

Video game Rental System

**CS-546-B**

**Web Programming I**

**GROUP 10**

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## Users

The user collection contains all users registered with the service, along with pertinent basic information. 3 lists of video games that the user has put up for lending, games owned by the user, games currently borrowed by the user.

1. "UserId": "7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310",
2. "email": "xxx@gmail.com",
3. "password": "xxxxxx",
4. "firstName": "XX",
5. "lastName": "XX",
6. "profilePicture": "/static/example.jpg",
7. "address": "xxxxxxxxxx",
8. "city": "Hoboken",
9. "state": "NJ",
10. "country": "US",
11. "ZIP": "07030",
12. "LendedGamesID": ["7c7997a2-c0d2-4f8c-b27a-6a1d4b5b6310", "xxx", ... ],
13. "OwnedGamesID": ["7c7997a2-c0d2-4f8c-b27a-6a1d4b5b6310", "xxx", ... ],
14. "BorrowedGamesID": ["7c7997a2-c0d2-4f8c-b27a-6a1d4b5b6310", "xxx", ... ]

Name	Type	Description
UserID	ObjectId	A unique identifier to represent the user.
First name	String	First name of the user
Last name	String	Last name of the user
Email	String	Email of the user
Password	String	Password of the user, hashed, this will not be the salt
Profile picture	String	This will be link to the profile picture of the user
Address	String	First line of the user address
City	String	City of the user
State	String	State of the user

Country	String	Country of the user
Zip	String	Zip code of the user address
Owned games	Array	Array of games id of the games owned by the user
Borrowed games	Array	Array of games id of the games borrowed by the user
Lended games	Array	Array of games id of the games lended by the user

## Video Games

The games collection contains unique entries put up by the user lending or selling the game. It contains information about the video games.

1. "gameId": "XXXXXXXXXXXXXXXXXXXX",
2. "ownerId" : "userID"
3. "name": "xxxxxx",
4. "genre": "XX",
5. "gameDetail": "xxxxxxxxxxxxxxxxxxxxxx",
6. "released date": "2020/10/16",
7. "gamePictures": ["/static/example.jpg1", "/static/example.jpg2"...],
8. "platform" : "PS5"
9. "available": true,
10. "Category": "rent"(or "sell"),
11. "comments": [commentsId ... ]

GameID	objectId	A unique identifier to represent the game.
Name	String	Name of the game
HolderID	objectId	A unique identifier to represent

		the user that rented the game.
Genre	String	Genre of the game
Release date	Date	Release date of the game
Game details	String	Details about the game
Platform	String	Game platform
Game pictures	Array	Array of links to the images of the game
Category	String	Buy or Sell
Comments	Array	Array of comments ids
Available	Boolean	Listed on the website or not

## Buy games

This collection is only for the games that are in the listing for buying. Once the game is bought, this entry will remain in the database but the listing will be removed from the available games page.

1. "gameId": "XXXXXXXXXXXXXXXXXXXX",
2. "sellerId": "xxxxxxxxxxxxxxxxxxxxxx",
3. "buyerId": "xxxxxxxxxxxxxxxxxxxxxx",
4. "price": 29.99,
5. "date": "xxxx/xx/xx"

GameID	ObjectID	Unique id of the game
SellerID	ObjectID	Unique id of the seller
BuyerID	ObjectID	Unique id of the buyer
Price	Number	Price of the game
Date of Transaction	Date	Date the transaction is made

## Rent games

This collection is only for the games that are in the listing for renting. Once the game is borrowed, this entry will remain in the database but the listing will be removed from the available games page. Once the game is returned the entry will remain in the database but the availability of the game will depend on the lender.

1. "gameId": "XXXXXXXXXXXXXXXXXXXX",
2. "rent" : 29.99
3. "duration" : # in days
4. "penalty" : #\$ per day after overdue

5. "lenderId": "xxxxxxxxxxxxxxxxxxxxxx",
6. "borrowerId": "xxxxxxxxxxxxxxxxxxxxxx",
7. "dateOfTransaction": "xxx/xx/xx"

GameID	ObjectID	Unique id of the game
LenderID	ObjectID	Unique id of the lender
BorrowerID	ObjectID	Unique id of the borrower
Duration	Number	Number of days to be rented
Rent	Number	Rent of the game
Penalty	Number	Penalty to pay if return is overdue
Date of Transaction	Date	Date the transaction is made

## Comments

This collection will store comments of the users on the games.

1. "commentsID": "XXXXXXXXXXXXXXXXXX",
2. "body": "Actual comment body."
3. "userID": User ID of the commenter
4. "gameID": Game ID of the comment
5. "dateOfComment": "xxx/xx/xx"}

Comment ID	ObjectID	Unique id of the comment
Body	String	Text of the comment
Commenter ID	ObjectID	Unique id of the Commenter
Game ID	ObjectID	Unique id of the game
Date of comment	Date	Date the comment is made

## Github

<https://github.com/hahahakkkE7/CS-546-FinalProject-Group10>

### Tasks:

- User portion
- Listing page
- Game portion (operations related to the games e.g creating editing games)
- Transaction Portion

Database functionality

Routes

Front-end