

Nuclear War City Simulator 2019 Xtreme Edition

Josef Bostik
Thomas van Haastrecht
Eric Pereira
Ryan Wojtyla

March 15, 2019

Initial Ruminations

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

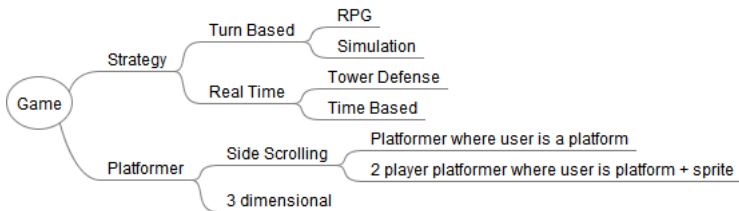
Resources

Buildings

Score

Implementation

Demo



Settlement

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

- turn-based strategy
- 2D grid
- rogue-like
- short
- procedurally generated (we hope)
- high replayability

Game Engine

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

Working with Godot

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

- Steep initial learning curve
- Official Godot documentation is expansive, but it lacks examples.
- Community tutorials are more example-based.
- Recent updates have obsolesced a significant portion of provided community support.
 - solutions for the old system
- The learning curve soon plateaus.
- The native scripting language, GDScript, is nice to use.
- An extensive collection of objects is provided.

Prepare for imminent global thermonuclear war!

- Ensure the survival of as many of your citizens as possible.
- Pacify the masses.
- Manage resources.
- Modify infrastructure.

Population

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

Who really wants to live anyway?

- Educate and inform your citizens (or don't).
- Encourage them to adopt behavior conducive to self-preservation.
- Don't push them too hard!
- Keep them happy.



Resources

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

Food, fuel, tools, medicine, building materials, and more!

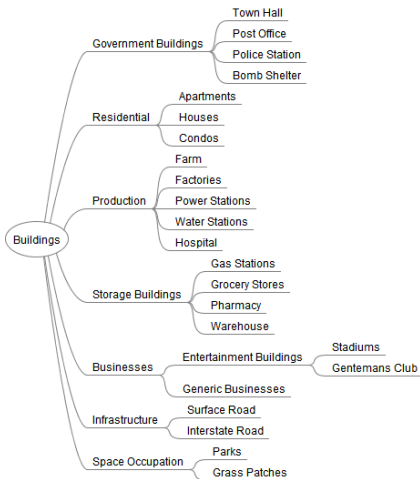
- Optimize the distribution and allocation of limited critical resources.
- Maintain integrity of transportation infrastructure to ensure swift movement of supplies.
- Plan for the future.



Buildings

Permanent residence or fleeting pleasure?

- Buildings play several unique and critical roles within the city.
- Store resources.
- Maintain buildings to help keep the peace.
- Fortify buildings to increase their chance of survival.
- Production buildings can aid the surviving population.



Initial Survival Rate

How many survive the battle?

- Each building has a structural integrity rating.
- This rating can be improved by using “building materials” on them.
- The likelihood of a building’s survival is directly related to its structural integrity rating.
- If a building is destroyed, everything inside it is lost - both people and resources.



Prolonged Survival Rate

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

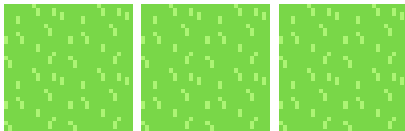
Score

Implementation

Demo

How many survive the war?

- How much food is left to feed the survivors?
- How much medical supplies do they have?
- Are there enough resources to farm?
- Is there housing enough for everyone?



Class Diagram

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

Demo

Nuclear War
City Simulator
2019 Xtreme
Edition

Origins

Game Engine

Foundations

Pieces

Population

Resources

Buildings

Score

Implementation

Demo

