The Simulation Game

# Table of Contents:

[Game Playing](#_Game_Playing).

[Game Buildings List.](#_Game_Buildings)

[Game Technology Tree.](#_Technology_Tree)

[Civilization Management Overview.](#_Civilization)

[Social System.](#_Social_System)

[Financial System.](#_Financial_System)

[Resources System.](#_Resources_System)

# Game Playing

I need a game that simulate the real life of a civilization in the world.

The player will be able to manage a new civilization from only two families (may be more if he needs to be more easy) and grow this civilization to be a powerful one among other civilizations in the world.

The game is progressed in days, starting from day 1, and one day takes 1 hour of real game playing, any time-related actions (e.g. Age of human, time of construction, ...) takes parts of the day (hours).

The maps of the game may contain up to 16 civilizations, and comes in 4 types:

* Small maps: that contains only two players.
* Medium maps: that contains up to 4 players.
* Large maps: that contains up to 8 players.
* Huge maps: that contains up to 16 players.

The player may choose any type of map and choose any number of players (like choose huge maps and only 2 players).

The money of the game is the unique Dinar (Gold) + Dirham (Silver) coins that can be collected from the gold and silver workshops, where one Dinar = 100 Dirham.

The player can build various buildings that has effects on the game and civilization behaviors, and the buildings requires resources to be built.

The player also can research new technologies that enable advanced knowledge and options to the player in managing the civilization.

# Game Buildings

Every system in the game requires some buildings associated with, these buildings require resources and money and takes an amount of time to be built, besides it requires some level of technology to be researched in order to enable the knowledge to build this building.

Here is a table show the buildings available in a civilization and the resources required:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Building*** | ***Money*** | ***Resources*** | ***Time*** | ***Technology*** | ***Owner System*** | ***Jobs*** |
|  |  |  |  |  |  |  |

# Technology Tree

The player can research various technologies, and these technologies depend on other technologies and enable new buildings and tools for the player.

The technology to be researched requires time and money to be researched, the time can be boosted by assigning researchers in advanced times.

The list of technologies can be researched is:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Technology*** | ***Parent Tech*** | ***Time*** | ***Money*** | ***Min Researchers*** | ***Unlocks*** |
|  |  |  |  |  |  |

# Civilization

To be able to manage the whole civilization, the player is provided a list of systems that deliver a full control over all aspects of the civilization, these systems are:

1. Social System: which maintain the population.
2. Financial System: which maintain the money.
3. Resources System: which maintain the raw resources in the civilization.
4. Supply System: which maintain the goods providing to the people.
5. Politics System: which maintain the type of government in the civilization.
6. Diplomacy System: which maintain the relations with others.
7. Foreigners System: which maintain the foreigners in the civilization.
8. Trade System: which maintain the trading through the civilization or with others.
9. Defense System: which maintain the army.
10. Security System: which maintain the security and police in the civilization.
11. Manufacturing System: which maintain the factories and production.
12. Health System: which maintain the health of the people.
13. Agriculture System: which maintain the farms and plants and animals in the civilization.
14. Education System: which maintain the learning process of people.
15. Housing System: which maintain the housing providing in the game.
16. Religion System: which maintain the religion in the civilization.
17. Facilities System: which maintain providing water, electricity, garbage, ...
18. Transport System: which maintain the transportation and roads.
19. Employment System: which maintain providing jobs for people.
20. Sports System: which maintain the sports in the civilization.
21. Entertainment System: which maintain all resources of entertainment in the civilization.
22. Environment System: which maintain providing good appeal in the land.
23. Research System: which maintain researching new technologies in the game.
24. Communication System: which manages the communication between humans and other systems.
25. Construction System: which manages the constructing of various game buildings.

and here are the details of each system.

# Social System

The civilization core resource is the human, and all civilization aspects is to serve that human and keep it happy.

The human comes in two types (Man, Woman), and any man in the civilization can marry a woman which is not his mother or sister or daughter, this happens by the man to send a marriage proposal to the chosen woman among non-married women, and waiting for response from her.

The man chooses a woman based on some conditions like (the age, the wealth, the religion, …), and also the woman accepts based on these conditions.

If the woman accepts a marriage proposal, a new family exist and start producing children to the civilization, the family is restricted to only 2 children, and may cannot produce children at all, based on a random sampling of the population.

At some conditions, like a woman that cannot produce children or a man that cannot too, or temper of each spouse, a divorce may happen between a two married humans.

As a new human comes to life, an end age is assigned to him at random sampling and measured by days, and as soon as he reaches to this age, he died, he may die also for illness or not enough supplies, or in war or attacks, …

Any human can have relations with any other human is his civilization or another civilization, and this relation can range from rivals to friendship.

When the man searches about a wife, he starts with his known people which his relation is good and with his family members, then he starts searching in the remaining women.

At this point, the social system comes to manages these interactions, and recording the existing humans in the civilizations and the relations with others (marriage, children, friends, rivals, …).

In the social system panel, the player can control how many wives the man can have, what is the maximum allowed children for the family, is the marriage of sisters is allowed or not, the minimum and maximum age of marriage for both men and woman, allowing relations with other civilizations, and so on.

# Financial System

The most important resource of the civilization after human is the money, the money computed in Simulation game using two measures (Dinar, Dirham) where 1 Dinar = 100 Dirham.

There are many sources for the money in the game, these sources are:

* Trading items with other civilizations.
* Converting Gold and Silver to money.
* Taxes that the humans pay.

And it required for many things like:

* Buildings.
* Researching Technologies.
* Trading with others.
* Paying Wages for humans.
* Maintaining the buildings.

The civilization has a one big amount of money that can be stored in some special store of the civilization, and an amount of it is assigned as a budget to the overall systems, this budget it dispatched on the other systems in the Financial System.

In the financial system, the player can decide the ratio of the global budget from the income, he also able to see the income and outcome of the civilization, also he can take loans or give loans to other civilizations, also he can decide the min and max wage for employees.

# Resources System

The world has many resources that spread in the world map, these resources includes

* Natural resources like (Timber, Stone, Water, Fish).
* Minerals like (Iron, Coal, Copper, Gold, Marble, Silver, Tin, Lead).
* Crops like (Cotton, Corn, Rice, Wheat, Sugar, Tea, Potatoes, Apples, Panamas, Coffee, Onions, Olives, Lemons).
* Animals like (Cow, Cattle, Sheep, Chicken, Goat).

All civilizations have access to all resources in the world, and once one civilization has access to any resource, it has the option to share this resource with others, or keep it for herself.

The resources are spread in the world at random locations, which means that one civilization may have access to some resources that others don’t have, especially the natural resources.

The most of resources needs specific buildings to gather it, such that:

* Timber needs Lumber Mill.
* Stone needs Quarry.
* Water needs Well and Water houses.
* Fish needs Fishing House.
* Minerals needs Mines.
* Crops needs Fields.
* Animals needs Pens.

All the resources are stored in special stores to be delivered to its production places, the crops are stored in the crops store, the animals are kept in the Pen, the Minerals are stored in the storehouse, fish are stored in food store directly, timber and stone are stored in storehouse.

At this point, the Resources System comes to manage all these things, which keeps records with the available resources and the rate of consumption, also keeps track with the explored resources, the usage of its resources, it also manages buildings that gather resources, notify the Employment System with the required jobs, notifies the Construction System with the buildings required, manage the storing of the resources, and provide info about the storage condition, …