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| **Metropolitan State University** | |
| ICS 372-01 Object-Oriented Design and Implementation (Spring 2016) | |
| Instructor: Habtamu Bogale | Project 1 - Iteration 1 |
| Group 5:   * Robert Novak * Jared Johnson * Piseth Khoem * Daniel Clark | “The Theatre”  **13 Use Cases** |

-------------Use Case 0------------------

**Use-Case: #1. Add Client**

*Add Client. The system accepts the name, address, and phone number of the client. The system generates a unique id and sets the balance to 0. (The balance will remain 0 in this iteration.)*

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| **Actors:** User, System | |
| Actions performed by the actor | Response from the System |
| 1. The user requests the system for adding client |  |
|  | 2. The system asks for data about the new client |
| 3. The user enters client’s name, address, and phone number. |  |
|  | 4. Reads in data, and if the client can be added, generates an identification number for the clients, sets the balance to 0, and remembers information about the client. Informs the user if the member was added and output the client information that was stored. It then asks if the user want to add another client. |
| 5. The user answers in the affirmative or in the negative. |  |
|  | 6. If the answer is in the affirmative, the system toes to Step 2. Otherwise, it exits. |

**Use-Case: #2. Remove Client**

*Remove a client with the given id. If a show is scheduled for the current or a future date for this client, the client cannot be removed.*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Admin identifies the client to be deleted |  |
| 2. The clerk issues a request to delete a client from the system |  |
|  | 3. The system asks for the client ID |
| 4. The clerk enters the ID for the client |  |
|  | 5. If the ID is valid and no shows are scheduled currently or in the future for the given client, the system marks the client as no longer in the client list. The system informs the clerk about the success of the deletion operation. It then asks if the clerk wants to delete another client. |
| 6. The clerk answers either yes or no. |  |
|  | 7. If the answer is yes, the system returns to Step 3. Otherwise, it exits. |

**Use-Case: #3. List All Clients**

*Print information about every client.*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Inputs a request to list the clients. |  |
|  | 2. Print the clients. |

-------------Use Case 4------------------

**Use-Case: #5. Remove Customer**

*Remove Customer. Remove a customer with the given id. All credit cards related to the customer are also deleted.*

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| **Actors:** User, System | |
| Actions performed by the actor | Response from the System |
| 1. The user identifies the customer to be removed by customer’s id |  |
| 2. The user issues a request to remove the customer |  |
|  | 3. The system ask for the identifier of the customer |
| 4. The user enters the ID for the customer |  |
|  | 5. The system removes the information customer including name, address, phone number, and all credit cards. Then, it informs the user about the success of the deletion operation. Finally, it asks if the user wants to delete another customer. |
| 6. The user answers in the affirmative or in the negative. |  |
|  | 7. If the answer is in the affirmative, the system goes to Step 3. Otherwise, it exits. |

**Use-Case: #6. Add a Credit Card**

*The system accepts the customer id, credit card number, and expiration date and remembers that the credit card belongs to this customer.*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Issues a request to add a credit card to the system |  |
|  | 2. The system asks for the customer ID, credit card number, and expiration date. |
| 3. Enters a customer ID and then enters the credit card number and expiration date. |  |
|  | 4. If the ID and credit card number with expiration date are valid, the credit card is added to the customer’s account. The system informs the clerk about the success of the operation. It then asks if the clerk wants to enter information about another credit card. |
| 5. Answers either yes or no. |  |
|  | 6. If the answer is yes, the system returns to Step 2. Otherwise, it exits. |
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**Use-Case: #7. Remove a Credit Card**

*The system accepts the credit card number and removes the information related to the credit card. If this is the only credit card for the customer, it refuses to delete the credit card information.*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Inputs a request to remove a credit card. |  |
|  | 2. The system asks the credit card number to be removed. |
| 3. Enters the member ID and card number. |  |
|  | 4. Removes the credit card if valid and notifies the user. |

-------------Use Case 8------------------

**Use-Case: #9. Add Show/Play**

*Add a Show/Play. Add a new show for a client. The values accepted are the name of the show, the client id, and the period for which the client wants the theater for this play. The entire range of dates should be available, or the process fails.*

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| **Actors:** User, System | |
| Actions performed by the actor | Response from the System |
| 1. The user receives a record of a show from a client containing name of the show, the client id, and the period for which the client wants the theater for this show. |  |
| 2. The user issues a request to add a show |  |
|  | 3. The system asks for information about the show. |
| 4. The user enters the record of the show. |  |
|  | 5. The system checks if the entire range of dates is available. If not, the process fails. If it is available, the system processes the operation adding the show. The system informs the user about the checking result as well as about the information was stored successfully or not. It then asks if the user wants to add another show. |
| 6. The user answers in the affirmative or in the negative. |  |
|  | 7. If the answer is in the affirmative, the system goes to Step 3. Otherwise, it exits. |

**Use-Case: #10. List all Shows**

*List the names and dates of all shows.*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Issues a request to retrieve a list of all shows. |  |
|  | 2. The system prints all shows and their respective dates. |

**Use-Case: #11. Store Data**

*Store all data related to the theater (everything, including customers, shows, clients, etc.) on disk*

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| **Actions performed by the actor** | **Responses from the system** |
| 1. Inputs a request to store the data. |  |
|  | 2. Stores the data and notifies the user. |

-------------Use Case 12------------------

**Use-Case: #13. Help**

*Help. This should display all commands.*

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| **Actors:** User, System | |
| Actions performed by the actor | Response from the System |
| 1. User triggers a command for help menu |  |
|  | 2. The system displays all commands |
| 3. User can navigate to a desired operation according to commands’ descriptions. |  |