD hh:mm:ss) | No | Not allowed |

## Registered User

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Email | Varchar(320) | Yes | Not allowed |
| Nickname | Varchar(30) | Yes | Not allowed |
| Password | Varchar(128) | No | Not allowed |
| First Name | Varchar(30) | No | Not allowed |
| Last Name | Varchar(30) | No | Not allowed |
| Postal Code | Varchar(5) | No | Not allowed |

## Postal Code

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Postal Code | Varchar(5) | Yes | Not allowed |
| City | Varchar(50) | No | Not allowed |
| State | Varchar(128) | No | Not allowed |
| Latitude | Decimal(8,6) | No | Not allowed |
| Longitude | Decimal(9,6) | No | Not allowed |

## Item

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Item Number | Int | Yes | Not allowed |
| Registered User  (Owner) | Varchar(30) | No | Not allowed |
| Title | Varchar(300) | No | Not allowed |
| Description | Varchar(1000) | No | Allowed |
| Condition | Enum(6) | No | Not allowed |
| Game type | Enum(5) | No | Not allowed |
| Video Game –  Platform | Enum(3) | No | Allowed |
| Video Game – Media | Enum(3) | No | Allowed |
| Computer Game –  Platform | Enum(3) | No | Allowed |
| Availability | Boolean | No | Not allowed |

## Condition

Enum of Unopened, Like New, Lightly Used, Moderately Used, Heavily Used, Damaged/Missing parts

## Game Type

Enum of Board Game, Playing Card Game, Collectible Card Game, Video Game, Computer Game

## Collectible Card Game

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Number of Cards being offered | Smallint | No | Not allowed |

## Video Game – Platform

Enum of Nintendo, PlayStation, Xbox

## Video Game – Media

Enum of optical disc, game card, cartridge

## Computer Game – Platform

Enum of Linux, macOS, Windows

## Trade

|  |  |  |  |
| --- | --- | --- | --- |
| Attributes | Data Type | Unique | Null |
| Proposer item number | Int | Yes | Not allowed |
| Desired item number | Int | Yes | Not allowed |
| Proposal date | Date | No | Not allowed |
| Action | Boolean | No | Allowed |
| Action date | Date | No | Allowed |

# Tradeplaza business logic constraints

## User

* New user need self-register
* Email is used to uniquely identify user in DBMS

## Item

* When collectible card game is chosen for game type, display, Number of cards being offered, input option
* When video game is chosen for game type, display, platform and media drop downs
* When computer game is chosen for game type, display, platform dropdown
* Item number is ordinally auto-generated by system
* Item availability becomes FALSE, when owner propose to trade or trade completed

## Trade

* Counterparty can only propose trade when item availability is TRUE
* User cannot propose trade to him/herself
* User without item listed can only browse, but not trade
* Proposer item number and Desired item number pair has no duplicates
* If action is TRUE, meaning trade is completed, both proposed and desired item availability are FALSE and cannot be used for trading again

# Task decomposition and abstract code (TD/AC)

## Login

## User registration

## Main menu

### Unaccepted trades

#### List of accept/reject trades

#### Action message

### Response time

### My rank

### List item

#### success

### My items

#### List of my items

#### detail

### Search items

#### List of searched item

#### View item

#### Propose trade

#### Display confirm message

### Trade history

#### List of trade history

#### Trade details