Project Charter

Project Title

Project Name: The Forsaken Planet (Serious Game)
Project Sponsor: ALGOSUP
Project Manager: Mathias GAGNEPAIN
Date Prepared: 2024/11/13

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1. Project Purpose

The purpose of the Forsaken Planet is to create an educational and immersive game that raises awareness about environmental conservation. Players will explore a damaged ecosystem on an alien planet, learning about ecological restoration and the impact of human-like activities on natural environments. By engaging players in ecological challenges and teaching sustainable practices, the project aims to promote real-world awareness and inspire players to make more environmentally conscious decisions.

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2. Project Objectives

The Forsaken Planet Project aims to achieve the following objectives:

- **Raise Environmental Awareness**: Educate players on ecological principles and the consequences of environmental degradation, using gameplay mechanics that illustrate the impact of their actions on the ecosystem.
- **Engage Players with Restorative Actions**: Design interactive puzzles and missions that challenge players to restore the planet’s ecosystems through non-violent, ecology-based tasks.
- **Promote Sustainable Thinking**: Inspire players to apply the ecological lessons learned in-game to real-world actions by emphasizing the importance of biodiversity, resource management, and pollution control.
- **Deliver an Immersive Experience**: Create a visually appealing and cohesive 2D game world that engages players with atmospheric environments and adaptive AI, offering an engaging and thought-provoking experience.
- **Collect Data on Player Engagement and Awareness**: Gather feedback on players’ understanding and retention of ecological concepts through in-game metrics and post-game surveys, to assess the game’s educational impact.

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3. Scope

This project will focus on developing an educational 2D game centered around environmental restoration and ecological awareness. The game will include multiple interactive zones, a variety of puzzles, and story-driven missions that educate players on sustainability principles.

In-Scope

- **Game Design and Development**: Create and implement gameplay mechanics focused on environmental restoration, including puzzle-based interactions, adaptive AI, and ecological impact systems.
- **Narrative and Lore Creation**: Develop a compelling storyline, world lore, and characters (such as the scientist guide) to convey educational messages effectively.
- **Graphics and Art**: Design 2D visual assets for different environments, including Pokémon-style exteriors and Rain World-style interiors, to create an immersive atmosphere.
- **Educational Content**: Integrate educational resources and information about ecology and sustainability within gameplay, supported by guided explanations from the scientist character.
- **Playtesting and User Feedback**: Conduct beta testing with diverse users to gather feedback on gameplay experience and educational impact.
- **Final Testing**: Complete final testing of the game with supporting materials to ensure functionality and player engagement.

Out-of-Scope

- **Mobile or Console Porting**: The game will be developed only for PC during this phase, with no porting to mobile or console platforms planned.
- **In-Depth AI Development**: Advanced adaptive AI capabilities beyond basic responses to player actions will not be included in this phase.
- **Localization**: The initial release will be in English only, with no additional languages or localization efforts planned.
- **Extensive Marketing Campaign**: Promotion will be limited to organic marketing efforts; no large-scale advertising campaigns will be conducted.

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4. Deliverables

The Forsaken Planet Project will produce the following key deliverables:

1. **Game Prototype**: A functional prototype showcasing core gameplay mechanics, including ecological puzzles, non-combat interactions with flora and fauna, and the impact of player actions on the environment.

2. **Final Game Build**: A polished, complete version of the game with all in-scope features, including the central hub (ship), multiple interactive zones, educational content delivered by the scientist character, and 2D graphics inspired by Pokémon and Rain World aesthetics.

3. **Playtesting and Feedback Report**: A summary of playtesting results, including player engagement metrics and feedback on educational content comprehension, to assess the game's impact and suggest improvements for future iterations.

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5. Timeline and Milestones

The following timeline outlines the key milestones for the development and release of the Forsaken Planet.

Milestone	Target Date
Project Kickoff	2024-11-04
Game Concept and Design Finalized	2024-11-12
Prototype Development Completed	2024-11-22
Initial Playtesting and Feedback	2024-11-25
Full Game Development Completed	2024-12-11
Final Playtesting and Adjustments	2024-12-12
Project Completion	2024-12-20
Post Mortem	2024-12-20

6. Project Budget

As this project is being developed entirely in-house using existing resources and team members, there is no allocated budget required for external expenses.

- **Total Budget:** $0
- **Internal Resources Only**: All development, design, and testing are conducted by internal team members using existing tools and facilities.

7. Key Stakeholders

The following individuals play critical roles in the success of the Forsaken Planet Project.

Stakeholder Name	Role	Responsibilities
ALGOSUP	Sponsor	Provides project guidance and ensures alignment with educational goals
Mathias GAGNEPAIN	Project Manager	Oversees project progress, manages timelines, and ensures deliverables are met
Enzo GUILLOUCHE	Program Manager	Designs core game mechanics, narrative elements, and gameplay experience; manages visual style and 2D artwork to maintain cohesive and engaging graphics
Evan UHRING	Technical Leader	Leads the technical development, ensuring the integration of game systems, adaptive AI, and overall technical performance
Michel RIFF	Software Engineer	Implements game mechanics, ecological impact system, and adaptive AI elements
Axel DAVID	Technical Writer	Writes game instructions, and ensures clarity in communication for development and user support

Stakeholder Name	Role	Responsibilities
Tino GABET	Quality Assurance	Coordinates playtesting, gathers feedback, and ensures quality control

8. Project Risks and Mitigations

The following are potential risks to the success of the Forsaken Planet Project, along with proposed mitigation strategies.

ID	Description	Risks	Impact	Likelihood	Solution
1	**Create a serious game is an exhausting work.**	We may not finish on time, misunderstood the client requirements.	High	Medium	Start with the most simple and fundamental tasks and go to more detailed ones.
2	**The new team highlights the possible issue of having different conventions within the team members.**	The communication may suffer from having different coding or documentation styles.	Medium	Medium	We will define precise specifications to ensure this does not happen.
3	**Compatibility between different hardwares is hardly possible.**	If the client decides to play the game on another hardware than the developpement one the game can crash or have unexepected behavior.	Medium	Low	We will endeavor to make it cross-platform and testing it on different Operating System.
4	**The client may decide to change the requirements of the project.**	We would reconsider a new path to take, possibly delaying us if we were already done.	Medium	Medium	We will often communicate with the client to ensure the current specifications are relatable.

ID	Description	Risks	Impact	Likelihood	Solution
5	**Winter is here, sicknesses and transport issues could come up easier.**	Team members may be late or even missing, possibly for multiple days.	Medium	High	The work of absent members will either be shared to others, done later, or done remotely.
6	**Inadequate Testing**	If testing is not comprehensive, it may lead to undetected bugs and errors in the interpreter.	High	Medium	Implement rigorous testing protocols throughout development and regularly conduct test reviews.
7	**Team Member Turnover**	If key team members leave, it could disrupt project progress and knowledge transfer.	High	Low	Cross-train team members on critical tasks and maintain documentation to facilitate knowledge sharing.
8	**Technology Obsolescence**	Rapid advancements in technology may make the chosen technology stack outdated, affecting project compatibility.	Medium	Medium	Regularly review and update the technology stack to incorporate the latest advancements and ensure long-term compatibility.

ID	Description	Risks	Impact	Likelihood	Solution
9	**Insufficient Backup and Recovery Mechanisms**	Data loss due to inadequate backup and recovery mechanisms may result in setbacks and compromised project integrity.	High	Medium	Implement robust backup and recovery procedures to safeguard critical project data and ensure a quick recovery in case of data loss.
10	**Network and Infrastructure Issues**	Unforeseen issues with the network or infrastructure may disrupt project activities and communication.	Medium	Medium	Implement redundancy in critical systems, regularly monitor network performance, and have contingency plans for infrastructure failures.
11	**Team Member Burnout**	Excessive workload and stress may lead to team member burnout, impacting productivity and morale.	High	Medium	Monitor team workload, encourage work-life balance, and provide support mechanisms to prevent and address burnout.

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