Greyt Race

- 2D management simulation for Greyhound Racing / Breeding.
- Goal will be to breed the fastest dog possible to win
  - will require selection of good dogs to breed for fast offspring

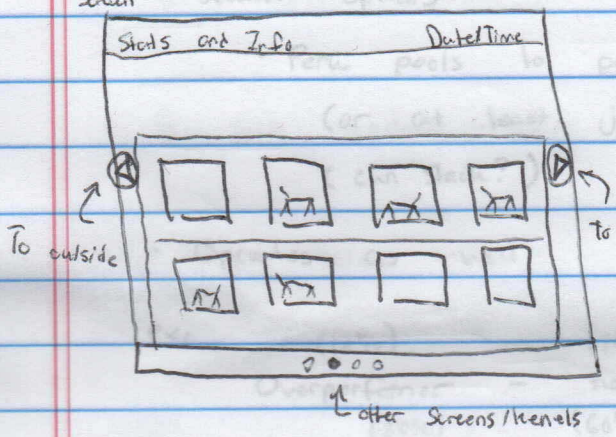
- Gameplay
  - Select dogs from menus to breed and determin if their suitble for racing.
  - Dogs can be selected from external family dogs (to prevent inbreeding)
  - Dogs will either be bred to use, or can be purchased from other breeders
  - Goal will be to win Race in 'A' class (most competitive) to gain most amount of money. (Maybe like F1, dog Champ, ~~Kings~~ breeder champ each year)
    * Need wins (champ) in previous league to go up one.
  - Traits to breed for
    - Speed (Top Speed of dog)
    - Stamina (Consistency of Speed)
    - ~~Height~~
    - Height / Weight (Could affect overall speed?) (ratio?)
    - Color (no effect)
    - Guidance (how easily trained / follows race toy?)
    - Parenting (how good they are at Siring)
      - will give small bumps to stats of offspring if high parenting.

  - Each Day (or week)
    * Need to make game not 'drag-on'
    - Can train specific dogs for stat bumps (3 max? There will be a max)
    - Can choose to breed a pair (but can't race for a week)
    - Retire dog for adoption (female can't race for year) (stats degrade heavily due to puppies)
  - Each week (or month) Race a maximum number of dogs

Greyt Race

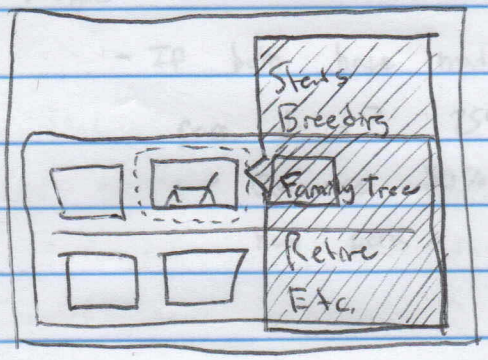
- Interface ort will be 480 x 270 (maybe can lower?) scaled to 1920 x 1080 very low res

Screen



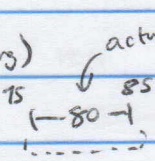
* Include
  - Current Day of week / Day (Wednesday 7th)
  - Current money
  - Grid based kennels

* Selecting a dog will bring up their stats on opposite side of screen as well as options (breeding / Training / Retire / etc. Stats / Career)



* Breeding Screen would be a family tree style display
* There will be certain game/age 'genes' that gives boosts and have a chance to pass down (be dominant / non-dominant. (ever performer for example will make consistency boundary higher above stat)

- Training - will Increase favorably (or decrease in the case of varience)
  - Speed (top speed)
  - Acceleration (time to get to speed)
  - Stamina (Time spent at top speed before degrading)
  - Consistency (varience of stat performances



Gryt Race

- Breeding Traits
  - Several options
    - Perk pools to prevent getting everything (or at least just allowing three perks) (can stack?)
  - Opposites as well

ex: (15%) (70%) (15%) → uncommon

Overperformer - none - underperformer

Lucky (20%) - (60%) none - (20%) unlucky → common

Large (Abnormal) (5%) - (90%) none - (5%) Small (Abnormal) → rare

- Breeding could be a 50/50 between parents
- Maybe
  - If both have matching traits 75% chance to pass down? 25% to be random new choice
    - Otherwise 50% chance to pass down? vs. 50% at new perk

- Dogs can be sold and their value will be based on stats as well as perks. Rare perks will bump up cost significantly.

Great Race

- Breeding Chance

Should this be higher for better chance?

Scenarios

No Perks
- Generate from array of Perks like last page. (Ex. Below)

At Least One
- 50/50
- 50% generate from array
- 50% parents perk (with small chance failure)?

Two (Both Parents)
↳ -75/25
- 75% choose a parents perk
- 25% chance generate from array

Ex. No Parent Perks

	Positive	Negative	Neutral	Rate (weight)
Perk A -	20%	20%	60%	35
" B -	35%	35%	30%	25
" C -	15%	15%	70%	15
" D -	10%	10%	80%	20
" E -	5%	5%	90%	5

$\frac{35}{100} \times \frac{60}{100} = 0.2275 = 22.75\%$

$\frac{25}{100} \times \frac{35}{100} = 0.0875 = 8.75\%$

$\frac{15}{100} \times \frac{15}{100} = 0.0225 = 2.25\%$

$\frac{20}{100} \times \frac{10}{100} = 0.02 = 2\%$

$\frac{5}{100} \times \frac{5}{100} = 0.0025 = 0.25\%$

Chance of Nothing

$\frac{35}{100} \times \frac{60}{100} = 22.75\%$

$\frac{25}{100} \times \frac{30}{100} = 7.5\%$

$\frac{15}{100} \times \frac{70}{100} = 10.5\%$

$\frac{20}{100} \times \frac{80}{100} = 16\%$

$\frac{5}{100} \times \frac{90}{100} = 4.5\%$

$= 61.25\%$ of nothing

19.375 of good

19.375 of bad

0.7% all good or all bad.

$0.3875 \times \dots \times \dots = 5.81\%$ chance to fill all perk slots (38.75%)

58% chance to get at least one perk (Good or Bad if the same)