

CS6400: Phase 1 Report

Team65
Summer 2022

Table of Contents

1	Tradeplaza data types	3
1.1	User.....	3
1.2	Administrator	Error! Bookmark not defined.
1.3	Registered User	3
1.4	Postal Code	3
1.5	Item.....	4
1.6	Condition	5
1.7	Game Type.....	5
1.8	Collectible Card Game.....	5
1.9	Video Game – Platform	5
1.10	Video Game – Media	5
1.11	Computer Game – Platform	5
1.12	Trade.....	5
2	Tradeplaza business logic constraints	7
2.1	User.....	7
2.2	Item.....	7
2.3	Trade.....	7
3	Task decomposition and abstract code (TD/AC).....	8
3.1	Login.....	8
3.2	User registration.....	8
3.3	Main menu	8
3.3.1	Unaccepted trades	8
3.3.2	Response time	8

3.3.3	My rank	8
3.3.4	List item	8
3.3.5	My items	8
3.3.6	Search items	8
3.3.7	Trade history	8

1 TRADEPLAZA DATA TYPES

1.1 User

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

1.2 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
Unaccepted trades		No	Not allowed
Response Time		No	Not allowed
Rank		No	Not allowed

1.3 Postal Code

Attributes	Data Type	Unique	Null
Postal Code	Varchar(5)	Yes	Not allowed

Attributes	Data Type	Unique	Null
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

1.4 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

1.5 Condition

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

1.6 Game Type

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

1.7 Collectible Card Game

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

1.8 Video Game – Platform

Enum of Nintendo, PlayStation, Xbox

1.9 Video Game – Media

Enum of optical disc, game card, cartridge

1.10 Computer Game – Platform

Enum of Linux, macOS, Windows

1.11 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

2 TRADEPLAZA BUSINESS LOGIC CONSTRAINTS

2.1 User

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

2.2 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 ordinaly auto-generated by system
- Item availability becomes FALSE, when owner propose to trade or trade completed

2.3 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

3 TASK DECOMPOSITION AND ABSTRACT CODE (TD/AC)

3.1 Login

3.2 User registration

3.3 Main menu

3.3.1 *Unaccepted trades*

List of accept/reject trades

Action message

3.3.2 *Response time*

3.3.3 *My rank*

3.3.4 *List item*

Success list

3.3.5 *My items*

List of my items

detail

3.3.6 *Search items*

List of searched item

View item

Propose trade

Display confirm message

3.3.7 *Trade history*

List of trade history

Trade details