Feasibility Study

"The Oregon Trail with Python(s)"

# Introduction:

The purpose of our project is to recreate the popular text-based adventure decision game from the ‘70s “The Oregon Trail” using python. This will not be a 1:1 recreation but simply inspired by it. This version will have python puns included in gameplay to reference the language the game is built with.

# 1. Technical Feasibility:

Creating the game in Python is technically feasible. Python is a flexible programming language. It supports a wide range of functionalities used for developing a text-based simulation game like "The Oregon Trail." There are extensive libraries and frameworks for handling user input, managing gameplay logic, and displaying text-based graphics. Additionally, there is a large Python community. This provides many resources and support for game development.

# 2. Legal Feasibility:

Developing this spinoff game in Python is legal. It’s simply for a class project. As long as the project adheres to relevant copyright laws and does not infringe on intellectual property rights, we should be fine. This is a satirical recreation of the classic game, so no assets will be plagiarized from the original game.

# 3. Operational Feasibility:

Creating and operating the game in Python is operationally feasible. It is easy to write, maintain, and debug code in Python. The game's design can be broken up into manageable components. This will make it easy to collaborate and work on it as a team. Python's cross-platform compatibility allows the game to run on various operating systems. This enhances its accessibility and usability.

# 4. Time Feasibility:

Completing the game within the time constraints of a semester is feasible. We will define realistic requirements and objectives. This will make it feasible to develop the core functionality of the game on time.

# 5. Economic Feasibility (Cost Benefit Analysis):

To assess the economic feasibility of the project, several factors need to be considered:

## a. Projected Profitability:

"The Oregon Trail" game would be popular with those who like retro gaming, a common theme now. There is a large market for this type of game right now. It would bring the nostalgia feeling to market. This could run on many different devices, which would lead to a larger market that could use it. This game could be rated highly profitable. For example, there are 10,000+ downloads on the Google Play store of “Pong,” another retro game. If in-game advertising is used, this could be a valuable source of revenue.

## b. Total Cost of Completion:

The cost of completing the project includes the development time of our team for 5 hours per week per developer at $75 per hour. Additionally, marketing and distribution costs will also be considered. The total cost estimate is $15,000 for development time and $5,000 for marketing and distribution.

## c. Estimated Investment by Outside Parties:

We have secured funding from an external investor who is willing to sponsor the development and distribution of this project. Dr. Steven D. Carver, Ed. D., MS, MS will be supporting our efforts in this project.

# 6. Contribution to Organizational Objectives:

The objectives of this course are to apply project management skills to software development projects. This aligns with those objectives.

# 7. Implementation within Schedule and Budget:

As mentioned previously, this project is feasible in the 8 week semester with funding from our external investor.

# 8. Integration with Other Systems:

The game can be played across many different platforms and does not require any other system to function. We will ensure compatibility with various operating systems to increase the reach of the game.

# Conclusion:

In conclusion, developing "The Oregon Trail with Python(s)" game feasible. The group will perform further risk analysis and project planning to ensure the success of the project.