

Informatics Institute of Technology

University of Westminster

Object Oriented Programming

5COSC019C.1

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Date of Submission: - 12/12/2024

Assignment: - Coursework – Real-Time-Ticket-System

Assignment Type: - Individual

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1. Table of generic test cases for the CLI

Test Case ID	Description	Expected Outcome	Actual Outcome
1.	Do you want to load the existing configuration? (yes/no)	“yes” System will start the configuration by retrieving the data from the already saved data from the Jason file.	Passed
		“no” System will override the Jason file with the new inputs from the user.	Passed
		The system will keep looping until the user inputs a valid input “Invalid input. Please enter 'yes' or 'no'.”	passed
2.	Enter ticket release rate (ms):	The rate of vendor release tickets (vendor thread sleep time). Inputs in between 10-10000 is allowed. No other inputs are allowed.	Passed
3.	Enter customer retrieval rate (ms):	The rate of customer ticket purchase (customer thread sleep time). Inputs in between 10-10000 is allowed. No other inputs are allowed.	Passed
4.	Enter maximum ticket capacity:	The maximum number of tickets that the ticket pool can hold. Only integers are accepted any other inputs (letters, negative numbers, symbols) are not allowed.	Passed
5.	Enter total number of tickets:	The maximum number of tickets that a vendor can release at once. Only integers are accepted any other inputs (letters, negative numbers, symbols) are not allowed.	Passed
6.	Commands: 'start' to begin, 'stop' to halt, 'exit' to quit.	“start” The system will start the threads and simulation with the config data.	Passed
		“stop” The system will hold the process until the user starts it again	Passed
		“exit” The system will save the provided config data to the Jason file and terminate the program	Passed
		The system will keep looping until the user inputs a valid input “The system will keep looping until the user inputs a valid input ”	Passed

2. Table of generic test cases for the Backend

Test Case ID	Description	Expected Outcome	Actual Outcome
1.	Adding a new customer to the system. (/customer/add-customer)	<pre>{ "customerId": 12, "name": "Cust_test", "vip": true }</pre> <p>Ensure that the customerId is an integer, name is a non-empty string, and vip is a boolean (true/false). Any invalid input, such as incorrect data types or missing fields, will result in a 400 Bad Request response. This guarantees that only properly structured requests are accepted by the system, ensuring data integrity and accurate processing.</p>	Passed
		<pre>{ "code": 201, "message": "success", "data": { "customerId": 9, "name": "Cust_3", "vip": true } }</pre> <p>If the inserted data is valid the new customer will be added to the system.</p>	Passed
2.	Deleting a customer from the database (/customer/delete-customer)	<pre>{ "code": 201, "message": "Success", "data": "Customer not found!" }</pre> <p>Provide the customerId of the customer you want to delete. If the specified ID does not exist, an appropriate error message will be returned.</p>	Passed
		<pre>{ "code": 201, "message": "Success", "data": "Customer deleted successfully!" }</pre>	Passed

		<pre>} </pre> <p>If the inserted Id is available the relevant customer will be deleted. Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	
3.	<p>View all the customers in the database</p> <p>(customer/get-all-customer)</p>	<p>All the available customers will be displayed with the relevant name, id and the status</p>	Passed
4.	<p>Get a customer detail by customer id.</p> <p>(customer/get-customer-by-id)</p>	<pre>{ "code": 404, "message": "Customer not found", "data": null }</pre> <p>If the id given is not available in the database response data will be null and pass a message error message.</p> <p>Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
		<pre>{ "code": 200, "message": "Success", "data": { "customerId": 71, "name": "Cust_3", "vip": true } }</pre> <p>If the given Id is found the data of the relevant customer will be displayed. Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
5.	<p>Update a customer saved in the database.</p> <p>(customer/update-customer)</p>	<pre>{ "customerId": 49, "name": "Updated_Cust", "vip": false }</pre> <p>If the id given is not available in the database response data will be null and pass a message error message.</p> <p>Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
		<pre>{ </pre>	Passed

		<pre>"code": 201, "message": "Success", "data": "Customer has been updated successfully..." }</pre> <p>If the id inserted is found the customer will be updated and pass a success message.</p>	
6.	View all the tickets in the database (/ticket/get-all-tickets)	All the available and non-available tickets will be displayed.	Passed
7.	Get all the available tickets in the database (/ticket/get-available-tickets)	Only the available tickets will be displayed.	Passed
8.	Purchasing a ticket by the customer (/ticket/purchase-ticket)	<pre>{ "code": 201, "message": "Success", "data": "Ticket is not found or already sold...!" }</pre> <p>If the customerId or the ticketId is not available this message will be passed. Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
		<pre>{ "code": 201, "message": "Success", "data": "Ticket purchased successfully by customer : Cust_3" }</pre> <p>If both the inserted ids are found to be valid and available. The ticket will be purchased and the success message will be passed. And the purchase details will be saved to the purchase table.</p>	Passed
9.	Adding a new vendor to the system. (/vendor/add-vendor)	<pre>{ "code": 201, "message": "success", "data": "New vendor added...!" }</pre>	Passed

		<p>If all the data inserted is valid and acceptable the new vendor will be added to the system and the success message will be passed.</p> <pre>{ "timestamp": "2024-12-10T19:17:52.734+00:00", "status": 400, "error": "Bad Request", "path": "/vendor/add-vendor" }</pre> <p>Ensure that the vendorId is an integer, name is a non-empty string, and ticketReleaserate is a integer . Any invalid input, such as incorrect data types or missing fields, will result in a 400 Bad Request response. This guarantees that only properly structured requests are accepted by the system, ensuring data integrity and accurate processing</p>	Passed
10.	<p>Deleting a customer from the database</p> <p>(/customer/delete-customer)</p>	<pre>{ "code": 201, "message": "Success", "data": "Vendor not found!" }</pre> <p>Provide the vendorId of the vendor you want to delete. If the specified ID does not exist, an appropriate error message will be returned.</p>	Passed
		<pre>{ "code": 201, "message": "Success", "data": "Vendor deleted successfully!" }</pre> <p>If the inserted Id is available the relevant vendor will be deleted. Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
11.	<p>View al the available vendors</p> <p>(/vendor/get-all-vendors)</p>	All the vendors saved in the database will be displayed here.	Passed
12.	<p>Updating an existing vendor</p> <p>(/vendor/update-vendor)</p>	<pre>{ "code": 200, "message": "success", "data": "Vendor not found!" }</pre>	Passed

		<p>If the id given is not available in the database response data will be null and pass a message error message.</p> <p>Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	
		<pre>{ "code": 200, "message": "success", "data": "Vendor updated successfully!" }</pre> <p>If the id inserted is found the vendor will be updated with the new data and passes a success message.</p>	Passed
13.	Starting a vendor thread by a vendor	<pre>{ "price": 100, "ticketCount": 2, "ticketType": "CONCERT" }</pre> <p>If all the field have valid inputs, an existing vendor can start their thread by giving their vendor Id. Any incorrect data types or missing fields will result in a 400 Bad Request response.</p>	Passed
		<pre>{ "code": 201, "message": "Success", "data": "Vendor with id 2 not found" }</pre> <p>If the vendor Id is not matching with the data in the database the request will be denied.</p>	Passed
		<pre>{ "code": 201, "message": "Success", "data": "Open a new Thread for vendor: vendor_10" }</pre> <p>If the data required for the thread and the vendorId is valid and acceptable. The thread will be started while passing a success message.</p>	Passed
14.	Stopping a vendor thread by a vendor	<pre>{ "code": 201, "message": "Success", "data": "vendor thread stopped..." }</pre>	Passed

		If the vendor Id is not matching with the data in the database the request will be denied.	
		<pre>{ "code": 201, "message": "Success", "data": "Vendor with id 2 not found" }</pre> <p>If the vendor Id is not matching with the data in the database the request to stop the thread will be denied.</p>	Passed

3. Table of generic test cases for the Frontend

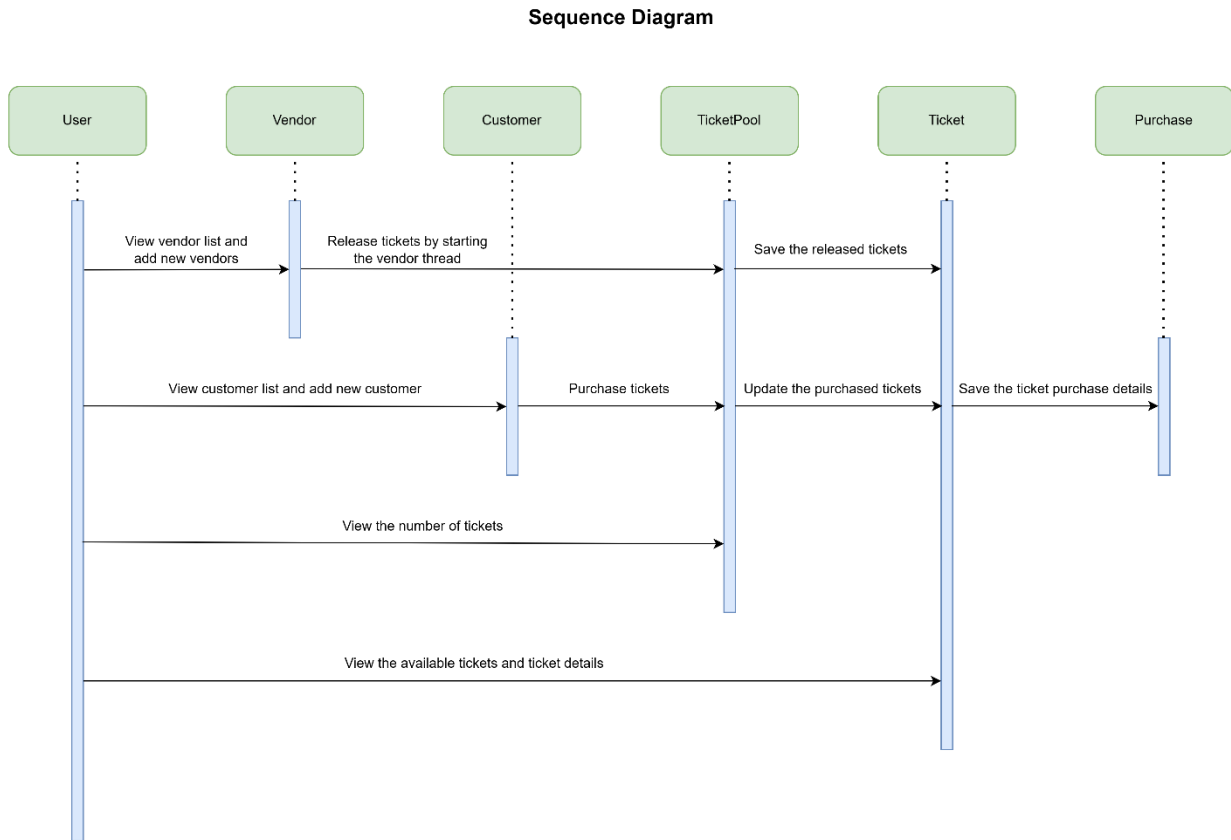
Test Case ID	Description	Expected Outcome	Actual Outcome
1.	Add customer form	All the required data should be in the correct data type (customerId-integer, Customer Full name-string) customer status can be selected from a drop-down menu. If the values do not match the requested type Customer will not be added an error message will displayed.	Passed
		If all the data types are valid new customers will be added to the table	Passed
2.	Update customer form	All the saved data will get fetched to the update form. If all the data inserted matches the requested data, the customer will be updated. Otherwise, an error message will be displayed.	Passed
3.	Delete customer	When the user presses the “Delete” button the relevant customer will be deleted. Before deleting the customer the user has to confirm the delete request just to be sure.	Passed
4.	Add vendor form	All the required data for the vendor must be in the correct data type (vendorId - integer, Vendor Name - string). The vendor status can be selected from a drop-down menu. If the values do not match the expected data types, the vendor will not be added, and an appropriate error message will be displayed.	Passed
		If all the data types are valid new customers will be added to the table	Passed

5.	Update vendor form	All the saved data will get fetched to the update form. If all the data inserted matches the requested data, the vendor will be updated. Otherwise, an error message will be displayed.	Passed
6.	Delete vendor	When the user presses the “Delete” button, the relevant vendor will be deleted. Before deleting the vendor, the user must confirm the delete request to ensure the action is intentional.	Passed
7.	Start vendor thread	All the required data for the vendor thread to start must be in the correct data type. If the values do not match the expected data types, the vendor will not be added, and an appropriate error message will be displayed. (Each vendor can activate their thread with the button in front of them)	Passed
		If all the data types are valid new vendor thread will be started, and the tickets will be added to the table.	Passed
8.	Stop vendor thread	By pressing the button corresponding to a specific vendor, the user can stop the thread associated with that vendor, effectively halting its operation.	Passed
9.	Purchasing a ticket by a registered customer	Customers must enter their Customer ID to access the ticket pool and purchase tickets. Once authenticated, they can select from the available tickets to complete their purchase.	Passed
		If the customer Id is not valid or all non of the tickets are available an error msg will be displayed.	Passed

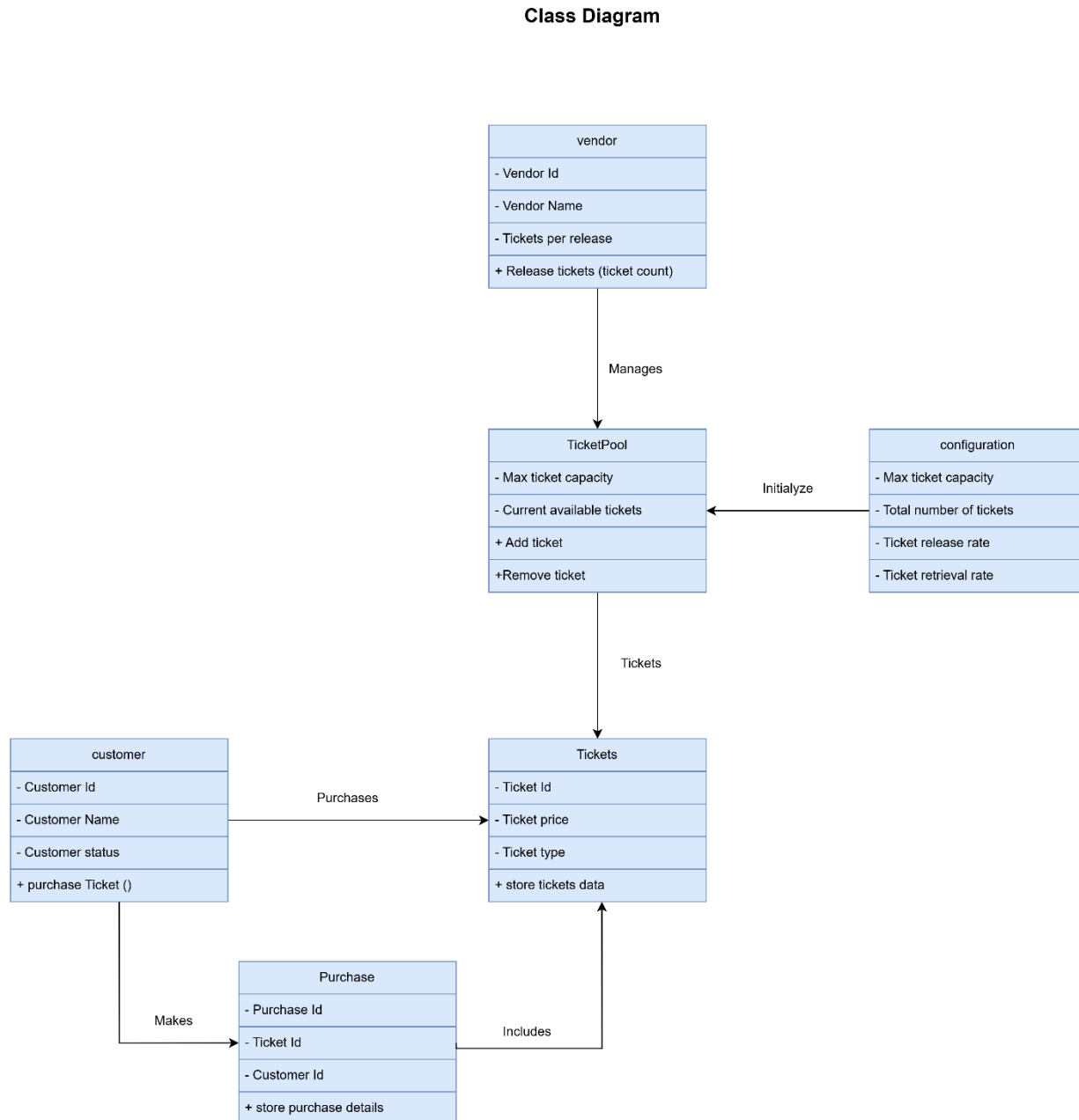
4. Observations, issues, and solutions of this project

Id	Description of the Issue	Impact	Solution Implemented
1.	The "Do you want to load the existing configuration? (yes/no)" prompt was not functioning correctly.	Prevented proper loading of configuration.	Adjusted the input handling logic to correctly parse and handle user responses
2.	Vendors and customers occasionally clashed due to unsynchronized ticket handling.	Caused concurrency issues.	Added synchronized blocks and wait/notify mechanisms to ensure proper thread coordination.
3.	Threads were not stopping properly after all tickets were sold out.	The system remained active unnecessarily.	Used a stopTicketHandling method with executor.shutdownNow() and added appropriate termination logic to ensure proper thread closure.

5. Sequence Diagram



6. Class Diagram



7. References

- [1] "ChatGPT," 19 November 2024. [Online]. Available: <https://chat.openai.com/>.
- [2] "W3 Schools - React, Bootstrap, Java," 5 12 2024. [Online]. Available: <https://www.w3schools.com/>.
- [3] "Java Programming Exercises, Practice, Solution," 11 11 2024. [Online]. Available: <https://www.w3resource.com/java-exercises/>.
- [4] J. Guides, "Spring Boot REST API Project Course | Build 2 Spring Boot REAL-TIME REST API Projects in 3 Hours," 08 2024. [Online]. Available: <https://www.youtube.com/@JavaGuides>.
- [5] S. Smith, "Building Real-Time Web Apps with Spring Boot, webSockets," 10 08 2018. [Online]. Available: <https://www.linkedin.com/learning/building-real-time-web-apps-with-spring-boot-and-websockets?u=76664938>.

8. Appendices

Test case proof for the CLI

```
C:\Users\USER\.jdk\openjdk-21.0.2\bin\java.exe ...
Do you want to load the existing configuration? (yes/no)
yes
Configuration loaded successfully.
20:33:39.119 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Starting command loop.
Commands: 'start' to begin, 'stop' to halt, 'exit' to quit.
Command: start
20:34:08.345 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Starting ticket handling.
20:34:08.355 [pool-1-thread-1] INFO org.example.oop_cw.ticket.TicketPool -- Tickets added: 10, Total tickets: 10
20:34:08.357 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Vendor 1 Added tickets. The ticket pool contains:10
20:34:08.361 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Waiting for 1500
20:34:09.864 [pool-1-thread-1] INFO org.example.oop_cw.ticket.TicketPool -- Tickets added: 10, Total tickets: 20
20:34:09.865 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Vendor 1 Added tickets. The ticket pool contains:20
20:34:09.865 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Waiting for 1500
20:34:09.867 [pool-1-thread-2] INFO org.example.oop_cw.ticket.TicketPool -- Tickets added: 10, Total tickets: 30
20:34:09.867 [pool-1-thread-2] INFO org.example.oop_cw.ticket.Vendor -- Vendor 2 Added tickets. The ticket pool contains:30
20:34:09.867 [pool-1-thread-2] INFO org.example.oop_cw.ticket.Vendor -- Waiting for 1500
20:34:11.367 [pool-1-thread-1] INFO org.example.oop_cw.ticket.TicketPool -- Tickets added: 10, Total tickets: 40
```

```
C:\Users\USER\.jdk\openjdk-21.0.2\bin\java.exe ...
Do you want to load the existing configuration? (yes/no)
1234
Invalid input. Please enter 'yes' or 'no'.
no
Starting fresh configuration setup.
Enter ticket release rate (ms):
```

```
C:\Users\USER\.jdk\openjdk-21.0.2\bin\java.exe ...
Do you want to load the existing configuration? (yes/no)
no
Starting fresh configuration setup.
Enter ticket release rate (ms): 200000
20:41:11.484 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Invalid input. Please enter an input
Please enter a value between 10 and 100000.
Enter ticket release rate (ms): 1500
Enter customer retrieval rate (ms): Abcd
20:41:29.223 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Invalid input. Please enter valid input in the range 10 and 100000.
Invalid input. Please enter a valid number.
Enter customer retrieval rate (ms): 1000
Enter maximum ticket capacity: !@#$$%
20:41:39.895 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Invalid input. Please enter valid input in the range 1 and 2147483647.
Invalid input. Please enter a valid number.
Enter maximum ticket capacity: 120
Enter total number of tickets: 10
20:41:51.610 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- All the data is successfully loaded.
20:41:51.665 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Configuration saved successfully.
Configuration saved successfully.
20:41:51.666 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Starting command loop.
Commands: 'start' to begin, 'stop' to halt, 'exit' to quit.
Command: |
```

```

20:41:51.666 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Starting command loop.
Commands: 'start' to begin, 'stop' to halt, 'exit' to quit.
Command: stop
System is not running.
Command: 1234
Unknown command. Please try 'start', 'stop', or 'exit'.
Command: car
Unknown command. Please try 'start', 'stop', or 'exit'.
Command: start
20:44:35.751 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Starting ticket handling.
20:44:35.759 [pool-1-thread-1] INFO org.example.oop_cw.ticket.TicketPool -- Tickets added: 10, Total tickets: 10
20:44:35.761 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Vendor 1 Added tickets. The ticket pool contains:10
20:44:35.764 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Vendor -- Waiting for 1500

20:44:58.862 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 5 has stopped.
20:44:58.877 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 6 has stopped.
20:44:59.886 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 7 has stopped.
20:45:00.898 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 8 has stopped.
20:45:01.910 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 9 has stopped.
20:45:02.921 [pool-1-thread-1] INFO org.example.oop_cw.ticket.Customer -- Customer 10 has stopped.
System has been stopped.
20:45:03.926 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- System has been stopped.
All tickets have been sold. System is stopping.
Command: exit
System has been stopped.
21:15:46.329 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- System has been stopped.
21:15:46.356 [main] INFO org.example.oop_cw.CLI.TicketingSystemCLI -- Configuration saved successfully.
Configuration saved successfully.

Process finished with exit code 0

```

Test cases for the Backend using Swagger API Documentation

Customer functions

POST /customer/add-customer addCustomer

Parameters Cancel

Name	Description
customerDTO required (body)	customerDTO Example Value Model <pre>{ "customerId": 17, "customerType": "customer", "name": "Test", "vip": true }</pre>

Cancel

Parameter content type
application/json

Response body

```
{
  "code": 201,
  "message": "success",
  "data": {
    "customerId": 17,
    "name": "Test",
    "vip": true
  }
}
```

[Download](#)

GET

/customer/get-all-customer getAllCustomer

Parameters

Cancel

No parameters

ExecuteClear

Responses

Response content type */*

Curl

curl -X GET "http://localhost:8081/customer/get-all-customer" -H "accept: */*"

Request URL

http://localhost:8081/customer/get-all-customer

Server response

Code	Details
201 <i>Undocumented</i>	<div><div>Response body</div><pre>{ "code": 201, "message": "Success", "data": [{ "customerId": 2, "name": "Cust_12", "vip": false }, { "customerId": 23, "name": "Cust_3", "vip": false }, { "customerId": 26, "name": "Cust_5", "vip": true }, { "customerId": 56, "name": "Cust_test", "vip": true }, { "customerId": 59 }] }</pre><div>Download</div></div> <div>Response headers</div> <pre>connection: keep-alive content-type: application/json date: Wed, 11 Dec 2024 15:33:12 GMT keep-alive: timeout=60 transfer-encoding: chunked vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</pre>

customerID * required

string

(query)

customerID

108

Execute

Clear

Responses

Response content type */*

Curl

curl -X DELETE "http://localhost:8081/customer/delete-customer?customerID=108%20" -H "accept: */*"

Request URL

http://localhost:8081/customer/delete-customer?customerID=108%20

Server response

Code

Details

201

Undocumented

Response body

```
{
  "code": 201,
  "message": "Success",
  "data": "Customer deleted successfully!"
}
```

Download

GET /customer/get-customer-by-id getCustomerById

Parameters

Cancel

Name

Description

customerID * required

Integer (\$int32)

(query)

customerID

87

Execute

Clear

Responses

Response content type */*

Curl

curl -X GET "http://localhost:8081/customer/get-customer-by-id?customerID=87" -H "accept: */*"

Request URL

http://localhost:8081/customer/get-customer-by-id?customerID=87

Server response

Code

Details

200

Response body

```
{
  "code": 200,
  "message": "Success",
  "data": {
    "customerId": 87,
    "name": "Cust_test_updated",
    "vip": false
  }
}
```

Download

Response headers

```
connection: keep-alive
content-type: application/json
date: Wed, 11 Dec 2024 15:33:32 GMT
keep-alive: timeout=60
transfer-encoding: chunked
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

```
{
  "customerId": 87,
  "name": "CUSTOMER",
  "vip": false
}
```

Cancel

Parameter content type

application/json

Execute

Clear

Responses

Response content type */*

Curl

```
curl -X PUT "http://localhost:8081/customer/update-customer" -H "accept: */*" -H "Content-Type: application/json" -d '{"customerId": 87, "name": "CUSTOMER", "vip": false}'
```

Request URL

```
http://localhost:8081/customer/update-customer
```

Server response

Code

Details

201

Response body

```
{
  "code": 201,
  "message": "Success",
  "data": "Customer has been updated successfully..."
}
```

Download

Response headers

Ticket functions,

GET /ticket/get-all-tickets getAlITickets

Parameters

No parameters

Execute

Clear

Responses

Response content type */*

Curl

```
curl -X GET "http://localhost:8081/ticket/get-all-tickets" -H "accept: */*"
```

Request URL

```
http://localhost:8081/ticket/get-all-tickets
```

Server response

Code

Details

201

Response body

```
{
  "vendorID": null,
  "ticketType": "EXHIBITION"
},
{
  "id": 14,
  "name": null,
  "price": 10,
  "sold": true,
  "vendorID": null,
  "ticketType": "EXHIBITION"
},
{
  "id": 15,
  "name": null,
  "price": 10,
  "sold": false,
  "vendorID": null,
  "ticketType": "EXHIBITION"
},
{
  "id": 17,
  "name": null,
  "price": 10,
  "sold": false,
  "vendorID": null,
  "ticketType": "EXHIBITION"
}
```

Download

Response headers

```
connection: keep-alive
content-type: application/json
date: Mon, 11 Dec 2024 15:47:08 GMT
keep-alive: timeout=60
transfer-encoding: chunked
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

Responses

Curl

curl -X GET "http://localhost:8081/ticket/get-available-tickets" -H "accept: */*"

Request URL

http://localhost:8081/ticket/get-available-tickets

Server response

Code

Details

201

Undocumented

Response body

```
{
  "code": 201,
  "message": "Success",
  "data": [
    {
      "id": 6,
      "name": null,
      "price": 10,
      "sold": false,
      "vendorID": null,
      "ticketType": "EXHIBITION"
    },
    {
      "id": 7,
      "name": null,
      "price": 10,
      "sold": false,
      "vendorID": null,
      "ticketType": "EXHIBITION"
    },
    {
      "id": 8,
      "name": null,
      "price": 10,
      "sold": false,
      "vendorID": null,
      "ticketType": "EXHIBITION"
    }
  ]
}
```

Download

Response headers

```
connection: keep-alive
content-type: application/json
date: Wed, 11 Dec 2024 15:47:14 GMT
keep-alive: timeout=60
transfer-encoding: chunked
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

Responses

POST /ticket/purchase-ticket saveTicket

Cancel

Parameters

Name	Description
customerid * required	customerid
string (query)	108
ticketid * required	ticketid
string (query)	106

Execute

Clear

Responses

Response content type */*

Curl

curl -X POST "http://localhost:8081/ticket/purchase-ticket?customerid=108&ticketid=106" -H "accept: */*"

Request URL

http://localhost:8081/ticket/purchase-ticket?customerid=108&ticketid=106

Server response

Code

Details

500

Undocumented

Error:

Response body

```
{
  "timestamp": "2024-12-11T15:47:59.856+00:00",
  "status": 500,
  "error": "Internal Server Error",
  "path": "/ticket/purchase-ticket"
}
```

Download

Response headers

```
connection: close
content-type: application/json
date: Wed, 11 Dec 2024 15:47:59 GMT
transfer-encoding: chunked
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
```

Responses

Vendor functions,

POST

/vendor/add-vendor addVendor

Parameters

Cancel

Name	Description
vendorDTO required (body)	vendorDTO <div>Example Value Model</div> <pre>{ "id": 30, "name": "New", "ticketsPerRelease": 5}</pre>

Cancel

Parameter content type
application/json

Execute

Clear

Responses

Response content type */*

Curl

```
curl -X POST "http://localhost:8081/vendor/add-vendor" -H "accept: */*" -H "Content-Type: application/json" -d '{"id": 30, "name": "New", "ticketsPerRelease": 5}'
```

Request URL

```
http://localhost:8081/vendor/add-vendor
```

Server response

Code	Details
201	<div>Response body<pre>{ "code": 201, "message": "success", "data": "New vendor added...!"}</pre></div> <div>Response headers<pre>connection: keep-alive content-type: application/json date: Wed, 11 Dec 2024 15:54:25 GMT keep-alive: timeout=60 transfer-encoding: chunked vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</pre></div> <div>Download</div>

Responses

DELETE

/vendor/delete-vendor

deleteVendor

Parameters

Cancel

Name	Description
vendorID required	vendorID
string (query)	110

ExecuteClear

Responses

Response content type */*

Curl

```
curl -X DELETE "http://localhost:8081/vendor/delete-vendor?vendorID=110" -H "accept: */*"
```

Request URL

```
http://localhost:8081/vendor/delete-vendor?vendorID=110
```

Server response

Code	Details
201 <i>Undocumented</i>	<div>Response body<pre>{ "code": 201, "message": "Success", "data": "Vendor deleted successfully!"}</pre></div> <div>Response headers<pre>connection: keep-alivecontent-type: application/jsondate: Wed, 11 Dec 2024 15:54:58 GMTkeep-alive: timeout=60transfer-encoding: chunkedvary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</pre></div> <div>Download</div>

GET

/vendor/get-all-vendors

getAllVendors

Parameters

Cancel

No parameters

ExecuteClear

Responses

Response content type */*

Curl

```
curl -X GET "http://localhost:8081/vendor/get-all-vendors" -H "accept: */*"
```

Request URL

```
http://localhost:8081/vendor/get-all-vendors
```

Server response

Code	Details
201 <i>Undocumented</i>	<div>Response body<pre>{ "id": 1, "name": "vendor_10", "ticketsPerRelease": 3000 }, { "id": 5, "name": "vendor_2", "ticketsPerRelease": 2000 }, { "id": 25, "name": "Vendor_12", "ticketsPerRelease": 2000 }, { "id": 88, "name": "vendor_test_update", "ticketsPerRelease": 2000 }, { "id": 110, "name": "New", "ticketsPerRelease": 2000 } }</pre></div> <div>Download</div>

POST

/vendor/start-vendor-thread

startVendorThread

Parameters

Cancel

Name	Description
<div><div>purchaseDTO required</div><div>(body)</div></div>	<div><div>purchaseDTO</div><div>Example Value Model</div><div><pre>{ "price": 450, "ticketCount": 2, "ticketType": "CONCERT"}</pre></div></div>

Cancel

Parameter content type

application/json

vendorID required

string

(query)

88

Execute

Clear

Responses

Response content type

/

Curl

```
curl -X POST "http://localhost:8081/vendor/start-vendor-thread?vendorID=88" -H "accept: */*" -H "Content-Type: application/json" -d "{ \"price\": 450, \"ticketCount\": 2, \"ticketType\": \"CONCERT\"}"
```

Request URL

http://localhost:8081/vendor/start-vendor-thread?vendorID=88

Server response

Code	Details
201	<div><div>Response body</div><div><pre>{ "code": 201, "message": "Success", "data": "Open a new Thread for vendor: vendor_test_update"}</pre></div><div>Download</div><div>Response headers</div><div><pre>connection: keep-alive content-type: application/json date: Wed, 11 Dec 2024 15:55:27 GMT keep-alive: timeout=60 transfer-encoding: chunked vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</pre></div></div>

Responses

GET

/vendor/stop-vendor-thread

stopVendorThread

Parameters

Cancel

Name	Description
vendorID required	vendorID
string (query)	88

ExecuteClear

Responses

Response content type */*

Curl

curl -X GET "http://localhost:8081/vendor/stop-vendor-thread?vendorID=88" -H "accept: */*"

Request URL

http://localhost:8081/vendor/stop-vendor-thread?vendorID=88

Server response

Code	Details
201 <i>Undocumented</i>	<div><div>Response body</div><div>{ "code": 201, "message": "Success", "data": "vendor thread stopped..." }</div><div>Download</div></div> <div><div>Response headers</div><div>connection: keep-alive content-type: application/json date: Wed, 11 Dec 2024 15:55:45 GMT keep-alive: timeout=60 transfer-encoding: chunked vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</div></div>

Responses

PUT

/vendor/update-vendor updateVendor

Parameters

Cancel

Name	Description
<div>vendorDTO <div>required</div></div> <div>(body)</div>	<div>vendorDTO</div> <div>Example Value Model</div> <div><pre>{ "id": 88, "name": "update", "ticketsPerRelease": 5}</pre></div> <div>Cancel</div> <div>Parameter content type<div>application/json</div></div>
<div>vendorID <div>required</div></div> <div>string</div> <div>(query)</div>	<div>vendorID</div> <div>88</div>

ExecuteClear

Responses

Response content type */*

Curl

curl -X PUT "http://localhost:8081/vendor/update-vendor?vendorID=88" -H "accept: */*" -H "Content-Type: application/json" -d '{"id": 88, "name": "update", "ticketsPerRelease": 5}'

Request URL

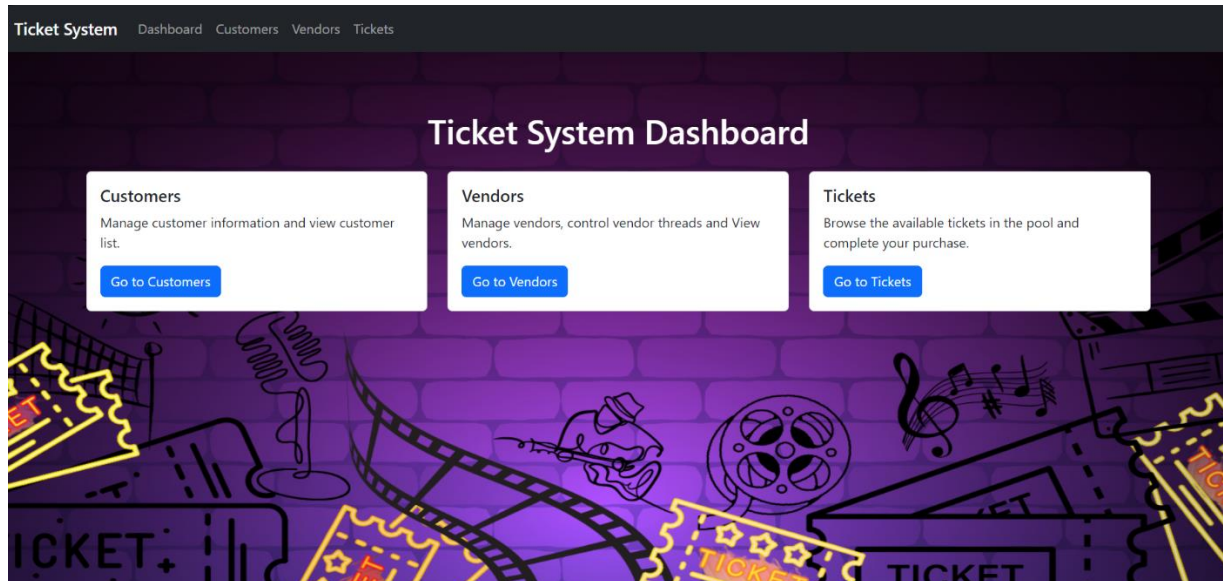
http://localhost:8081/vendor/update-vendor?vendorID=88

Server response

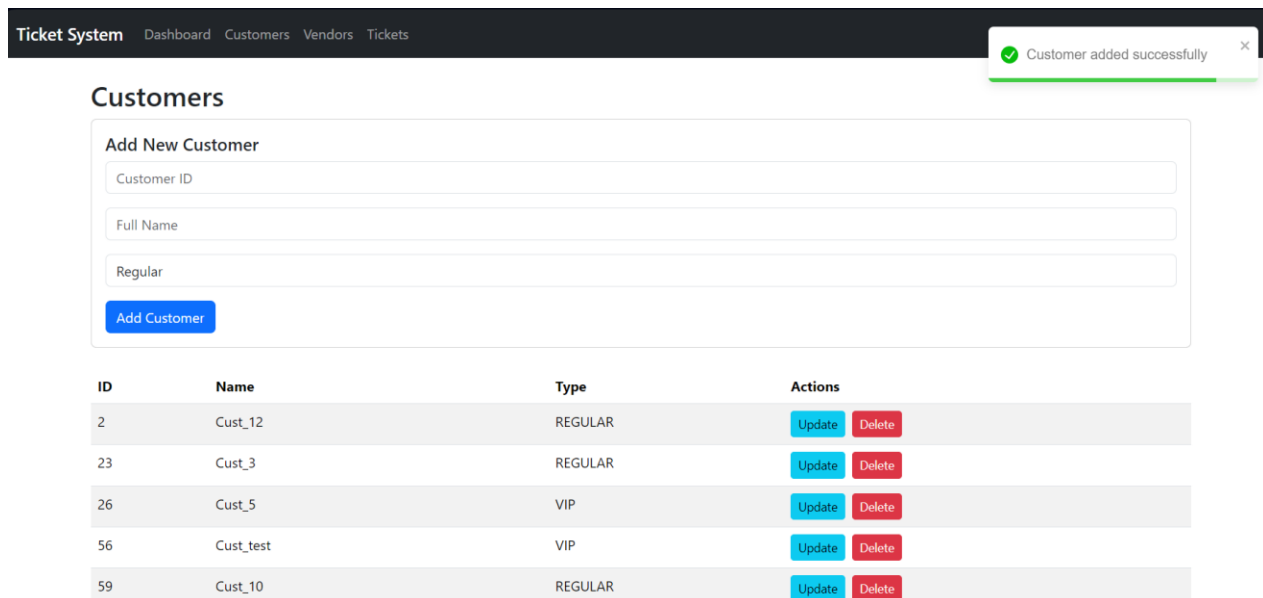
Code	Details
201	<div><div>Response body</div><div><pre>{ "code": 200, "message": "success", "data": "Vendor updated successfully!"}</pre></div><div>Download</div><div>Response headers</div><div>connection: keep-alive content-type: application/json date: Wed, 11 Dec 2024 15:56:07 GMT keep-alive: timeout=60 transfer-encoding: chunked vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers</div></div>

Test cases proof for the Frontend

Dashboard,



Customer features,



Add New Customer

Customer ID

Full Name

Regular

Add Customer

✔ Customer updated successfully

ID	Name	Type	Actions	
2	Cust_12	REGULAR	Update	Delete
23	Cust_3	REGULAR	Update	Delete
26	Cust_5	VIP	Update	Delete
56	Cust_test	VIP	Update	Delete
59	Cust_10	REGULAR	Update	Delete
71	Cust_3	VIP	Update	Delete
87	CUSTOMER	REGULAR	Update	Delete

Add New Customer

Customer ID

Full Name

Regular

Add Customer

✔ Customer deleted successfully

ID	Name	Type	Actions	
2	Cust_12	REGULAR	Update	Delete
23	Cust_3	REGULAR	Update	Delete
26	Cust_5	VIP	Update	Delete
56	Cust_test	VIP	Update	Delete
59	Cust_10	REGULAR	Update	Delete
71	Cust_3	VIP	Update	Delete
87	CUSTOMER	REGULAR	Update	Delete

Vendor features,

Start Vendor Thread

Ticket Count

5

Ticket Price

10

Ticket Type

Exhibition

Start Thread

Vendor updated successfully

ID	Name	Release Rate	Thread Control	Actions
4	vendor_10	3000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
5	vendor_2	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
25	Vendor_12	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
88	update	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
114	Vendor_0	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>

Start Vendor Thread

Ticket Count

5

Ticket Price

10

Ticket Type

Exhibition

Start Thread

Vendor deleted successfully

ID	Name	Release Rate	Thread Control	Actions
4	vendor_10	3000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
5	vendor_2	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
25	Vendor_12	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>
88	update	2000ms	<div>Start Thread</div> <div>Stop Thread</div>	<div>Update</div> <div>Delete</div>

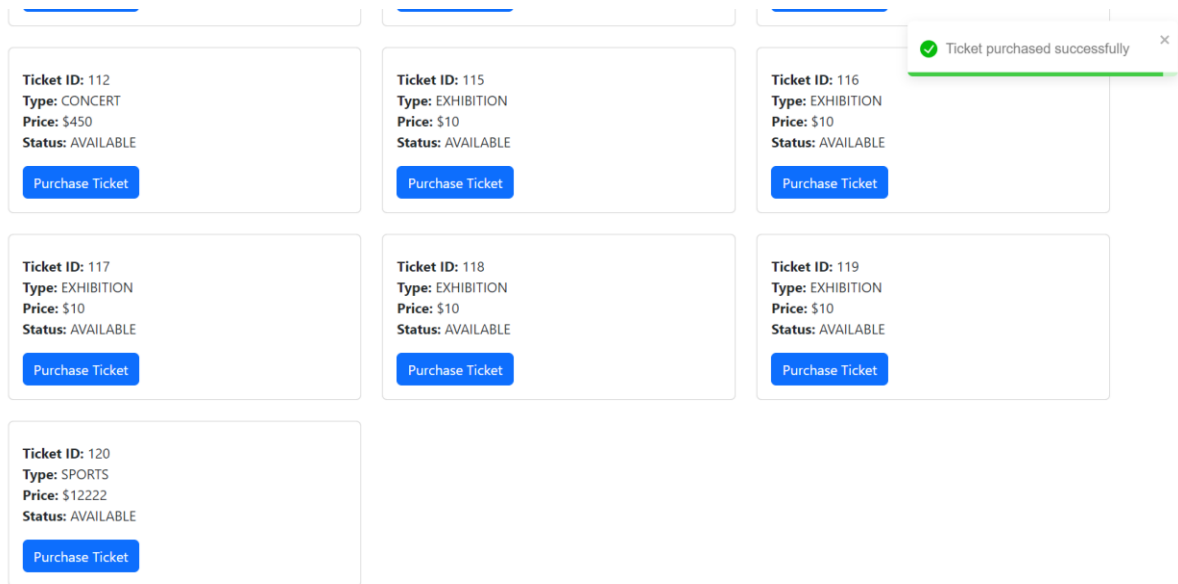
Vendor thread started successfully

Vendor thread stopped successfully

Vendor thread stopped successfully

Vendor thread stopped successfully

Ticket System Dashboard Customers Vendors Tickets



LinkedIn certificates: -

https://www.linkedin.com/learning/certificates/679eefc3bf5929b61487d9121e6faba8614e9514af15bf3e95e97eba490ba29e?trk=share_certificate

GitHub Link: -

<https://github.com/danu2003-cy/RealTimeTicketSystem>