

# Accumulus

GDD Version 1.0  
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## 1.1 High Concept

Accumulus is a relaxing, low-stress city builder where players will have to build their floating island city one tile at a time from a set of randomly drawn building cards. Each building will synergize with certain environmental elements and existing buildings, leading players to make choices each turn about the optimal card play & placement.

## 1.2 Executive Summary

Accumulus is a city-building Unity3D puzzle game where players must strategically place building tiles around their ever-growing randomly-generated floating island. Utilizing each building's unique adjacency bonuses, players attempt to maximize their high score during each playthrough with their clever building placement. As players earn score points, they also earn more cards for their deck, extending their playthrough. As players progress, they will "complete" an island and move to a new, adjacent island; each new island unlocked will come with a new unlocked Card for the player's deck. Play continues until the player's deck is empty.

## 1.3 Key Features

- Randomly generated low-poly world for a unique playthrough every time.
- Relaxing, inviting graphics & design allow players an escape to the clouds.
- Strategically mix and match fifteen different buildings in your city.
- Unlock new buildings by completing sky islands.
- Fill the high score meter to earn new cards in your deck.
- Build the biggest, best city you can before your deck is empty!

## 1.4 Genre

Accumulus is a roguelike city-building puzzle game set in a cloud city; gamers should find the game low-stakes and relaxing to play.

## 1.5 Setting

The game is set in an idyllic cloud city located high in the air. The player takes on the role of the city planner, instructed by the mayor to expand the town aggressively but also maintain its charming character (the player's score will reflect their ability to balance these two considerations).

## 1.6 Target Audience

Desktop PC gamers who are enjoy relaxing builder/simulation games such Stardew Valley or Mini Metro/Motorways. Tabletop players of tile-placing games such as Cascadia or Patchwork.

## 1.7 Platform

PC.

## 1.8 Engine

Unity 2022.2.12f1.

## 2.0 Gameplay Overview

The game begins with 7 hex-shaped ground tiles animating up out of the clouds. Player is dealt a deck of Building Cards; three cards are turned upright and placed in-front of the player. Each turn, player chooses one of the upright cards and plays it on one of the available ground tiles. Each building placed increases the player's score according to the buildings already around it. As the player's score increases, they earn more cards in their deck, extending their game. Players will also fill a second meter representing their island's construction progress. When this meter fills, the island is "complete"; the camera will move up and over to a new island and the player will be presented with a new, unlocked card for their deck. Each island will have a unique season/biome theme (winter/snow, spring/temperate, etc.) Players keep placing cards and trying to increase their score as high as possible until they run out of cards in their deck.

## 2.1 Player-Controlled Character Abilities & Overview

No playable character; the player can move the angled top-down camera with the WASD keys; during development, we'll see if the player will need to rotate the camera too.

## 2.2 Controls

KB/Mouse:

WASD: move camera

QE: rotate camera? (if necessary for gameplay)

LMB: Select Card / Place Building

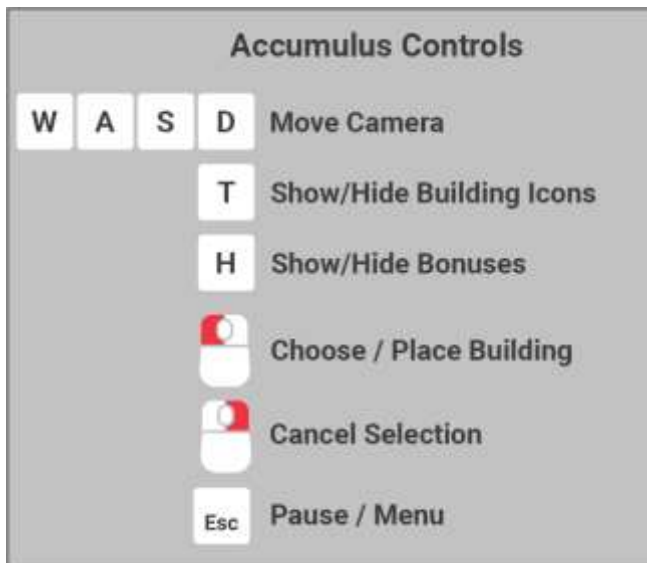
RMB: Cancel Selection

H: Show/Hide Bonuses on Map

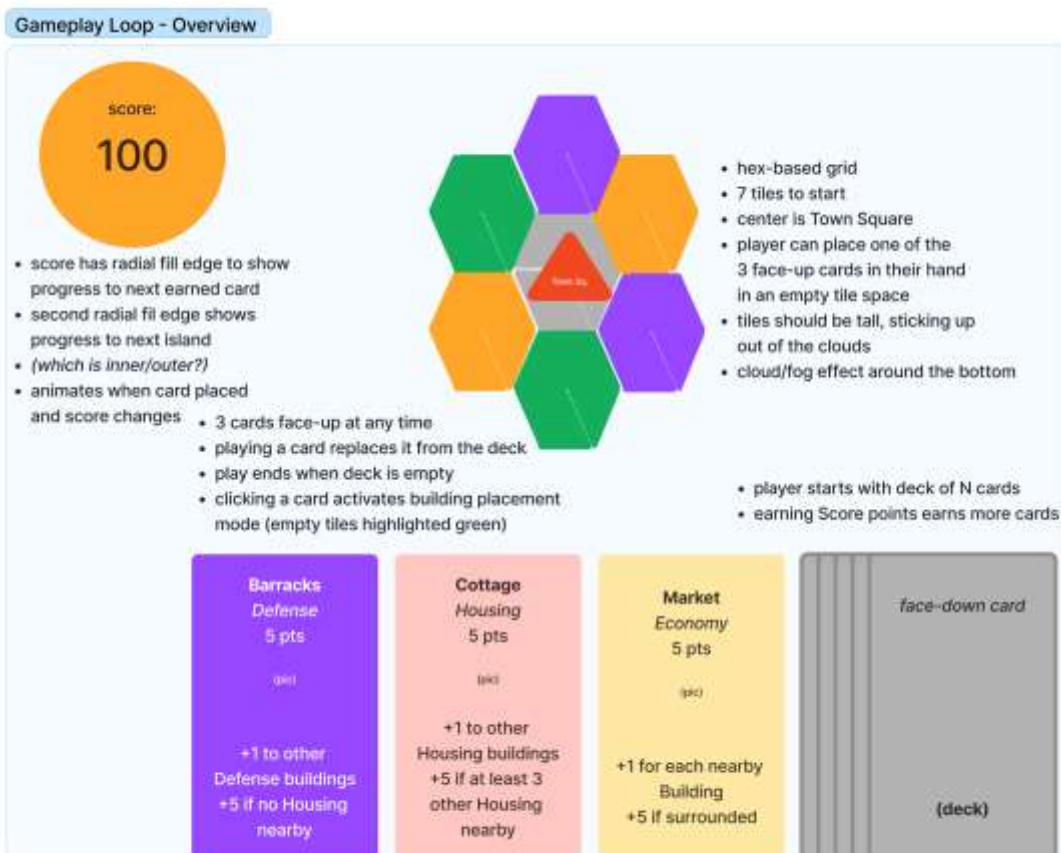
T: Show/Hide Building Types on Map

Esc: Pause/Main Menu

## Controls Overview Mockup



## 3.0 Gameplay Mechanics / HUD Overview / Level Layout



### 3.0 Gameplay Mechanics / HUD Overview / Level Layout (cont'd)

#### Gameplay Loop - After Turn 1

score:  
**110**

- camera top-down on an angle ala cities skylines or simcity
- move with WASD
- rotate? with OE (if necessary)

- blue tiles have spawned after Barracks was placed
- tiles spawn immediately after a building is placed to fill in the 1-3 empty spaces around it
- text vfx pop up when building placed to show the score for each tile around
- tiles animate up out of the clouds into place

<b>Barracks</b> Defense 5 pts [icon] ...	<b>Cottage</b> Housing 5 pts [icon] +1 to other...	<b>Market</b> Economy 5 pts [icon] ...	<i>face-down card</i> [icon] ...
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#### Gameplay Loop - After Island 1

score:  
**200**

- camera swoops up and away from first island
- new island rises next to it
- play continues on new island

- each new island comes with a new unlocked card
- unlocked cards have higher bonuses than base cards
- 5 base cards, 10 to unlock

**New Card Unlocked!**

**Exchange**  
Economy  
5 pts  
[icon]

+2 for each nearby Building  
+10 if surrounded

<b>Barracks</b> Defense 5 pts [icon] ...	<b>Cottage</b> Housing 5 pts [icon] +1 to other...	<b>Market</b> Economy 5 pts [icon] ...	<i>face-down card</i> [icon] ...
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## In-Game Mockup/Prototype



### 4.0 UI Overview

#### Title Screen

- Left or center-aligned buttons on a semi-transparent background; camera orbiting the gamefield behind the menu as it automatically plays the game.
- Shows the player's current game when menu is used to pause.
- New Game, Resume (only shown upon New Game), How to Play, Options, Credits, and Exit buttons.
- Submenus pop up modal windows that cover the Title Screen.

#### Tutorial Screen

How to Play screen will explain the basic goals of the game and a labeled overview of the HUD.

#### Victory / Level End Screen

When the player's last card is played, their score will be tallied up and a screen shown that summarized how long their session was, how many cards they played, total score, etc. Screen will offer a button to return to the main menu.

## 5.0 Asset List

All Assets should be done in the style agreed to in the Style Guide.

### Tiles

Simple blank Tiles (minor variations ok) for each of the 4 themed biomes:

- Spring / Temperate
- Summer / Tropical
- Autumn / Desert
- Winter / Snow

### Buildables

Buildables will include their Tile (like Dorf from Antik). They will be themed according to the biome of the island the player is currently building on.

Undecided whether they should be symmetrical or not (to be determined in Style Guide).

- Defense
  - Barracks
  - Armory
  - Fort
- Housing
  - Cottage
  - Double Cottage
  - Estate
- Art
  - Theater
  - Gallery
  - Museum
- Science
  - School
  - Institute
  - Observatory
- Economy
  - Market
  - Bank
  - Exchange

Buildables can have up to 3 minor variations (that should all be recognizable as the same building); buildables can also have subtle, twee animations in their models (as actual fbx animations or as separate mesh that can be animated in Unity).

### Cards

Each Buildable will also have a portrait image for its Card in the game.



## Changelog

0.1, 23/03/28: initial draft

0.2, 23/03/30: minor changes, add asset list

0.3, 23/04/01: remove quests, remove tiles/resources, change buildables to include their base tile, add island->island progression, add island biomes

1.0, 23/04/02: update controls mockup & section language, final check & submit