



INFORMATICS  
INSTITUTE OF  
TECHNOLOGY

UNIVERSITY OF  
WESTMINSTER 

## INFORMATICS INSTITUTE OF TECHNOLOGY

<b>Module:</b>	5COSC019C.1 Object Oriented Programming
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## 1.Test cases for java cli

Test Case ID	Test Name	Description	Steps	Expected Result	Status
Test case 1	Validate Minimum Ticket Capacity	Ensure total tickets capacity is $\geq 10$ .	1. Start the program. 2. Enter a number below 10 for total ticket capacity.	Program rejects input and asks for a value $> 10$	pass
Test case 2	Validate Maximum Ticket Capacity	Ensure max tickets capacity is $\leq$ total capacity.	1. Enter total capacity as 15. 2. Enter 10 for max capacity.	Invalid input. Enter a value between 10 and 4000, and not exceeding 10	pass
Test case 3	Stop Adding at Max Capacity	Verify vendors adds tickets after max capacity is reached.	Configure total capacity as 10, max capacity as 15. 2. Start the system. 3. Wait for max capacity to be reached.	Vendor continues adding tickets and logs "Max capacity reached."	pass
Test case 4	Handle No Tickets Gracefully	Ensure customers wait when no tickets are available.	1. Configure total and max capacity as 15. 2. Start the system. 3. Wait for tickets to be purchased.	Customer threads wait for tickets to be added.	pass
Test case 5	After enter configuration Start the system	Ensure start the system with start command	1.enter configuration. 2.type start to Start the system	Display "System started. Real-time monitoring is active."	pass

Test case 6	Start the system with invalid command	To start the system give command as begin	1.enter configuration. 2.type begin to start the system.	Display" Invalid command. Use 'start' or 'exit'."	pass
Test case 7	Check max ticket release rate	Ensure the system reject the over ticket release rate	1.enter 120 (in second) for ticket release rate	Display" Invalid input. Enter a value between 1 and 100:"	pass

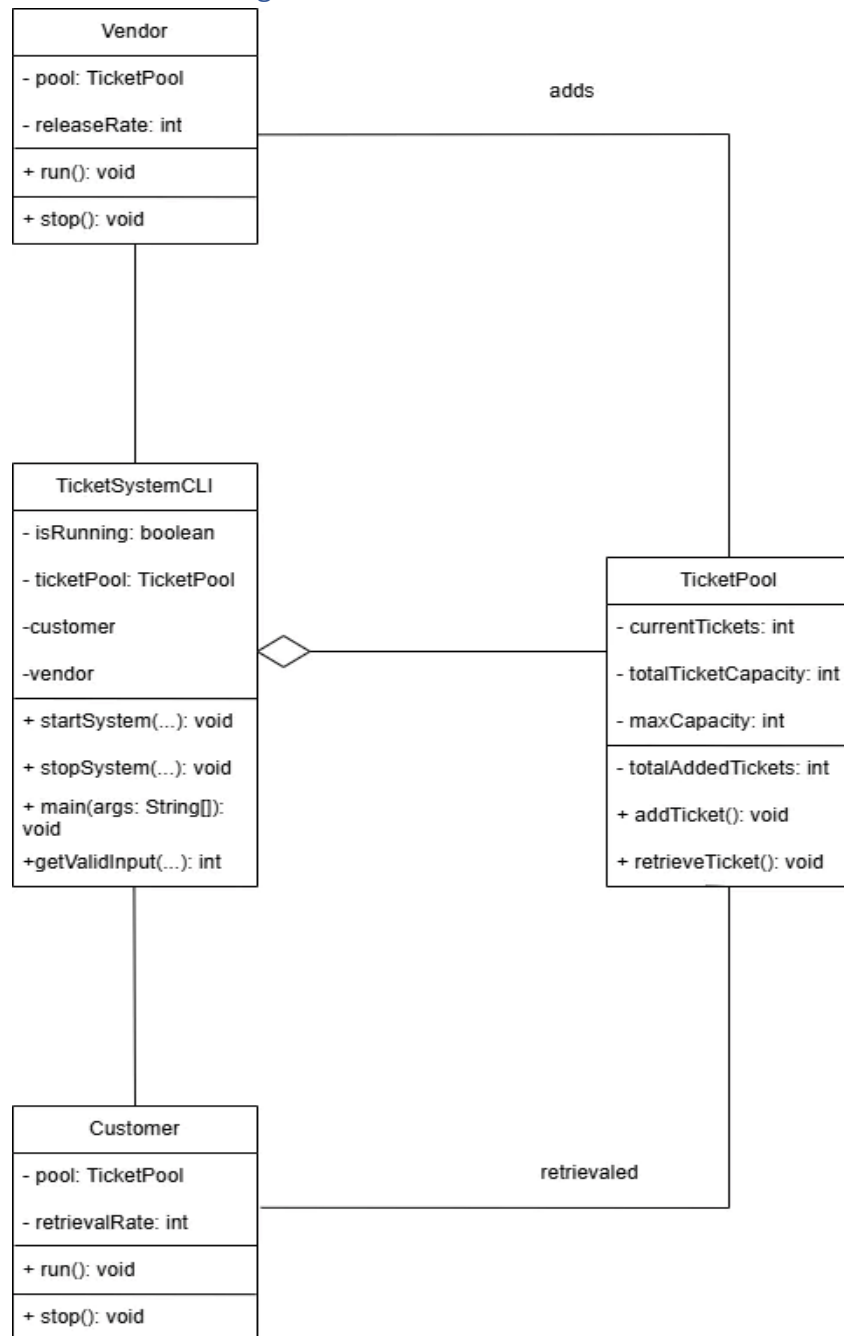
Test case 8	Check min ticket release rate	Ensure the system reject the below given ticket release rate	1.enter 0 (in second) for ticket release rate	Display" Invalid input. Enter a value between 1 and 100:"	pass
Test case 9	Check max customer retrieval rate	Ensure the system reject the over customer retrieval rate	1. .enter 120 (in second) for customer retrieval rate	Display" Invalid input. Enter a value between 1 and 100:"	pass
Test case 10	Check min customer retrieval rate	Ensure the system reject the below given customer retrieval rate	1.enter 0 (in second) for ticket release rate	Display" Invalid input. Enter a value between 1 and 100:"	pass
Test case 11	Graceful Exit	Verify exit command stops all threads and exits.	1. Start the system. 2. Run exit command.	Display" System stopped. Real-time monitoring is inactive. Exiting application. Goodbye!"	pass
Test case 12	Behavior at Max Capacity	Ensure correct behavior when max capacity is reached.	1.enter configuration correctly. 2. start the system	Display "All tickets have been purchased. Stopping the system... Max capacity reached (15). Waiting for all tickets to be purchased..."	pass

## 2.Test cases for GUI and Backend

Test Case ID	Test Name	Description	Steps	Expected Result	Status
Test case 1	Validate Minimum total Ticket Capacity	Ensure total ticket capacity $\geq 10$	1.Enter a number below 10 for total ticket capacity.	Display "value must be greater than 10"	Pass
Test case 2	Validate Maximum total Ticket Capacity	Ensure total ticket capacity $\leq 4000$	1. Enter a number higher than 4000	Display "value must be less than or equal to 4000"	Pass
Test case 3	Validate Maximum max Ticket Capacity	Ensure max ticket capacity $\geq 10$	1.Enter a number below 10 for max ticket capacity.	Display "value must be greater than 10"	Pass
Test case 4	Validate Minimum max Ticket Capacity	Ensure max ticket capacity $\leq 4000$	1. Enter a number higher than 4000	Display "value must be less than or equal to 4000"	Pass
Test case 5	Validate maximum customer retrieval rate	Ensure customer retrieval rate $\geq 1000$ (ms)	1.Enter a number below 1000 for customer retrieval rate	Display "value must be greater than or equal 1000 "	Pass
Test case 6	Validate minimum customer retrieval rate	Ensure customer retrieval rate $\leq 1000000$ (ms)	1. Enter a number higher than 1000000	Display "value must be less than or equal to 1000000"	Pass
Test case 7	Validate maximum ticket release rate	Ensure ticket release rate $\geq 1000$ (ms)	1. Enter a number below 1000 for release rate	Display "value must be greater than or equal 1000 "	Pass
Test case 8	Validate minimum ticket release rate	Ensure ticket release rate $\leq 1000000$ (ms)	1. Enter a number higher than 1000000	Display "value must be less than or equal to 1000000"	Pass
Test case 9	Validate minimum number of customer	Ensure number of customer $\geq 1$	1.Enter a number below 1	Display "value must be greater than or equal to 1 "	Pass
Test case 10	Validate maximum number of customer	Ensure number of customer $\leq 10$	1.Enter a number higher than 10	Display "value must be less than or equal 10"	Pass

Test case 11	Validate minimum number of vendors	Ensure number of vendor $\geq 1$	1.Enter a number below 1	Display "value must be greater than or equal to 1 "	Pass
Test case 12	Validate maximum number of vendors	Ensure number of vendor $\leq 10$	1.Enter a number higher than 10	Display "value must be less than or equal 10"	Pass
Test case 13	Check input fields for characters	Ensure input fields are correctly respond to characters	1.Enter a character	Nothing display and cannot input characters. Only get numbers.	pass
Test case 14	Check system start	Ensure start the system.	1.Enter correct inputs for configuration form 2.Click the start button	In system Logs Display "Start command sent."	Pass
Test case 15	Check system stop	Ensure after system starts stop the system	1.Enter correct inputs for configuration form 2.Click the start button 3.Click stop button	In system Logs Display "Stop command sent."	Pass
Test case 16	Check system reset	Ensure after system starts rest the system	1.Enter correct inputs for configuration form 2.Click the start button 3.Click reset button	In system Logs Display "reset command sent."	Pass
Test case 17	Check configuration save	Ensure configuration save successfully.	1.Enter correct inputs for configuration form 2.Click the save configuration button 3.Click reset button	In system Logs Display "configuration save successfully"	pass

### 3. Java cli class diagram



#### 4. Sequence Diagram for java cli

