

Project Milestones & Time Table (October–April)

Phase 1: Foundation & Planning (October)

- **Milestone 1:** Research suitable game engines for technical and creative needs
- **Milestone 2:** Investigate engine documentation, tutorials, and community resources
- **Milestone 3:** Study traditional game development principles (level design, feedback loops, progression systems)

Phase 2: Concept & Design (November)

- **Milestone 4:** Design initial game concept and narrative script
- **Milestone 5:** Define core mechanics and player objectives
- **Milestone 6:** Document early design decisions (what worked, what didn't)

Phase 3: Asset Creation (December–January)

- **Milestone 7:** Design visual assets (characters, environments, UI)
- **Milestone 8:** Design audio assets (music, sound effects, voice cues)

Phase 4: Single-Player Development & Testing (January–February)

- **Milestone 9:** Implement and test early gameplay attributes (movement, combat, camera)
- **Milestone 10:** Refine gameplay based on feedback and performance metrics
- **Milestone 11:** Validate single-player experience through playtesting and user feedback

Phase 5: Multiplayer Development & Testing (February–March)

- **Milestone 12:** Research multiplayer frameworks and networking options
- **Milestone 13:** Develop core multiplayer functionality (sessions, sync, matchmaking)
- **Milestone 14:** Test multiplayer features with multiple users
- **Milestone 15:** Refine multiplayer systems based on test results and feedback

Phase 6: Finalization & Documentation (March–April)

- **Milestone 16:** Document multiplayer implementation details and known limitations
- **Milestone 17:** Final polish, bug fixes, and performance tuning
- **Milestone 18:** Prepare final presentation/demo for Spring showcase

Effort vs. Impact Matrix

Task	Effort	Impact
Research game engines	Medium	High
Investigate engine documentation & tutorials	Medium	High
Study traditional game development principles	Medium	Medium
Design initial game concept & narrative script	High	High
Define core mechanics & player objectives	High	High
Document early design decisions	Low	Medium
Design visual assets (characters, environments, UI)	High	High
Design audio assets (music, SFX, voice cues)	High	Medium
Implement and test early gameplay attributes	High	High
Refine gameplay based on feedback	Medium	High
Validate single-player experience through playtesting	Medium	High
Research multiplayer frameworks	High	Medium
Develop core multiplayer functionality	High	High
Test multiplayer features with multiple users	High	High
Refine multiplayer systems	High	High
Document multiplayer implementation and limitations	Low	Medium
Final polish, bug fixes, performance tuning	Medium	High
Prepare final presentation/demo	Medium	High