CR001: Add Networking Feature for Attendees (profiles + messaging)

CR002: Integrate Payment Gateway (Stripe + PayPal)

Scenario 1: Project Beginning – No Code Written Yet

CR001 – Networking Feature

ID	CR001	**Date of approval**	9/04/2025
Issue description			
Lack of clear design specifications for chat interactions. Group chats and asynchronous messaging were not included.			
Risk	Medium – Could delay design.		
Effort	Medium		
Assigned persons	Backend (Mariana López), Frontend (Nayeli Perez)		
Estimated budget	$800	**Real budget**	$10000
Estimated Time	16 days	**Real Time**	16 days
Solution	A meeting was held to clarify user interaction scenarios and requirements. Additional mockups and flowcharts were generated.		
Opportunities:	Improved communication tools for attendees		
Outcomes	Backend began outlining database schema for chat data.		
HR Feasibility	Yes existing team		

CR002 – Payment Gateway Integration

ID	CR002	**Date of approval**	9/04/2025
Issue description			
Payment implementation requirements were unclear during the design phase. The team was unaware of the encryption and storage rules for sensitive user payment data.			
Risk	High – Potential rework if security standards are unmet.		
Effort	Medium		
Assigned persons	Backend (Monica Hernandez), Frontend (Luis Perez)		
Estimated budget	$ 1000	**Real budget**	$ 1200
Estimated Time	8 days	**Real Time**	12 days
Solution	The project manager organizes the team and a payment security document is created.		
Opportunities:	Secure transactions and learning about payment security		
Outcomes	Security requirements finalized before coding		
HR Feasibility	Yes existing team		

Scenario 2: 50% of Code Completed

CR001 – Networking Feature

ID	CR001	**Date of approval**	9/08/2025
Issue description			
Backend API created high response times during chat under medium user load. The API was executing complex joins in real-time, resulting in latency.			
Risk	High – Poor user experience and delays in QA		
Effort	High		
Assigned persons	Backend (Raul Mora)		
Estimated budget	$ 1200	**Real budget**	$ 1250
Estimated Time	15 days	**Real Time**	18 days
Solution	The backend team redesigned the API using MongoDB for chat logging. Response time was reduced by 70%.		
Opportunities:	More stable and scalable messaging backend, learn optimization with MongoDB		
Outcomes	Load test scheduled.		
HR Feasibility	Yes with external review		

CR002 – Payment Gateway

ID	CR001	**Date of approval**	9/08/2025
Issue description			
There were conflicts between the PayPal and Stripe options in the interface. Switching between them erased the user's data, which had to be re-entered.			
Risk	Medium – Risk of purchase abandonment.		
Effort	Medium		
Assigned persons	Frontend (Luis Perez)		
Estimated budget	$300	**Real budget**	$300
Estimated Time	8 days	**Real Time**	8 days
Solution	The team encapsulated each payment method into independent components with a shared driver.		
Opportunities:	New experience in developing independent modules		
Outcomes	QA passed the test case		
HR Feasibility	Yes existing team		

Scenario 3: 90% of Coding Complete

CR001 – Networking Feature

ID	CR001	**Date of approval**	9/12/2025
Issue description			
System slowed down with 20+ concurrent chat users. The server was not optimized for concurrent WebSocket connections.			
Risk	High: Performance degradation during peak usage times.		
Effort	High		
Assigned persons	Backend (Monica Hernandez),		
Estimated budget	$1500	**Real budget**	$1700
Estimated Time	20 days	**Real Time**	27 days
Solution	The backend adopted a dedicated message queuing system. Load was distributed using PM2 and CPU clustering.		
Opportunities:	Optimizing performance and learning about distributed processing		
Outcomes	60% improvement observed, but stress testing pending		
HR Feasibility	Yes with external review		

CR002 – Payment Gateway

ID	CR002	**Date of approval**	9/12/2025
Issue description			
The Stripe service failed due to incorrect environment variables that didn't match the test configuration. Tokens were invalidated during payment execution.			
Risk	Critical – Payment processing failed randomly		
Effort			
Assigned persons	Backend (Monica Hernandez)		
Estimated budget	$ 1700	**Real budget**	$ 2000
Estimated Time	15 days	**Real Time**	22 days
Solution	Stripe API keys were reconfigured and validated in production. Monitoring tools were added to detect potential issues.		
Opportunities:	Learn about testing in real-world environments		
Outcomes	Issue was contained, but fallback logic will be fully implemented in version 1.1.		
HR Feasibility	No – external software support is required		