

1. Historical Setting: Provide a comprehensive description of the historical background and context surrounding your game. Detail the period, location, cultural milieu, and any significant events that inform the historical setting of your game.

Our game takes place in a world plunged into chaos caused by the collapse of a once-mighty empire. This marked the end of an era and the beginning of a new era filled with strife and uncertainty.

The collapse of the empire, which had stood as a beacon of power and civilization for centuries left behind a vast power vacuum that reverberated across the known world.

Technologically and culturally, the world finds itself in a period reminiscent of the high Middle Ages. While the knowledge and achievements of the fallen empire linger in scattered ruins and fragmented texts, much of the technological and societal progress it fostered has been lost or forgotten. Feudalism, chivalry, and feudal warfare dominate the landscape, with castles, knights, and medieval armies coloring the landscape.

A century has passed since the empire's fall, yet its shadow still looms large over the fractured lands it once ruled. The power vacuum caused countless factions to emerge, each vying for control over the empire's former territories. Warlords, noble houses, religious orders, and ambitious individuals of all stripes seek to carve out their own domains, driven by visions of power, glory, or survival in this new, uncertain world.

This is where you come in. Will you, the ruler of a small village, be able to fend off rival warlords, forge new alliances and expand your village to be the shining capital of a new empire capable of bringing peace and prosperity to this desolate region once again?

2. Interaction: Articulate the type of interaction players can expect within the framework of your game. Will it involve exploration, strategic decision-making, or other forms of interaction?

The players will be able to make strategic city management decisions by using their resources. This can range from choosing which buildings to build or upgrade to carefully designing their city layout by moving buildings around to their preference.

They can even choose which soldiers to recruit to reach their ideal troop composition for an upcoming battle. Armies cost food to maintain so players have to plan ahead to not let their soldiers starve to death.

Another aspect to take into consideration is the fact that players will be able to manage multiple settlements and can exchange resources between these settlements.

The players will also be able to chat, battle or form alliances with other players. Allied players can even exchange resources to ensure the prosperity of their guild but players have to be careful resource transfers of any kind can be intercepted by enemies.

Users can scout enemies and discover their army composition and size and use this information to their advantage.

3. User Experience: Detail your strategy for delivering an engaging and immersive experience for players within the setting. Discuss gameplay mechanics, progression systems, and mechanisms for player engagement and enjoyment.

Players will find themselves immersed in the challenge of competing against others to develop their cities. Balancing the expansion of resource production and military prowess is key to victory. A crucial element of the game involves scouting adversaries, constructing and maintaining formidable armies, and strategically choosing and attacking lucrative cities to plunder their resources. However, players must remain vigilant, as neglecting the defense of their own city leaves them vulnerable to raids, resulting in resource losses.

This aspect of gameplay can lead to rivalries as a person may not take kindly to (repeated) raids. This animosity can fuel a cycle of retaliatory attacks between players, driven by a desire for vengeance.

The players can also interact with other players by forming a guild with other players or joining an existing one. While a guild provides a peace between members and possibilities for resources exchanges it can also function as a social community where members can casually chat or strategize with each other.

Players can also become friends with each other by sending friend requests. Friends can help one other by sending trade deals & exchanging goods.

Users will actively see their city(s) grow during their playtime, and will be able to see their progression on a global leaderboard. The player can even construct decorative buildings to personalize their cities. A leveling and achievement system will also reward the Players for their progression. Leveling up is done by gaining enough exp, exp is gained by constructing buildings, attacking enemies, achievements, ...

Daily logins are encouraged by a wheel of fortune and daily challenges which the player can play or complete once a day, these will provide useful rewards such as gems which can be used to speed up the construction of buildings.

To further improve the player's experience, a game administrator can be assigned, who can introduce certain seasons in which particular resources are for example more scarce or could be produced at a higher rate. This will stimulate players to keep interacting and thinking about the organization of their settlements. It simply adds a fun part!

Players will also be notified via a notification if something of significance happens in the game while they are offline.

4. Tools and Technology: Specify the tools and technology you plan to utilize for your project. You can refer to the assignment for a list of technology and tools that are suggested and/or required.

Web server:

- Flask
- Jinja2
- REST

Web design:

- HTML + Javascript + CSS
- React
- Bootstrap

Database:

- PostgreSQL

API:

- REST Principle

Teamwork & planning:

- Github
- Miro
- Jira

5. Feasibility: Discuss the feasibility of your project and the challenges you expect to encounter along the way. Explain why the design of your game is at the same time challenging as well as realistic given the time available.

There are a couple of challenges we are expecting which our team needs to overcome. Starting with the general use of a whole new set of tools. We hope this will go along with the standard learning curve, a hard start but with a static progress gain towards the end of the project.

As technical code-related issues we listed the following:

Correct syncing of events even when players are offline, this means that for example a resource production building that has finished upgrading while the player is offline must

begin producing resources without needing the player to login or if a player is attacked while offline and soldiers are killed the reduced army food upkeep must be taken into account.

Correct calculation of events while keeping server strain to a minimum. We can't constantly keep calculating everything while the player is offline as this would cause heavy server strain and limit the amount of possible players that can play the game.

However, a real time efficient update of the game when the user is logged in, is as important as the low use of resources when the user is logged in. We will have to develop a good balance there.

Implementing a separate admin overview which can adjust the game mechanics by setting up seasons.

Creating the functionality to intercept the transfer of goods and calculate the point this happens.

Setting up a system to notify the user about the activities that happen or happened in the meantime when the user was away.

While these problems may prove challenging we think they are definitely solvable and realistic to implement given the time available.