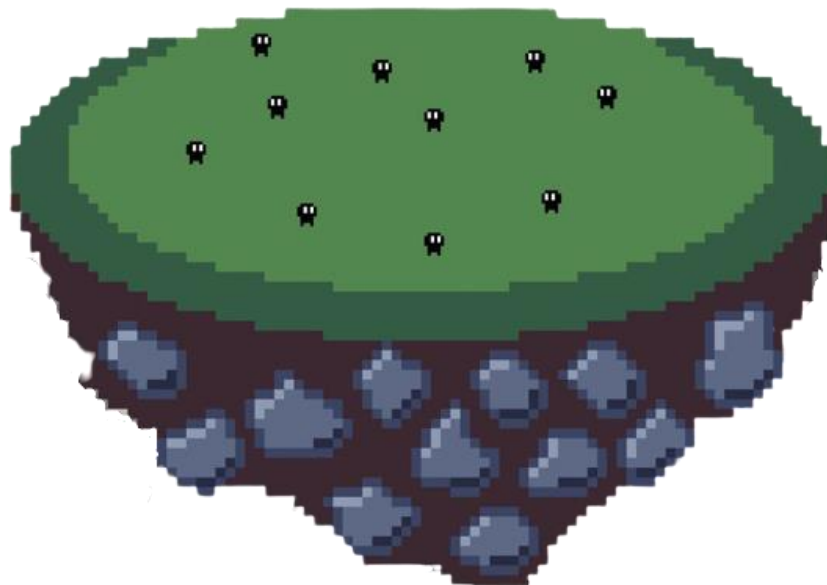


Projet Long de Technologie Orientée Objet

Fonctionnalités de l'application :

CIV ++



EF-02 : CARREZ Jeremie, HINNIGER-FORAY Nohé, JEANDON Emile, KALLEL Ismail, KSSIM Aymane, SEGHTROUCHNI Anas & LAZARE Léo.

Functionalities :

Link to the Notion for more details and visuals :

<https://jeremiecarrez.notion.site/civ-ef583732dffc4317b36b5c7909a21470>

why civ++ ? civilisation & increment (++) operator.



pitch

“civ++” is an incremental civilisation management game.

The player goal is to grow a civilisation which is eradicated every x minutes by an asteroid.

The game ends when the civilisation has reached a sufficient technologic knowledge to build a rocket to escape the planet to survive.



gameplay

Fonctionnalités:

A game will start with the user having two people on an island and all of their stats at zero.

They start clicking on the screen in order to make their population grow via reproduction.

After a certain amount of time the population will be big enough to allow them to buy their first upgrades : food farms, houses, utility buildings, all of which will potentially need workers who are individuals unable to reproduce.




The user will continue their game by clicking and buying upgrades until their world is destroyed for the first time.

After this first reset, the user will see their population back at two people and all of their buildings gone, except monuments. These special buildings will allow the player to buy upgrades faster after each reset.

The user will unlock their first next era after reaching a stat's goal and upgrading their City Hall, unlocking new kinds of upgrades and bringing them closer to victory.




The user will win after reaching the final era of the game and buying the final City Hall upgrade which would allow the inhabitants of the island to escape and live happily ever after.

Stats



























 Name	 Description	 Utilité
<u>Population</u>	La population totale (nombre de personnes)	Score final
<u>Nourriture</u>	La nourriture, que la population consomme (dont les ouvriers)	+ de nourriture ⇒ plus de personnes pouvant vivre et donc plus de reproduction
<u>Ouvriers</u>	La population active (accélère la production mais ralentit la reproduction)	accélère la production. Les ouvriers travaillent mais ne se reproduisent plus, le taux de reproduction faiblit donc + il y a d'ouvriers.
<u>Bonheur</u>	Bonheur général de la population	Haut % de bonheur ⇒ % de food, de vitesse de production et de reproduction amélioré Bas % de bonheur ⇒ l'inverse
<u>Production</u>	La production influe sur l'efficacité des ouvriers	+ de production ⇒ ouvriers + efficace ⇒ constructions plus rapides avec - d'ouvriers nécessaires

Eres

 Name	 Tags	 Related to Upgrades (Ere)
 <u>Ere numérique</u>		<u>Panthéon/Château fort/Usine/Gratte-ciel/Fusée (fin de partie), Champs / Cabane de pêche / Elevage / Outils Agricoles / Engrais, Cabane de bucheron / sculpteur de pierre / usines / robots, Aqueduc / Maison close / Theatre / Cinéma / Stade, Colisée / Hollywood, Pyramides / Cité Inderdite / Empire State Building, Robots</u>

Aa Name	Tags	↗ Related to Upgrades (Ere)
 <u>Antiquité</u>		<u>Panthéon/Château fort/Usine/Gratte-ciel/Fusée (fin de partie)</u> , <u>Champs / Cabane de pêche / Elevage / Outils Agricoles / Engrais</u> , <u>Cabane de bucheron / sculpteur de pierre / usines / robots</u> , <u>Aqueduc / Maison close / Theatre / Cinéma / Stade</u> , <u>Colisée / Hollywood</u> , <u>Pyramides / Cité Inderdite / Empire State Building</u> , <u>Jardins de Babylone / Machu picchu</u>
 <u>Ere industrielle</u>		<u>Panthéon/Château fort/Usine/Gratte-ciel/Fusée (fin de partie)</u> , <u>Champs / Cabane de pêche / Elevage / Outils Agricoles / Engrais</u> , <u>Cabane de bucheron / sculpteur de pierre / usines / robots</u> , <u>Aqueduc / Maison close / Theatre / Cinéma / Stade</u> , <u>Jardins de Babylone / Machu picchu</u> , <u>Tour Eiffel</u>
 <u>Moyen âge</u>		<u>Panthéon/Château fort/Usine/Gratte-ciel/Fusée (fin de partie)</u> , <u>Champs / Cabane de pêche / Elevage / Outils Agricoles / Engrais</u> , <u>Cabane de bucheron / sculpteur de pierre / usines / robots</u> , <u>Aqueduc / Maison close / Theatre / Cinéma / Stade</u> , <u>Pyramides / Cité Inderdite / Empire State Building</u> , <u>Angkor Vat</u>

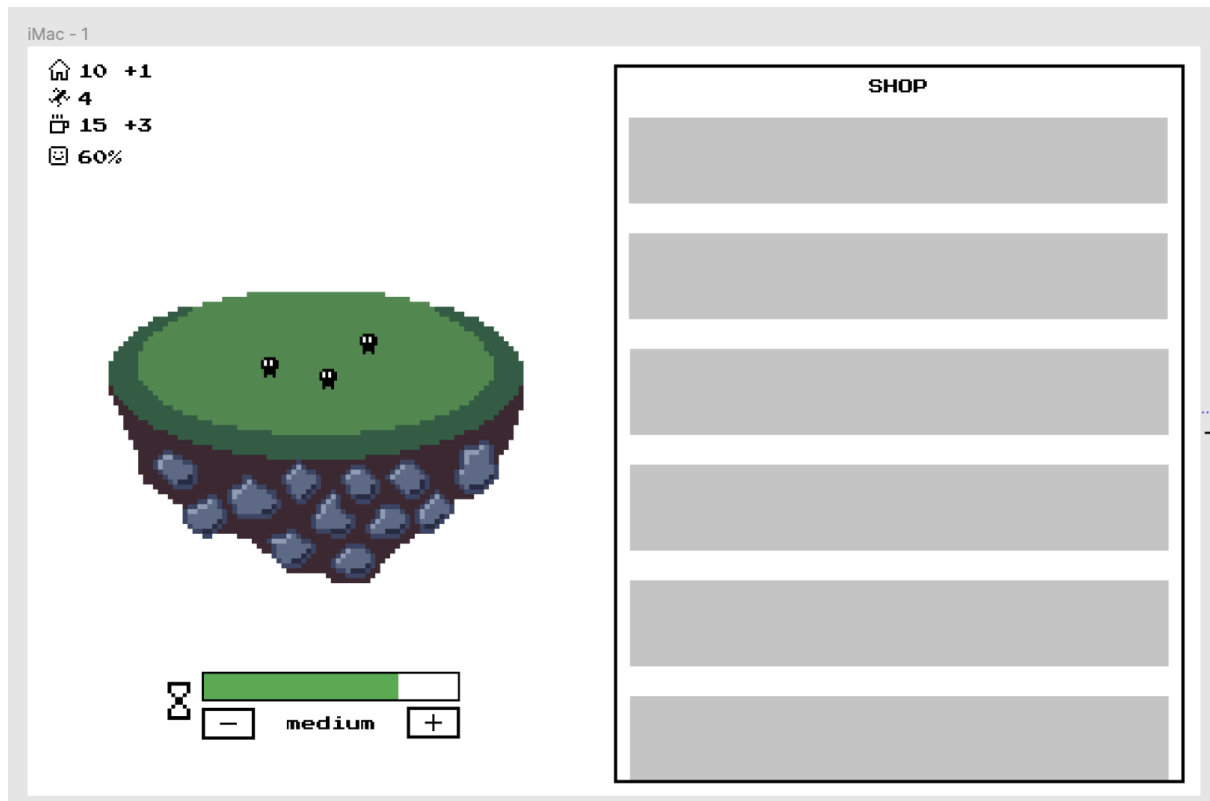
Bâtiments

Aa Nom	Type	Améliore	Ere
<u>Champs / Cabane de pêche / Elevage / Outils Agricoles / Engrais</u>	Bâtiment commun	Nourriture 	 <u>Ere industrielle</u> ,  <u>Ere numérique</u> ,  <u>Antiquité</u> ,  <u>Moyen âge</u>
<u>Cabane de bucheron / sculpteur de pierre / usines / robots</u>	Bâtiment commun	Production 	 <u>Antiquité</u> ,  <u>Ere numérique</u> ,  <u>Ere industrielle</u> ,  <u>Moyen âge</u>
<u>Panthéon/Château fort/Usine/Gratte-ciel/Fusée (fin de partie)</u>	Hôtel de ville 	Joie  Nourriture  Production 	 <u>Moyen âge</u> ,  <u>Antiquité</u> ,  <u>Ere numérique</u> ,  <u>Ere industrielle</u>
<u>Aqueduc / Maison close / Theatre / Cinéma / Stade</u>	Bâtiment commun	Joie 	 <u>Antiquité</u> ,  <u>Ere numérique</u> ,  <u>Ere industrielle</u> ,  <u>Moyen âge</u>
<u>Colisée / Hollywood</u>	Bâtiment Unique	Joie 	 <u>Ere numérique</u> ,  <u>Antiquité</u>

Aa Nom	▼ Type	☰ Améliore	↗ Ere
<u>Pyramides / Cité Inderdite / Empire State Building</u>	Bâtiment Unique	Production ⚙️	🏰 <u>Moyen âge</u> , 🤖 <u>Ere numérique</u> , 🏛️ <u>Antiquité</u>
<u>Jardins de Babylone / Machu picchu</u>	Bâtiment Unique	Nourriture 🌽	🏛️ <u>Antiquité</u> , 🏭 <u>Ere industrielle</u>
<u>Tour Eiffel</u>	Bâtiment Unique	Joie 😄 Production ⚙️	🏭 <u>Ere industrielle</u>
<u>Robots</u>	Bâtiment Unique	Nourriture 🌽 Production ⚙️	🤖 <u>Ere numérique</u>
<u>Angkor Vat</u>	Bâtiment Unique	Joie 😄 Nourriture 🌽	🏰 <u>Moyen âge</u>

User Interface :

Jeu:



Use cases :

First world :

The player will start with their population and City Hall in its primitive form, they should start clicking on their screen to increase the population.

After reaching a population milestone they will be able to buy their first “standard upgrade” to either increase food, happiness or production stats.

By cumulating these upgrades, they can buy their first Unique Building, allowing them to keep its boosts after the resets.

After the first reset :

As mentioned earlier, the Unique Buildings the player buys will not vanish after this reset, but all the population will be brought back to 2 people, the City Hall to its primitive state and all other buildings will be destroyed.

The player will then have to restart building their world, except this time they will reach milestones faster thanks to the Unique Building's boosts. And, this time they

potentially be able to buy the upgrade to the second era of the game, giving them the “Ere Max” effect that comes after upgrading the city hall and transitioning to an other era, which will make arriving to the current era faster after the next resets.

Mid-game :

The player will keep buying all kinds of upgrades and see their world resetting at regular intervals. However just before each reset, they would have reached a slightly more advanced state than the previous worlds.

Endgame :

During the last world, the player would have bought all unique buildings and all city hall upgrades except for the one that will mark their victory. However, they would be able to buy it and achieve victory.