

1 UI Elements

- 1.1 Title/Header
 - This is just the title for the game which lives at the top of the page.
- 1.2 Player Info
 - 1.2.1 Player Name
 - 1.2.2 Farm Start Date
 - 1.2.3 Farm Age
 - 1.2.4 Farm Name
- 1.3 Currency Bar
 - 1.3.1 Coins
 - 1.3.2 Seeds
 - 1.3.2.1 Wheat Seeds
 - 1.3.2.2 Oat Seeds
 - 1.3.2.3 Barley Seeds
 - 1.3.2.4 Rye Seeds
 - 1.3.3 Water Capacity
 - 1.3.3.1 Water
 - 1.3.4 Crops
 - 1.3.4.1 Wheat
 - 1.3.4.2 Oats
 - 1.3.4.3 Barley
 - 1.3.4.4 Rye
 - 1.3.5 Products
 - 1.3.5.1 Milk
 - 1.3.5.2 Eggs
 - 1.3.5.3 Wool
 - 1.3.5.3.1 Yarn
 - 1.3.5.4 Flour
- 1.4 The Field
 - 1.4.1 Plot Buttons
 - 1.4.1.1 Plot Sequence
 - 1.4.1.1.1 Stage 1 - Untilled: "~"
 - 1.4.1.1.2 Stage 2 - Tilled: "="
 - 1.4.1.1.3 Stage 3 - Planted: "."
 - 1.4.1.1.4 Stage 4.1 - Growing 1: "v"
 - 1.4.1.1.5 Stage 4.2 - Growing 2: "I"
 - 1.4.1.1.6 Stage 4.3 - Growing 3: "r"
 - 1.4.1.1.7 Stage 5 - Ready to Harvest: "x"
 - 1.4.1.1.8 Stage 6 - Fallow Period: "~**"
 - 1.4.2 Field Layout
 - 1.4.2.1 9 x 9 Grid of Plot Buttons
- 1.5 The Store
 - The Store display elements and screens.
 - 1.5.1 Supplies
 - Section of the store for purchasing needed supplies.
 - 1.5.1.1 Buy Seeds
 - 1.5.1.1.1 Bulk Seed Purchase Options
 - 1.5.1.2 Buy Water
 - 1.5.1.2.1 Bulk Water Purchase Options
 - 1.5.1.3 Buy Silage
 - 1.5.1.3.1 Bulk Silage Purchase Options
 - 1.5.1.4 Buy Fertilizer
 - 1.5.1.4.1 Bulk Fertilizer Purchase Options
 - 1.5.2 Market
 - Section of the store with options for selling player inventory.
 - 1.5.2.1 Crops
 - 1.5.2.2 Milk
 - 1.5.2.3 Silage
 - 1.5.3 Field Expansion
 - 1.5.3.1 Buy Plot
 - 1.5.3.1.1 1x
 - 1.5.3.1.2 3x
 - 1.5.3.1.3 5x
 - 1.5.3.1.4 9x
 - 1.5.3.2 Buy Field
 - 1.5.4 Upgrade Tokens
 - Not displayed until unlocked
 - The store items that appear when specific milestones are hit that unlock a buy button the player must click and purchase to fully unlock the feature.
 - 1.5.4.1 Expanded Click Tokens
 - 1.5.4.1.1 Mk. 1
 - 1.5.4.1.2 Mk. 2
 - 1.5.4.1.3 Mk. 3
 - 1.5.4.1.4 Mk. 4
 - 1.5.4.1.5 Mk. 5
 - 1.5.4.2 Water Capacity Upgrade Token
 - 1.5.4.3 Bulk Purchasing Tokens
 - 1.5.4.3.1 Bulk Seed Purchase Tokens
 - 1.5.4.3.2 Bulk Water Purchases Tokens
 - 1.5.4.3.3 Bulk Silage Purchases Tokens
 - 1.5.4.4 Bulk Sale Tokens
 - 1.5.4.4.1 Bulk Crop Sales Tokens
 - 1.5.4.4.2 Bulk Milk Sales Tokens
 - 1.5.4.4.3 Bulk Silage Sales Tokens
 - 1.5.5 Tools
 - 1.5.5.1 Shovel
 - 1.5.5.2 Auto-Farmer
 - 1.5.5.3 Sprinklers
- 1.6 Tools & Upgrades
 - 1.6.1 Upgrades
 - 1.6.1.1 Water Capacity Upgrade
 - Effect: permanent +10 to Water Capacity
 - Frequency: Once per purchase
 - Cost: The first Water Capacity Upgrade costs 50 coins. Each subsequent upgrade will increase in price according to the following algorithm: $\text{currentWaterCapacityUpgradeCost} * 1.25 = \text{newWaterCapacityUpgradeCost}$.
 - Unlock Cost: As the player hits Water Refills Milestones.
 - 1.6.1.1.1 Current Level
 - 1.6.1.2 Expanded Click
 - 1.6.1.2.1 Mk. 1 Toggle
 - Effect:
 - Frequency
 - Cost:
 - Unlock Cost:
 - 1.6.1.2.2 Mk. 2 Toggle
 - Effect:
 - Frequency
 - Cost:
 - Unlock Cost:
 - 1.6.1.2.3 Mk. 3 Toggle
 - Effect:
 - Frequency
 - Cost:
 - Unlock Cost:
 - 1.6.1.2.4 Mk. 4 Toggle
 - Effect:
 - Frequency
 - Cost:
 - Unlock Cost:
 - 1.6.1.2.5 Mk. 5 Toggle
 - Effect:
 - Frequency
 - Cost:
 - Unlock Cost:
 - 1.6.1.3 Plot & Field Modifiers
 - Change or otherwise alter elements of the plot buttons and the main sequence.
 - 1.6.1.3.1 Fertilizer Toggle
 - Increases Yield by +1
 - 1.6.2 Tools
 - 1.6.2.1 Sprinkler
 - 1.6.2.2 Auto-Farmer
 - 1.6.2.3 Shovel
- 1.7 Modal Messages

2 Game Mechanics

- 2.1 Field Mechanics
 - 2.1.1 Field Grid Contents Index
 - An array for each field that determines the contents of each location on each field's grid.
 - All fields start with
 - 2.1.1.1 0 = Nothing/Empty Plot
 - 2.1.1.2 1 = Plot Button
 - 2.1.1.3 2 = Sprinkler
 - 2.1.1.4 3 = Auto-Farmer
 - 2.1.2 Fertilizer
- 2.2 Store Mechanics
 - 2.2.1 Purchasing Mechanics
 - 2.2.1.1 Supplies
 - 2.2.1.1.1 Buy Seeds
 - 2.2.1.2 Field Expansion
 - 2.2.1.3 Upgrade Tokens
 - 2.2.1.4 Tools
 - 2.2.2 Sale Mechanics
 - 2.2.2.1 Market
- 2.3 Upgrade Mechanics
- 2.4 Plot Mechanics
 - This section defines the mechanics and interactions specific to the individual plots where the player's primary interaction takes place.
 - 2.4.1 Yields
 - These are the different base yield amounts for each crop type. These yields can be modified by the presence of fertilizer in a field
 - 2.4.1.1 Wheat
 - 2.4.1.1.1 1x Crop(s)
 - 2.4.1.2 Barley
 - 2.4.1.3 Rye
 - 2.4.1.4 Oats
 - 2.4.2 Plot Sequences
 - 2.4.2.1 Wheat Plot Sequence
 - This is the primary sequence each plot goes through
 - 2.4.2.1.1 Stage 1 - Untilled: "~"
 - 2.4.2.1.2 Stage 2 - Tilled: "="
 - 2.4.2.1.3 Stage 3 - Planted: "."
 - 2.4.2.1.4 Stage 4.1 - Growing 1: "v"
 - 2.4.2.1.5 Stage 4.2 - Growing 2: "I"

- 2.4.2.1.6 Stage 4.3 - Growing 3: "f"
 - 2.4.2.1.7 Stage 5 - Ready to Harvest: "W"
 - 2.4.2.1.8 Stage 6 - Fallow Period: "-~"
 - 2.4.2.2 Plot Sequence Requirements
 - These elements outline the different types of requirements that
 - 2.4.2.2.1 Water
 - 2.4.2.2.2 Seeds
 - 2.4.2.2.3 Tools
 - 2.4.2.3 Barley Plot Sequence
 - This is the primary sequence each plot goes through
 - 2.4.2.3.1 Stage 1 - Untilled: "-~"
 - 2.4.2.3.2 Stage 2 - Tilled: "= "
 - 2.4.2.3.3 Stage 3 - Planted: ". "
 - 2.4.2.3.4 Stage 4.1 - Growing 1: "f"
 - 2.4.2.3.5 Stage 4.2 - Growing 2: "f"
 - 2.4.2.3.6 Stage 4.3 - Growing 3: "f"
 - 2.4.2.3.7 Stage 5 - Ready to Harvest: "W"
 - 2.4.2.3.8 Stage 6 - Fallow Period: "-~"
 - 2.4.2.4 Rye Plot Sequence
 - This is the primary sequence each plot goes through
 - 2.4.2.4.1 Stage 1 - Untilled: "-~"
 - 2.4.2.4.2 Stage 2 - Tilled: "= "
 - 2.4.2.4.3 Stage 3 - Planted: ". "
 - 2.4.2.4.4 Stage 4.1 - Growing 1: "f"
 - 2.4.2.4.5 Stage 4.2 - Growing 2: "f"
 - 2.4.2.4.6 Stage 4.3 - Growing 3: "f"
 - 2.4.2.4.7 Stage 5 - Ready to Harvest: "W"
 - 2.4.2.4.8 Stage 6 - Fallow Period: "-~"
 - 2.4.2.5 Oats Plot Sequence
 - This is the primary sequence each plot goes through
 - 2.4.2.5.1 Stage 1 - Untilled: "-~"
 - 2.4.2.5.2 Stage 2 - Tilled: "= "
 - 2.4.2.5.3 Stage 3 - Planted: ". "
 - 2.4.2.5.4 Stage 4.1 - Growing 1: "f"
 - 2.4.2.5.5 Stage 4.2 - Growing 2: "f"
 - 2.4.2.5.6 Stage 4.3 - Growing 3: "f"
 - 2.4.2.5.7 Stage 5 - Ready to Harvest: "W"
 - 2.4.2.5.8 Stage 6 - Fallow Period: "-~"
 - 2.5 Milestone Mechanics
 - 2.5.1 Total Coins Earned
 - Total Coins Earned Milestone Marker Formula:

coinsEarned(n) = 100*2^n
 - 2.5.2 Total Seeds Purchased
 - Total Seeds Purchased Milestone Marker Formula:

seedsPurchased(n) = 50 x (1.33)^n
 - 2.5.3 Total Crops Sold
 - Total Crops Sold Milestone Marker Formula:

cropsSold(n) = 50 x (1.33)^n
 - 2.5.4 Total Water Refills Purchased
 - Water Refills Purchased

10 20 30 40 50 60 70 80 90 100 200 300 400 500 600 700 800 900 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
 - 2.5.5 Fields Filled
 - Each time a field plot index array is filled with 1
 - 2.5.6 Plots Clicked
 - 2.6 Farm Expansion Mechanics
 - Not displayed until unlocked
 - 2.6.1 Animals
 - 2.6.1.1 Cows
 - 2.6.1.1.1 Feeding
 - This explains the logic and values related to feeding cows
 - 2.6.1.1.2 Milking
 - This explains the logic the game uses to handle the milking process.
 - 2.6.1.2 Goats
 - 2.6.1.2.1 Milking
 - This explains the logic the game uses to handle the milking process.
 - 2.6.1.2.2 Feeding
 - This explains the logic and values related to feeding cows
 - 2.6.1.3 Chickens
 - 2.6.1.3.1 Feeding
 - 2.6.1.3.2 Egg Collection
 - 2.6.1.4 Sheep
 - 2.6.1.4.1 Wool Sheering
 - 2.6.1.4.2 Feeding
 - 2.6.2 Buildings
 - 2.6.2.1 Silage Silos
 - Turns crops into silage
 - 2.6.2.1.1 1x Crops -> 3x Silaged
 - 2.6.2.2 Barns
 - 2.7 Tool Mechanics
- ### 3 Design Document
- 3.1 General Information
 - 3.1.1 Genre
 - 3.1.2 Target Audience
 - 3.1.2.1 Me?
Me. I'm the target audience.
 - 3.1.3 Concept Paragraph
 - 3.1.4 Player Experience
 - 3.1.5 Key Moments
 - 3.1.6 Art, Sound & Music
 - 3.1.6.1 Art
 - 3.1.6.2 Sound
 - 3.1.6.3 Music
 - 3.1.7 Current Target Platform
 - 3.1.7.1 Desktop Web Browsers - Firefox, Chrome, Safari, Edge
 - 3.2 Concept Sentence
 - 3.2.1 Universal Paperclips Meet Farm Manager 2021, with a hint of Stardew Valley. Grow Crops, Raise Animals, and build a fortune by clicking a bubble-wrap-like webpage.
 - 3.3 Player Objectives & Goals
 - 3.3.1 Concrete Objectives
 - 3.3.1.1 Milestone Achievements
 - The player receives a Modal message for each milestone achievement and with share buttons for Mastodon and Lemmy.
 - 3.3.1.1.1 Total Coins Earned High Score
 - 3.3.1.1.2 Complete Fields
 - 3.3.2 Abstract Goals