
Video Game Store APP

— Made by Tomer Yaish —

Introduction

The system is a client-server-based software application that manages a inventory of a video game store.

The system includes a server-side component that uses a handler to process requests from the client, a controller to interact with the game service, and a Dao to store and retrieve data from a local text file. Also there is an option to backup and restore the data.

The client-side includes a GUI built using JavaFX and CSS, and follows the MVC (Model-View-Controller) architecture pattern to handle user inputs. The client-side also includes the option for users to log in as an employee using a password.

The system includes unit testing using JUnit.

The system also using pattern searching algorithms like KMP.

VideoGame	
name	String
YearOfRelease	Short
id	Long
Platform	GamePlatformEnum

Response	
toJson()	String
fromJson(String)	Response
success	boolean
message	String
data	List<VideoGame>

Request	
toJson()	String
fromJson(String)	Request
action	String
game	VideoGame

HandleRequest	
run()	void

Server	
run()	void

Driver	
main(String[])	void

VideoGameFileDao	
save(VideoGame, String)	void
findVideogameByTitle(String, String)	VideoGame?
deleteNewGame(VideoGame)	void
saveNewGame(VideoGame)	void
rentNewGame(VideoGame)	void
returnNewGame(VideoGame)	void
delete(VideoGame, String)	void
write(List<VideoGame>, String)	void
read(String)	List<VideoGame>
reeturn(String)	void
rent(String)	void
rentedAvailblePath	String
availablePath	String

GameController	
DeleteGame(VideoGame)	void
AddNewGame(VideoGame)	void
RentNewGame(String)	void
ReturnGame(String)	void
allGames	List<VideoGame>
allRentedGames	List<VideoGame>

GameService	
addNewGame(VideoGame)	void
deleteGame(VideoGame)	void
rentNewGame(String)	void
returnVideoGame(String)	void
allGames	List<VideoGame>
allRentedGames	List<VideoGame>

GameServiceTest	
saveNewGameTest()	void
returnNewGameTest()	void
rentNewGameTest()	void

BackupAndRestore	
restore(String)	List<VideoGame>
backup(String, String, long, long)	void

ClientController

```
m handleReturnRentedGameButton (ActionEvent , VideoGame , TableView <VideoGame>) void  
m handleAvailableGamesButton (ActionEvent , TableView <VideoGame>) void  
m handleRentedGamesButton (ActionEvent , TableView <VideoGame>) void  
m handleRentGameButton (ActionEvent , VideoGame , TableView <VideoGame>)
```

EmployeeController

```
m handleRentedGamesButton (ActionEvent , TableView <VideoGame>) void  
m handleAddGameButton (ActionEvent , VideoGame) void  
m handleReturnRentedGameButton (ActionEvent , VideoGame , TableView <VideoGame>)  
m handleRentGameButton (ActionEvent , VideoGame , TableView <VideoGame>)  
m handleAvailableGamesButton (ActionEvent , TableView <VideoGame>) void  
m handleDeleteGameButton (ActionEvent , VideoGame , TableView <VideoGame>)
```

Client

```
f m_socket Socket  
f m_request Request  
p m_socket Socket  
p m_request Request
```

MainView

```
m start(Stage) void  
m openEmployeeView () void  
m showPasswordDialog () boolean  
m openClientView () void  
m createButton (String) Button  
m setUpUI() void
```

Driver

```
m start(Stage) void  
m main (String[]) void
```

ClientView

```
m setUpUI() void  
m createReturnRentedGameButton () Button  
m createAvailableGamesButton () Button  
m createRentGameButton () Button  
m createRentedGamesButton () Button
```

EmployeeView

```
m createAvailableGamesButton () Button  
m setUpUI() void  
m createRentGameButton () Button  
m createRentedGamesButton () Button  
m createAddGameButton () Button  
m createDeleteGameButton () Button  
m createReturnRentedGameButton () Button
```

Employee

```
f m_request Request  
f m_socket Socket  
p m_socket Socket  
p m_request Request
```