



Informatics Institute of Technology in collaboration with The University of Westminster

Object Oriented Programming Principles

5COSC019C.1

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Ticket Booking Simulator

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Class Diagram

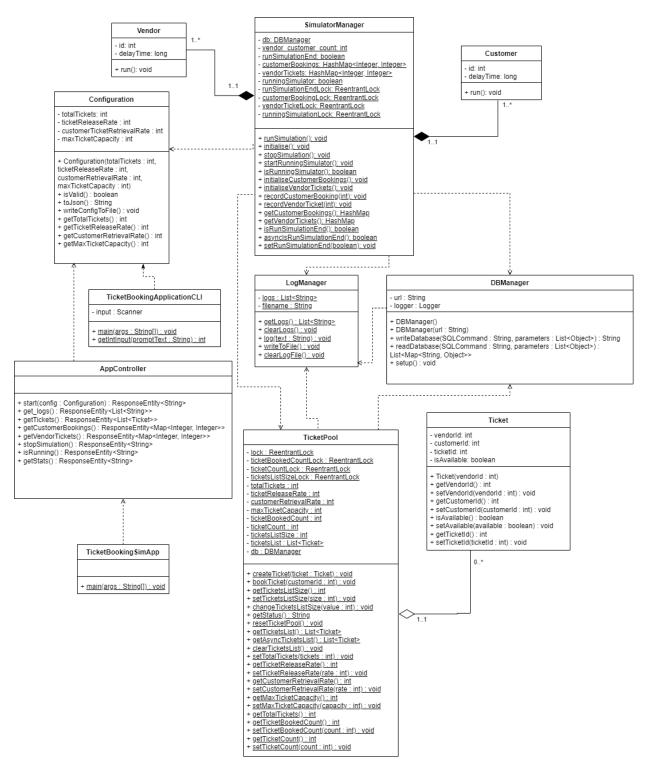


Figure 1: Class Diagram for the Ticket Booking Simulator

Sequence Diagram

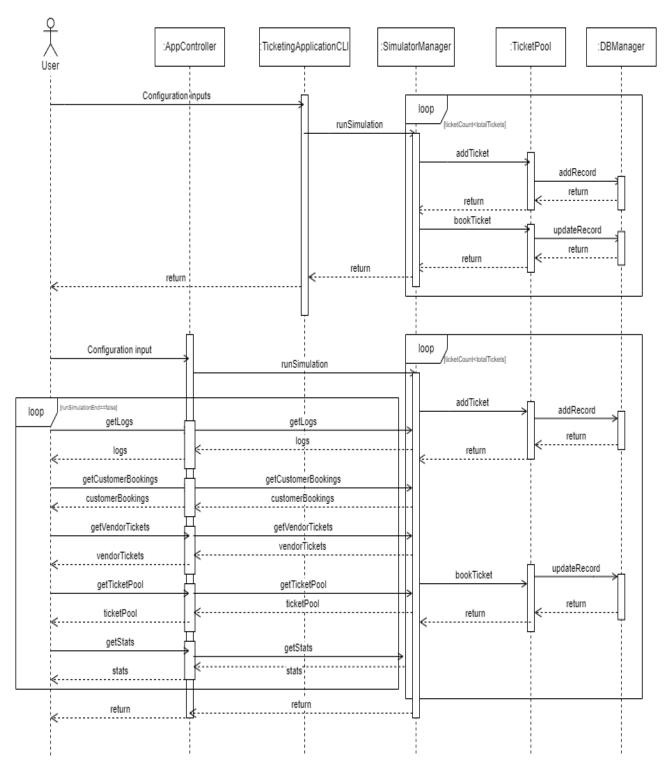


Figure 2: Sequence Diagram for the Ticket Booking Simulator

'Test Case Report

Table 1: CLI Test Case

SCREEN	NAME	Command Line Interface						
PREPAR	ED BY	Vethum Buthgamuwa						
DESIGN	ATION	Tester/Developer						
DATE				6/12/2024				
SCEN								
ARIO		SCENAR	IO .	Validate t	he user ii	nput and ru	n the tick	et
ID	1	DESCRIP	DESCRIPTION booking simulation					
5								
								STAT
					EXPEC		ACTU	US
		TEST CASE			TED		AL	(PAS
		DESCRIP	PRECOND		RESUL	POSTCON	RESUL	S/
S.NO	TEST CASE ID	TION	ITION	TEST DATA	Т	DITION	Т	FAIL)
				totalTickets:				
) (auifu		100			The	
		Verify the		ticketReleaseR ate: 10	The		simula	
		system		customerRetri	simulati		tion	
4		accepts		evalRate: 5	on	Simulatio	started	
1	TC_CONFIGURATION_VA	valid	CLI is	maxTicketCapa	starts	n is	runnin	
	LIDATION_001	inputs Verify	Running	city: 50	running	Running	g	Pass
		the						
		system						
		handles						
		values						
		less than 1		totalTickets: 100				
		for the		ticketReleaseR	The			
		configur		ate: -5	simulati			
		ation		customerRetri	on re-	Innut ro	Input re-	
	TO CONFICURATION VA	input	CLI is	evalRate: 5	prompt	Input re- prompte	promp	
2	TC_CONFIGURATION_VA LIDATION 002	without crashing	Running	maxTicketCapa city: 0	s the input.	d	ted	Pass
	<u>-</u>	Verify		21-11-4		-		
		the						
		system						
		handles non-						
		numeric		totalTickets:				
		values		100				
		for the		ticketReleaseR	The			
		configur		ate: 10	simulati		Input	
		ation input		customerRetri evalRate: 5	on re- prompt	Input re-	re-	
3	TC_CONFIGURATION_VA	without	CLI is	maxTicketCapa	s the	prompte	prom	
	LIDATION_003	crashing	Running	city: abc	input.	d	pted	Pass

Table 2:Simulation Execution Test Cases

SCREEN	NAMF	Simulation Execution							
PREPAR		Vethum Buthgamuwa							
DESIGNA		Tester/Developer							
DATE	· · · · · · · · · · · · · · · · · · ·		<u>'</u>	6/12/2024	<u> </u>				
DAIL				0/12/2024					
Tests various conditions that arise									
SCENA		SCENARI	0	simulation is r					
RIO ID	2	DESCRIP			•	lication)			
Application)									
S.NO	TEST CASE ID	TEST CASE DESCRIP TION	PRECONDI TION	TEST DATA	EXPEC TED RESUL T	POSTCOND ITION	ACTU AL RESUL T	STAT US (PAS S/ FAIL)	
				-		111011	Syste	,	
1	TC_MAX_TICKET_CA PACITY	Verify the system handles maximu m ticket capacity reached.	CLI or web applicati on is Running	totalTickets: 200 ticketReleaseRa te: 70 customerRetrie valRate: 4 maxTicketCapac ity: 5	Maximu m ticket capacity reached messag e.	No additional tickets are created, and the simulation continues	m blocke d additi onal ticket creatio n	Pass	
							Syste		
2	TC_TOTAL_TICKETS_ REACHED	Verify the system handles total ticket count reached.	CLI or web applicati on is Running	totalTickets: 100 ticketReleaseRa te: 10 customerRetrie valRate: 5 maxTicketCapac ity: 50	Total ticket count reached messag e was displaye d.	No additional tickets are created, and the simulation continues	m blocke d additi onal ticket creatio n	Pass	
3	TC_NO_TICKETS_AV	Verify the system handles no tickets available for custome r when the	CLI or web applicati on is	totalTickets: 100 ticketReleaseRa te: 5 customerRetrie valRate: 30 maxTicketCapac	A messag e saying no tickets availabl e for custome r will be displaye	Tickets will not be	A messag e saying no tickets availabl e for custom er will be display		
	AILABLE	ticket	Running	ity: 50	d.	removed	ed.	Pass	

pool	is			
empt	ty.			

Table 3: User Interface Test Cases

SCREEN	NAME	User Interface						
PREPAR	ED BY	Vethum Buthgamuwa						
DESIGN	ATION			ester/Develope				
DATE				6/12/2024				
57112				0,12,202 :				
SCENA		SCENAR	IO					
RIO ID	3		DESCRIPTION User Interface Functionality				is tested	
						,		
								STAT
					EXPEC		ACTU	US
		TEST			TED		AL	(PAS
		CASE DESCRIP	PRECOND		RESUL	POSTCON	RESU	`s/
S.NO	TEST CASE ID	TION	ITION	TEST DATA	Т	DITION	LT	FAIL)
				totalTickets:			The	
				100			simula	
		Verify the		ticketReleaseR ate: 10	The simulati		tion	
		system	Web	customerRetri	on		starte	
		accepts	Applicati	evalRate: 5	starts	Simulatio	d	
	TC_CONFIGURATION_VA	valid	on is	maxTicketCapa	running	n is	runnin	
1	LIDATION_001	inputs	Running	city: 50		Running	g	Pass
		Verify					The	
		the system			The web		web	
		handles			app		app shows	
		values			shows		an	
		less			an alert		alert	
		than 1			saying		saying	
		as		totalTickets:	the		the	
		inputs for		100 ticketReleaseR	value must		value must	
		configur		ate: -5	be		be	
		ation	Web	customerRetri	greater		greater	
		values	Applicati	evalRate: 5	than or	Simulatio	than or	
	TC_CONFIGURATION_VAL	without	on is	maxTicketCapa	equal	n does	equal	D-
2	IDATION_002	crashing Verify	Running	city: 0	to 1 The	not run	to 1 The	Pass
		the			applicat		applica	
		system		totalTickets:	ion		tion	
		handles		100	does		does	
		non-		ticketReleaseR	not		not	
		numeric	Web	ate: 10	allow		allow	
		inputs for	Applicati	customerRetri evalRate: 5	the user to	Simulatio	the user to	
	TC_CONFIGURATION_VAL	configur	on is	maxTicketCapa	enter a	n does	enter a	
3	IDATION_003	ation	Running	city: abc	value	not run	value	Pass

		values without crashing			that is not a number		that is not a numbe r.	
4	TC_CONFIGURATION_VALIDATION 004	Verify the system handles empty inputs for configur ation values without crashing	Web Applicati on is Running	totalTickets: [Blank] ticketReleaseR ate: 10 customerRetri evalRate: 5 maxTicketCapa city: [blank]	The web app shows an alert saying the relevan t field cannot be empty.	Simulatio n does not run	The web app shows an alert saying the relevan t field cannot be empty.	Pass
5	TC_STOP_FUNCTION	the user clicks the stop button while the simulati on is running.	The simulati on is running.	Click stop button	The simulati on stops running and shows an alert saying Ended.	The simulatio n stops running	The simulat ion stops runnin g and shows an alert saying Ended.	Pass