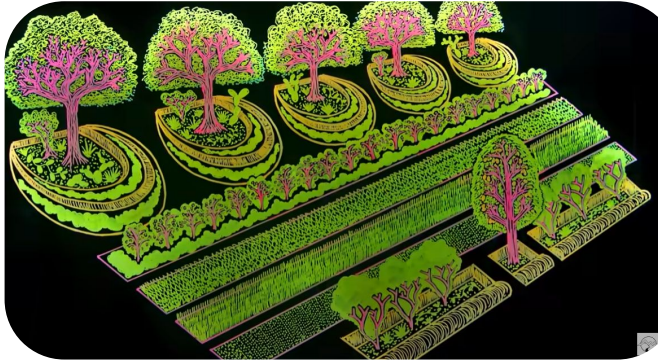# Green Wall

City Builder/Strategy Game

Game Proposal

Team Green 🌳

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Our Game

- "Green Wall" is a turn-based, city builder / strategy game.
- Players start with barren and almost uninhabitable lands which are not suitable for plant growth and agriculture
- Players will need to implement agricultural techniques, build and improve facilities to secure water and food supply, reclaim the soil and cultivate the lands once again.
- The goal is to fight desertification of the land and improve the living conditions of the local communities

Game Idea - Theme

- Our game's concept is inspired by a real world initiative supported by the United Nations and the African Union. The Great Green Wall initiative in the Sahara and Sahel region of Africa aims to stop desertification and land degradation in the region.

- The initiative incorporates various projects like sustainable agriculture, reforestation, and water management, which will be included in various degrees in our game as gameplay elements.

- A "green wall" which our game takes its name from, acts as a protective barrier between barren land and the land it tries to rescue.
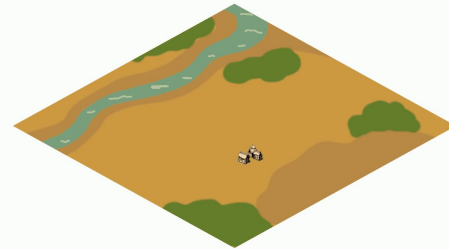
Gameplay

- Players take on the role of managing a community in a barren land
- Each turn players can take multiple actions, ranging from preparing the soil and supplying water, to planting gardens, trees, and building or upgrading facilities.
- Since the land would not be available for planting trees or fruit farming right from the start, players will have to employ agricultural techniques inspired by the real world techniques to terraform the land.
- While fighting against the desertification of the land players must also manage their resources and provide enough food and water for the people
- Players' success is measured by the greenification that they have achieved, and the resources and plants that they have produced after a number of turns
- In later stages of development we also want to experiment with adding multiple levels and adding player progression and upgrades between levels

Technical Achievement

- **Environmental Simulation**
  - Simulation of the effects of players' actions is crucial for gameplay.
  - Players prepare the land, build and upgrade facilities in a turn-based fashion
  - The game will be running a step(turn) based simulation of the environment to simulate the effects of water availability in different parts of the map, growth and spread of the cultivated plants, and effects of weather on soil, settlements & facilities, and plants

- **Procedural Generation**
  - As a high target, we would also like to add procedurally generated levels and challenges to our game for replayability.
  - Map and terrain generation, randomly generated level objectives, weather events, social and logistical events etc.

Big Idea Bullseye

Procedurally generated map,
accurate environmental simulation,
interconnected network of maps

Puzzle base-creating
game about
development with nature
+
raising awareness
about the Great Green
Wall project
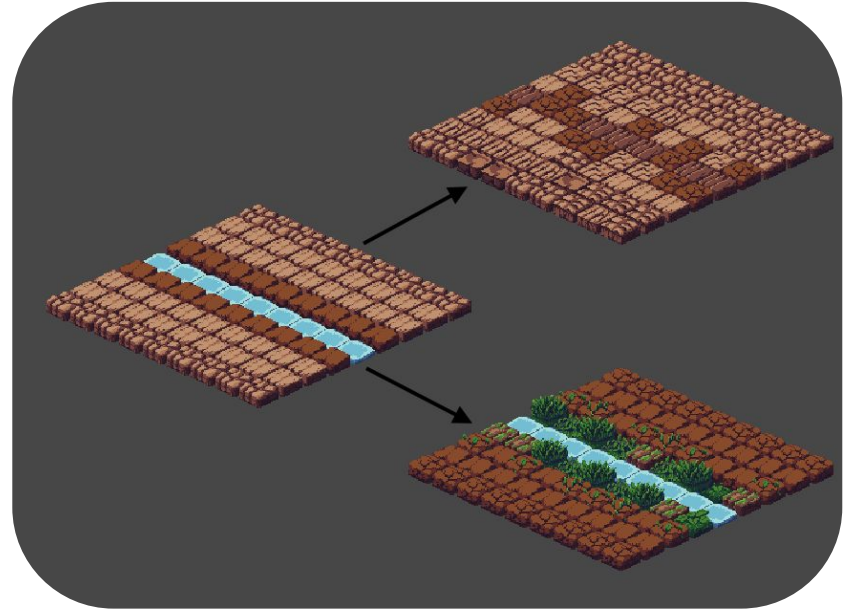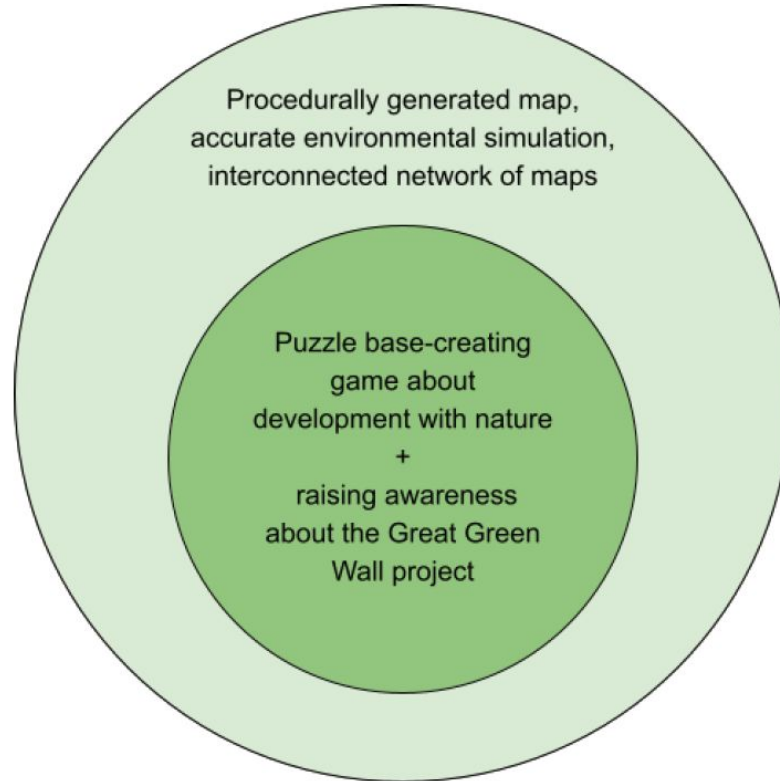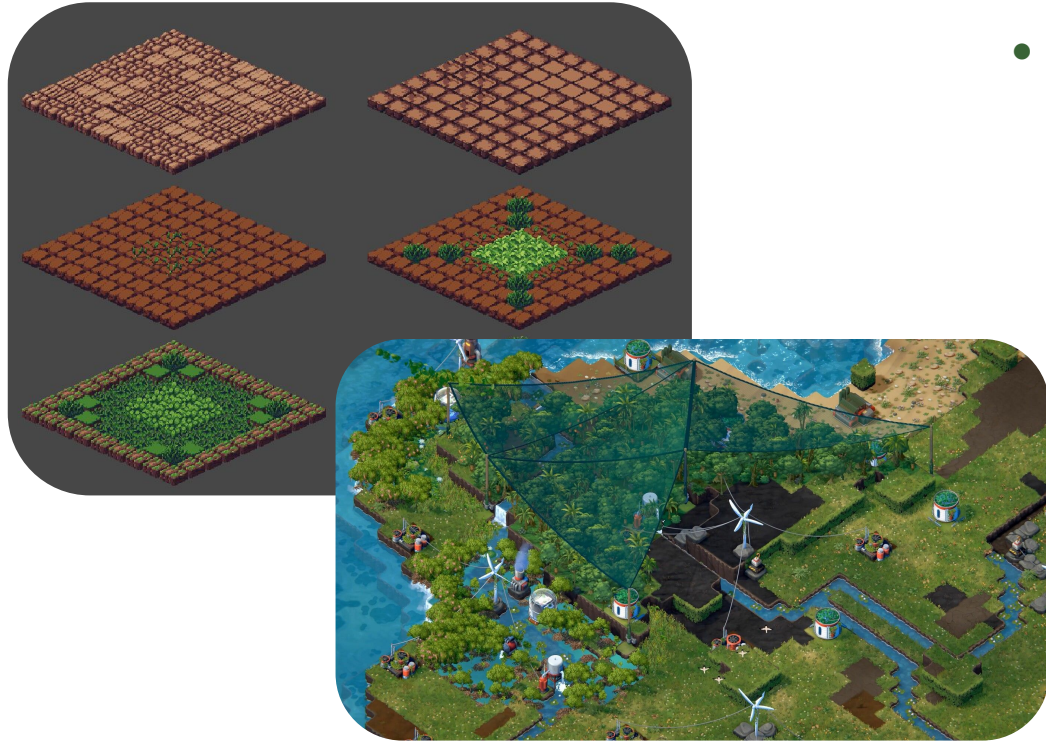
Artstyle

- **2D - Isometric Artstyle**

  - Allows players to get an overview of the whole map / level
  - Easier to create more assets / object or edit existing ones
  - Better performance

Development Targets

Functional Minimum

- One functioning level with basic resources (food, water etc)
- Simple turn structure and gameplay loop (Action points)
- Soil preparation (Degraded and arable soil tiles)
- Basic environmental simulation

Low Target

- Seasons and weather effects (Dry, Rainy)
- Implementation of more agricultural techniques, more building and improvement options for players
- More detailed soil and plant system, simulation of more effects and variables, degradation over time
- Multiple levels with different conditions and objectives

Desirable Target

- Ground and surface water supply systems (water storage during rainy season, dry up over time)
- Weather events (Sandstorms, droughts etc.)
- Research and Upgrade systems for meta-progression between levels

High Target

- Visual improvements, animations, sound effects
- More detailed social aspect:
  Social and logistical challenges, relationships with local communities, governments
- Procedurally created levels, objectives, events

Extras: Story quests/campaign | (Asynchronous) Multiplayer, Connected cities/communities |

Tasks and Timeline

Task	Interrim Demo			Alpha Release			Playtesting		Final Release	
	CW 19	CW 20	CW 21	CW 22	CW 23	CW 24	CW 25	CW 26	CW 27	CW 28
Functional Minimum										
Basic Art Assets	■									
Building First Map	■	■								
Unity Setup	■	■								
Resources & Turn System	■	■								
Placing "Buildings"	■	■								
UI & Main Menu		■								
Sounds & Music 1			■							
Low Target										
Soil Change System			■							
Season System & Effects				■						
Art Assests: Seasons, Crops, new Soil			■	■						
Additional Crops					■					
Community Buildings				■	■					
Sounds & Music 2										
Desired Target										
Ground Water System					■					
Surface Water System					■					
Water Stats for existing Crops					■	■				
Art Assets: Water, Weather, new Crops					■	■				
Tutorial							■			
Weather Events						■	■			
High Targets & Finalization										
Procedural Level Generation						■	■	■		
Saving & Loading							■	■		
Audio Improvements								■	■	
Visual Improvements									■	
Feedback integration									■	■
Bugfixing										■

Thank You