



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

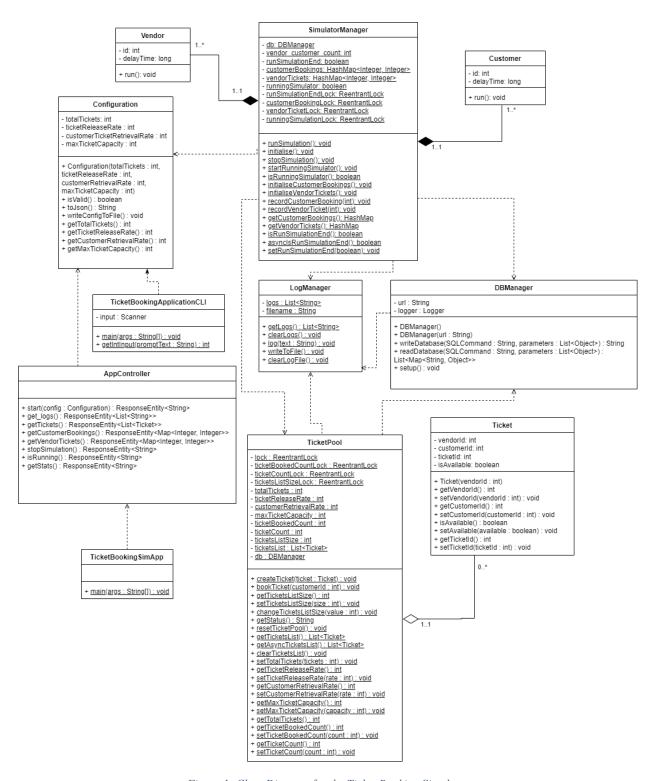


Figure 1: Class Diagram for the Ticket Booking Simulator

Sequence Diagram

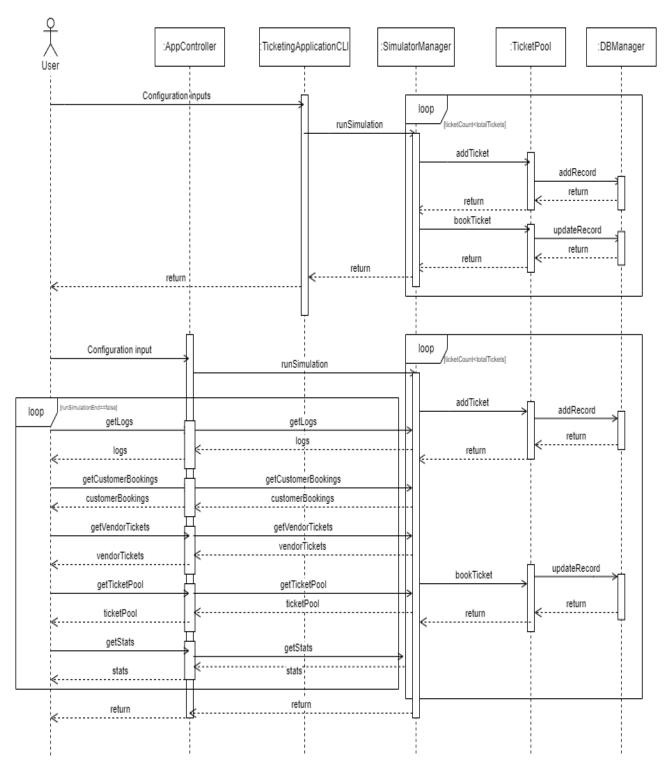


Figure 2: Sequence Diagram for the Ticket Booking Simulator

'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	TION			simulation		
								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-	Input ro	Input re-	
	TC_CONFIGURATION_VA	input without	CLI is	evalRate: 5	prompt	Input re- prompte	promp	
2	LIDATION 002	crashing	Running	maxTicketCapa city: 0	s the input.	d	ted	Pass
		Verify						
		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						
PREPARI		Vethum Buthgamuwa						
DESIGNA		Tester/Developer						
DATE			<u> </u>	6/12/2024	·		-	
7,,								
				Tests vario	us condit	ions that aris	se while t	the
SCENA		SCENARI	0	simulation is r				
RIO ID	2	DESCRIP [*]			•	lication)		
					•	•		
		TEST CASE			EXPEC TED RESUL		ACTU AL RESUL	STAT US (PAS S/
S.NO	TEST CASE ID	DESCRIP TION	PRECONDI TION	TEST DATA	T	POSTCOND ITION	T	FAIL)
2	TC_MAX_TICKET_CA PACITY TC_TOTAL_TICKETS_ REACHED	Verify the system handles maximu m ticket capacity reached. Verify the system handles total ticket count reached.	CLI or web applicati on is Running CLI or web applicati on is Running	totalTickets: 200 ticketReleaseRa te: 70 customerRetrie valRate: 4 maxTicketCapac ity: 5 totalTickets: 100 ticketReleaseRa te: 10 customerRetrie valRate: 5 maxTicketCapac ity: 50	Maximu m ticket capacity reached messag e. Total ticket count reached messag e was displaye d.	No additional tickets are created, and the simulation continues No additional tickets are created, and the simulation continues	Syste m blocke d additi onal ticket creatio n Syste m blocke d additi onal ticket creatio n creatio n creatio n creatio n creatio n 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 Running	totalTickets: 100 ticketReleaseRa te: 5 customerRetrie valRate: 30 maxTicketCapac ity: 50	A messag e saying no tickets availabl e for custome r will be displaye d.	Tickets will not be removed	A messag e saying no tickets availabl e for custom er will be display ed.	Pass

	pool is			
	empty.			

Table 3: User Interface Test Cases

SCREEN	NAME			User Interface				
PREPAR	ED BY	Vethum Buthgamuwa						
DESIGN				ester/Develope				
DATE			<u> </u>	6/12/2024	<u>. </u>			
0/12/2024								
CCENIA		CCENIAD	10					
SCENA RIO ID	3	SCENAR DESCRIP		Hearlat	orfoco Fi	nationality	ic tostod	
KIU ID	3	DESCRIP	TION	User int	errace Fu	inctionality	is tested	
					=\/==			STAT
		TEST			EXPEC		ACTU	US
		CASE			TED		AL	(PAS
		DESCRIP	PRECOND		RESUL	POSTCON	RESU	S/
S.NO	TEST CASE ID	TION	ITION	TEST DATA	Т	DITION	LT	FAIL)
				totalTickets:			The	
				100	T I		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			The		web	
		system handles			web		app	
		values			app shows		shows an	
		less			an alert		alert	
		than 1			saying		saying	
		as		totalTickets:	the		the	
		inputs		100	value		value	
		for		ticketReleaseR	must		must	
		configur ation	Web	ate: -5 customerRetri	be		be	
		values	Applicati	evalRate: 5	greater than or	Simulatio	greater than or	
	TC_CONFIGURATION_VAL	without	on is	maxTicketCapa	equal	n does	equal	
2	IDATION_002	crashing	Running	city: 0	to 1	not run	to 1	Pass
		Verify			The		The	
		the			applicat		applica	
		system		totalTickets:	ion		tion	
		handles		100	does		does	
		non- numeric		ticketReleaseR ate: 10	not allow		not allow	
		inputs	Web	customerRetri	the		the	
		for	Applicati	evalRate: 5	user to	Simulatio	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

	1	values	1		that is		that is	
		without			not a		not a	
					number			
		crashing			number		numbe	
					•		r.	
							The	
		Verify			The		web	
		the			web		арр	
		system			арр		shows	
		handles			shows		an	
		empty		totalTickets:	an alert		alert	
		inputs		[Blank]	saying		saying	
		for		ticketReleaseR	the		the	
		configur) A / - I-	ate: 10	relevan		relevan	
		ation	Web	customerRetri	t field	_	t field	
		values	Applicati	evalRate: 5	cannot	Simulatio	cannot	
	TC_CONFIGURATION_VAL	without	on is	maxTicketCapa	be	n does	be	
4	IDATION_004	crashing	Running	city: [blank]	empty.	not run	empty.	Pass
	_			-			The	
					The		simulat	
		the user			simulati		ion	
		clicks			on		stops	
		the stop			stops		runnin	
		button			running		g and	
		while			and		shows	
		the	The		shows	The	an	
		simulati	simulati		an alert	simulatio	alert	
		on is	on is	Click stop	saying	n stops	saying	
5	TC STOP FUNCTION	running.	running.	button	Ended.	running	Ended.	Pass
	TC_STOP_FONCTION	Tullilling.	running.	button	Lilueu.	Turring	The	1 033
							simulat	
					The		ion	
		Th a			_			
		The user clicks			simulati		contin	
					on		ues	
		the start			continu		runnin	
		button			es		g	
		while	The		running	The	withou	
		the	simulati		without	simulatio	t	
	TO START A	simulati	on is		causing	n is	causing	
6	TC_START_MULTIPLE_TI	on is		Clicks Start	any		any	Dest
6	MES	running.	running.	button.	errors.	running.	errors.	Pass
		The user			The		The	
		reloads			simulati		simulat	
		the			on		ion	
		page			continu		contin	
		while	The		es to	The	ues to	
		the			run		run	
		simulati	simulati	User click the	where	simulatio	where	
	TC_RELOAD_PAGE_WHIL	on is	on is	reload button	it left	n is	it left	
7	E_RUNNING	running	running.	or Ctrl + R	off.	running.	off.	Pass

Links

- GitHub Repository Link: https://github.com/vethumIIT/Tickets-Booking-Simulator.git
 Video Demonstration Link: https://youtu.be/sPbViCDCplQ?si=cqemlFH2b1U90iBo