

RedString Project Submission

Team Members: Nathan Nguyen, Faith Rider, Elias Weitfle

Milestones List

Milestone	Description	Planned Completion
Prototype Demo	Implement core Hybrid Retrieval + LLM system, NPC dialogue, and initial environment; playable small demo to demonstrate functionality	December 15, 2025
Level 1 Completion	First full level completed with narrative, NPC interactions, and LLM+RAG integration	February 15, 2026
Level 2 Completion	Second level completed, full story progression, game-state persistence, and TTS fully functional	March 31, 2026
Full Game Integration	Combine all levels, finalize art assets, implement all save files, polish UI, and optimize performance	April 15, 2026
Final Testing & Deployment	Test gameplay, fix bugs, verify NPC dialogue consistency, validate latency and TTS, prepare final submission	April 30, 2026

Table 1: Timeline

Task	Primary Lead	Start Date	End Date	Planned Milestone Completion
System design	Nathan	08/25/2025	09/15/2025	Prototype Demo
Backend API development	Nathan	09/16/2025	10/15/2025	Prototype Demo
Preset dialogue & warm-up fallback	Nathan	10/01/2025	10/31/2025	Prototype Demo
TTS integration	Nathan	10/15/2025	11/15/2025	Prototype Demo
Latency/load testing	Nathan	11/16/2025	12/10/2025	Prototype Demo
Narrative framework	Faith	08/25/2025	10/15/2025	Prototype Demo
Character profiles	Faith	09/01/2025	10/31/2025	Prototype Demo
2D visual assets	Faith	10/01/2025	12/15/2025	Level 1 Completion
Art style guide	Faith	09/15/2025	10/15/2025	Prototype Demo
Narrative constraints & dialogue guidelines	Faith	11/01/2025	12/15/2025	Level 1 Completion
Implement art assets	Elias	10/15/2025	11/30/2025	Level 1 Completion
Environment	Elias	09/25/2025	11/15/2025	Level 1

layouts				Completion
Text & movement systems	Elias	11/01/2025	12/20/2025	Level 1 Completion
Save data system	Elias	11/15/2025	01/15/2026	Level 1 Completion
Trustworthiness stat mechanics	Elias	12/01/2025	01/20/2026	Level 2 Completion
Scalable save file format	Elias	12/15/2025	01/31/2026	Level 2 Completion
Client-server request system	Elias	01/05/2026	02/20/2026	Level 2 Completion
Developer debug system	Elias	01/15/2026	03/01/2026	Level 2 Completion
Foundational NPC interaction	Elias	01/20/2026	03/15/2026	Level 2 Completion
Prototype initial room	Elias	08/25/2025	09/30/2025	Prototype Demo

Table 2: Effort Matrix

#	Task (Lead)	Nathan hrs	Faith hrs	Elias hrs	Notes
1	System design (Nathan)	15	0	0	Nathan lead
2	Backend API dev (Nathan)	20	0	0	Nathan lead
3	Preset dialogue & warm-up fallback (Nathan)	10	0	0	Nathan lead
4	TTS integration (Nathan)	10	0	0	Nathan lead

5	Latency/load testing (Nathan)	15	0	0	Nathan lead
6	Narrative framework (Faith)	0	15	0	Faith lead
7	Character profiles (Faith)	0	15	0	Faith lead
8	2D visual assets (Faith)	0	20	0	Faith lead
9	Art style guide (Faith)	0	10	0	Faith lead
10	Narrative constraints & dialogue guidelines (Faith)	0	10	0	Faith lead
11	Implement art assets (Elias)	0	0	10	Elias lead
12	Env. layouts (Elias)	0	0	10	Elias lead
13	Text & movement systems (Elias)	0	0	15	Elias lead
14	Save data system (Elias)	0	0	10	Elias lead
15	Trustworthiness stat mechanics (Elias)	0	0	10	Elias lead
16	Scalable save file format (Elias)	0	0	5	Elias lead
17	Client-server request system	0	0	5	Elias lead

	(Elias)				
18	Developer debug system (Elias)	0	0	5	Elias lead
19	Foundational NPC interaction (Elias)	0	0	5	Elias lead
20	Prototype initial room (Elias)	0	0	5	Elias lead
	Totals	70	70	70	