

## Requirements System Traceability Matrix

Requirement	Security Subsystem	User Activity Subsystem	User Interface Subsystem	Moodle Subsystem	Gamification Subsystem	Chatbot Subsystem	Database Subsystem
R1							
R2							
R3							
R4							
R4.1							
R4.1.1			X				
R4.1.2		X					X
R5							
R5.1		X					X
R5.2			X				
R5.3			X				
R6							
R6.1							
R6.1.1			X				
R6.1.2				X			
R6.1.3							
R6.1.3.1				X			
R6.1.3.2				X			
R6.1.3.3				X			
R6.2							
R6.2.1			X				

<b>R6.2.2</b>				<b>X</b>			
<b>R6.2.3</b>							
<b>R6.2.4</b>				<b>X</b>			
<b>R6.2.3.1</b>	<b>X</b>						<b>X</b>
<b>R6.2.3.2</b>	<b>X</b>						
<b>R6.2.3.3</b>	<b>X</b>						<b>X</b>
<b>R6.3</b>	<b>X</b>						
<b>R6.3.1</b>			<b>X</b>				
<b>R6.3.2</b>				<b>X</b>			
<b>R6.3.3</b>	<b>X</b>						
<b>R6.3.4</b>				<b>X</b>			
<b>R6.3.3.1</b>			<b>X</b>				
<b>R6.3.3.2</b>			<b>X</b>	<b>X</b>			
<b>R7</b>							
<b>R7.1</b>							
<b>R7.1.1</b>			<b>X</b>				
<b>R7.1.2</b>							<b>X</b>
<b>R7.1.3</b>							<b>X</b>
<b>R8</b>							
<b>R9</b>	<b>X</b>			<b>X</b>			
<b>R10</b>							
<b>R10.1</b>			<b>X</b>				
<b>R10.2</b>							
<b>R10.2.1</b>	<b>X</b>						
<b>R10.2.2</b>	<b>X</b>						<b>X</b>
<b>R10.2.3</b>							

R10.2.4	X						
R10.2.5	X						
R10.2.6				X			
R10.3	X			X			
R10.4							X
R11	X	X					X
R12	X						X
R13							
R14							
R15							
R16			X				
R17			X				
R18			X				
R19			X				
R20							
R21							
R22							
R22.1							
R22.1.1			X	X			
R22.1.2			X	X			
R22.1.3			X	X			
R22.2.1			X	X			
R22.3			X	X			
R22.4			X	X			
R22.5			X	X			
R22.6			X	X			

R22.7			X	X			
R23							
R23.1							
R23.1.1			X	X			
R23.1.2			X	X			
R23.2			X	X			
R24				X			
R25							
R26			X	X			
R27			X	X			
R28			X	X			
R29			X	X			
R30			X				
R31							
R32				X			
R33			X	X			
R34		X					
R35			X				
R36			X				
R37							
R38							
R39							
R40							
R41							
R41.1							
R41.1.1							X

R41.1.2			X				
R41.1.3			X				
R41.1.4							X
R41.2							
R41.2.1							
R41.2.1.1					X		
R41.2.1.2					X		
R41.2.1.3					X		
R41.2.1.4			X				
R41.2.1.5							X
R41.2.2					X		
R41.2.3			X				
R42							
R42.1							
R42.1.1							
R42.1.1.1		X					X
R42.1.1.2					X		X
R42.1.2					X		X
R42.1.3				X	X		
R42.1.4			X		X		
R42.2							
R42.2.1							

R42.2.1.1							X
R42.2.1.2					X		
R42.2.2					X		X
R42.2.3				X	X		
R42.2.4			X				
R43							
R43.1		X					
R43.2		X					
R43.3		X					
R43.4			X				
R44							
R45							
R46							
R47							
R48					X		
R49							
R50							
R51							
R52							
R53							
R54							
R55							
R55.1		X					
R55.2							
R55.2.1		X					

<b>R55.2.2</b>		<b>X</b>					
<b>R55.3</b>							
<b>R55.3.1</b>			<b>X</b>				
<b>R55.3.2</b>						<b>X</b>	
<b>R55.3.3</b>						<b>X</b>	
<b>R56</b>							
<b>R56.1</b>						<b>X</b>	
<b>R56.2</b>						<b>X</b>	
<b>R56.3</b>						<b>X</b>	
<b>R57</b>							
<b>R57.1</b>			<b>X</b>			<b>X</b>	
<b>R57.2</b>						<b>X</b>	
<b>R58</b>							
<b>R58.1</b>		<b>X</b>					
<b>R58.2</b>				<b>X</b>			
<b>R59</b>							
<b>R59.1</b>							
<b>R59.1.1</b>		<b>X</b>				<b>X</b>	<b>X</b>
<b>R59.1.2</b>						<b>X</b>	
<b>R59.1.3</b>						<b>X</b>	
<b>R59.1.4</b>						<b>X</b>	
<b>R59.2</b>							
<b>R59.2.1</b>			<b>X</b>			<b>X</b>	
<b>R59.2.2</b>			<b>X</b>				
<b>R59.3</b>							<b>X</b>
<b>R60</b>							

<b>R60.1</b>						<b>X</b>	
<b>R60.2</b>							<b>X</b>
<b>R60.3</b>							
<b>R60.3.1</b>						<b>X</b>	
<b>R60.3.2</b>						<b>X</b>	
<b>R61</b>							
<b>R62</b>							
<b>R62.1</b>						<b>X</b>	<b>X</b>
<b>R62.2</b>						<b>X</b>	
<b>R63</b>							
<b>R64</b>							