Design Document for: Aceituna Project's as yet Unnamed Game

Insert cool slogan Here

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Description

Design History:

This section will describe the stages taken to create the full design of the game . Listed here is changes made in each version of the design document for the game.

Version 1.0:
Version 1.0 is the first complete edition of the design document. The entire game design is discussed with each part of the design addressed.

Game Overview:

Goals:

Goal 1

The game will be a tick based massive multiplayer online strategy game with concepts found in games like Sid Meier's Civilization and Alfa Centauri, and commerce/business games like Merchant Prince or Railroad Tycoon.
Each player will control Military, Religious and/or commerce units, Installations (Like Fortresses, Factories, Research Labs, Temples, Depots, Trade posts, etc) and (if he so wishes) Cities.
At the beginning of the game, the technological level of the units and installations available will be primitive but the players will be able to research new technologies that will make better units and installations possible.

Goal 2

The game will have the maximum possible complexity in order to simulate as realistically as possible the course of human history.

High levels of complexity are avoided in current games for 2 main causes:

1. The Artificial Intelligence requirements for the game grow exponentially as the game's complexity grows because the game AI must consider every possibility before choosing a course of action. Our game will not be affected by this since it doesn't have computer controlled players.

2. The level of micromanagement needed to control vast empires in such detail, this will be avoided in the game by delegating control of units, installations and cities to other players.

Among of other things the game will include the following features not used in most strategy games due to the need to avoid excessive complexity

· Every unit will be equipped with weapons, armour and equipment at the players choice (he will not have a "phalanx" unit, instead he can (if he has the necessary goods) produce an infantry unit equipped with long spears and big shields and call it a phalanx)

· Every unit must be supplied with food (and other necessary goods depending on its equipment) by taking it from the terrain they occupy ("living of the land") or from depots or transport units that carry the necessary goods.

· The combat system will consider the equipment of each unit, the relationship between the attacking unit equipment and the defending unit equipment (as in cavalry not being very effective against pike infantry), the terrain, and the relationship between the terrain and the units equipment(horses have problems in swamps and forests, pikemen do not work as well in rugged terrain, etc)

Goal 3

The game will not limit the player's choice in regard to his role in it, for example a player could decide to manage troops but no cities and be a mercenary captain, another could use only spy units and sell information to other players, another could use transport units to be a transport tycoon, or have a few cities and a vast mercantile network like the renaissance princes of Italy, have only factories an be a industry tycoon….

Goal 4

The game server will be “Client Agnostic” and both the game server and client’s code will be open source, in order to allow anyone to create his own client (with his own graphics, GUI, etc) or his own Mod of the game by changing the game server’s code.

FAQ:

What is the game?

The game will be a massive multiplayer online strategy game, the game will include elements of military strategy, commerce, business and social and technological development.
At the beginning of the game, the technological level available will be primitive but the players will be able to research new technologies, eventually reaching modern science and

technology and possibly beyond, depending of the game instance configuration (allowing or not "sci-fi" techs like spaceships, Mechas, etc.)

Why create this game?

Single and multiplayer games in this style oversimplify the game play in order to avoid overloading the AI or boring the player with excessive micromanagement, our goal is a game with all the deepness and complexity excised out of other games, and at the same time fun to play, using the power of massive multiplaying to avoid AI players (which are never as fun to play against as a human player) and micromanagement.

Where does the game take place?
The game will take place in a earth-like world randomly generated.

What does the player control?

The player will start with a handful of units (selected before starting to play) and will have to reach any goals he sets for himself (military power, money, science, religious influence, etc) by wisely managing those units and his relationships with other players.

What is the main focus?

The player will choose his focus, the game will allow him to set his own goals and the means he will use to reach the.

What's different?

Currently there are some games that allow Civilization-like gaming in a MMOSG (massive multiplayer online strategy game) style.
Our game will have far more complex and rich gameplay and far more choices for the player to take.

Feature Set:

General Features:

- Huge flat-map world (Possibly many times larger than the maps of similar games, depending on the computer resources needed).
- "Tick Based" gameplay, each unit will have a number of "Time Units" that will be used to move and perform other actions (build installations, attack other units, etc), once each unit has spent his "Time Units" the player will have to wait until a "Game Tick" (a configurable amount of time, probably around an hour) passes for his units to start regaining UTs.
- Installations, Cities and terrain tiles will be updated each tick, generating new goods, increasing or decreasing populations and resources will grow back or be depleted.
- This allows players with different schedules or in different time zones to play in the same world without worrying about "losing" turns.

- Many players controlling different units, installations and cities
- Loyalty model in which each unit and city will have loyalty to different players depending on their actions, this loyalty can be used to take control of the units or cities.
- Task delegation system: Each unit, installation or city will have an Owner and a Controller, the Owner can avoid micromanagement by ceding control of his units/ cities/installations to other players, who become the "controllers", the owner can assume control of his property at any moment, but the risk exists of the unit or city's loyalty to the Controller surpassing it's loyalty to the owner, in which case the unit's ownership would pass to the controller.
- Scientific research and technology development allowing the use of new equipment for units and new installations.
- Completely "forum based" diplomacy and inter-player relationship, no game-enforced alliances, pacts or any other kind of agreement.
- Complex economy system were some players will extract raw materials, sell them to other players to manufacture goods to equip yet another player's units and cities, while allowing some other player to do al the production-chain steps by themselves.
- "Live" terrain, the resources of each terrain tile will be depleted by extraction and will grow back in time (if reasonable, as in a woods tile supply of wood or a plains tile supply of food or horses, as opposed to a mountain tile supply of iron).
- Dynamic Unit Types: Every unit will be equipped with weapons, armour and equipment at the players choice (he will not have a "phalanx" unit, instead he can (if he has de necessary goods) produce an infantry unit equipped with long spears and big shields and call it a phalanx)
- Realistic Logistics: Every unit must be supplied with food (and other necessary goods depending on its equipment) by taking it from the terrain they occupy ("living of the land") or from depots or transport units that carry the necessary goods.
- Complex Combat System: The combat system will consider the equipment, morale and loyalties of each unit, the relationship between the attacking unit equipment and the defending unit equipment (as in cavalry not being very effective against pike infantry), the terrain, and the relationship between the terrain and the units equipment(horses have problems in swamps and forests, pikemen do not work as well in rugged terrain, etc)

Playing the Game:

When a player joins the game he will be asked to select a number of units with which he will start in the game world, a point based system will limit his choices so each player starts with roughly similar chances. The units' technological level will be based on the running game's average technological level.

The player's units will start in a semi-random location in the game map (not completely random in order to group a certain amount of players close enough to have an economy and military and diplomatic relationships)

The player will move/perform actions with his units in the map until each unit has spent it's Time Units or the players has done all he wants to do at the moment, he will also administer his Installations and cities, giving orders to them about what to produce, what to extract,

recruiting and equipping new units, transferring goods or raw materials between installations and transport units, and many other possible actions.
Some installations and units will have the capability to buy or sell their contents (goods or raw materials) even when the controlling player is offline, and the players that are online can buy or sell to them if they follow the guidelines specified by the unit/installation's controller player (for example: sell wheat if offered more than 300 gold/ton)
The player will also be able to transfer ownership or control of his units, cities and installations to other players.

Game Play Models:

Resources:

Natural resources will be spread across the map. To collect these resources the relevant installation must be built on the resource to collect it.

Economy:

Players with raw material producing installations can sell their production to other players for them to process into manufactured goods in suitable installations, or transport them to their own installations (or pay other players to transport them there)
Players with manufacturing installations can do the same with their own installation's production.
Players with armies or cities can buy goods and resources from the other players or take them by force or ask for them as taxes.
In short the economy will be as close as possible to the real world's economy

Religion:

Some kind of units and installations (Churches, priests, etc) will have the capacity to affect the loyalty of populations and units towards or against a given player or to increase or decrease the morale of units and cities, a player can found a great religion by spreading "the faith" far and wide in the game world.

Media:

Not only religions can affect people's morale and loyalties, as technology progresses newspaper, TV and Radio stations and other kinds of Mass Media installations can be built and used for this purpose.

Governance:

Players that control cities will manage them in much the same way found in Civilization and other games, the game will not enforce any concept of race, civilization or nation, but the players can (and will) form their own alliances and manage them in any way they choose, for example:

Communism: all Installations,units and cities controlled by the same player or small number of players acting in concert.
Democracy: The players that have the loyalty of more people decide what to do.
Feudalism: An overlord player delegates parts of his kingdom to other players to manage, the other players can if they want, delegate parts of their fief to to others and so on.

Again, the game does not enforce neither allows this kind of arrangements, any form of government conceivable can be implemented by the players (who also will have to enforce it as well as they can… or want).

Science & Technology:

Scientific Installations will allow researching of scientific advances, installations built near or in great cities will research faster, if there are other scientific installations (of the same or other player) nearby the research will advance even faster.
Scientific advances will allow the players who have them to produce new kinds of goods, extract new types of raw materials, and build new types of installations.

Society:

All societal relationships (Except for people's morale and loyalty) will be between the players themselves, again without any game enforced or allowed "modes".

Military:

A player can have any amount of military units he can feed, equip and manage, the units can be supplied by the player with goods and food produced by himself, bought from other players or pillaged from others, small and primitive units can "live of the land" by extracting raw materials from undeveloped squares, but this is very time consuming limiting the unit's speed.

Technical Specifications:

The game will be developed using Sun's Proyect Darkstar platform for massive online gaming, the server will be developed in the Java programming language and the original

client too, as mentioned above, the server will be "client agnostic" thus allowing anyone to create his own client with his own UI.

Thanks to: ***Dale Kent*** for his template for his game ***"Empires"*** that I used as a model for creating this one.