Nest Quest 🦆

Mockup and Design Outlet

State Dataclass:

```
class State:
        duck_name: str                    #the player's chosen duck name
        current_location: str             #the player's current location
        coins: int                        #the number of coins the player has
        inventory: list[Item]             #the items in the player's inventory
        visited_locations: list[str]      #where the player has visited
        nest_progress: int                #nest completion percentage
        lifetime_coins: int               #total coins earner over time


class Item:
        name: str                         #name of the item
        description: str                  #what the item is used for
        value: int                        #cost or value of item (used in shop)
```

Page and Route Diagram

1. /start - Title / Introduction Page

Purpose: Begin the game and let the player name their duck

Layout:
- Title > "Nest Quest"
- Textbox > "Enter your duck's name"
- Button > "Start Game" > /home

State updates:
- state.duck_name = input_value
- state.current_location = "home"
- state.coins = 0

- state.inventory = []
- state.visited_locations = []
- state.nest_progress = 0
- state.lifetime_coins = 0

2. /home - Duck's Nest

Purpose: Show player progress and travel to other areas

Layout:
- Greeting: "Welcome home, {duck_name}!"
- Messages about nest completion:
  - If inventory has all materials > "Your nest is complete!"
  - Else > "Your nest is {nest_progress}% complete."
- Buttons:
  - "Travel to Pond" > /pond
  - "Travel to Forest" > /forest
  - "Travel to Town" > /town
  - "View Summary" > /summary

State updates:
- None, displays data from state.

3. /pond - Collect Reeds

Purpose: Gather soft reeds (and maybe some coins)

Layout:
- Text > "You find tall reeds by the pond."
- CheckBox: "Collect reeds for your nest?"
- Buttons:
  - "Collect" > /pond (refresh)
  - "Return Home" > /home

State updates:

- Add Item("reeds", "Soft pond reeds for nest lining") to inventory
- Random chance to gain a coin
- Add "pond" to visited locations

4. /forest - Search for Sticks

Purpose: Find sturdy twigs and maybe some leaves

Layout:
- Text > "The forest floor is covered in good nesting sticks"
- CheckBox: "Search for sticks??"
- Button > "Return Home" > /home

State updates:
- Add Item("sticks", "Strong twigs for the next frame") to inventory
- Random chance to gain a coin
- Add "forest" to visited locations

5. /town - Shop / Trade Page

Purpose: Use coins to buy special items.

Layout:
- Text > "Welcome to Duck Town's shop!"
- SelectBox
  - "Soft moss"
  - "Shiny pebble"
- Button > "Buy Item" > /town (same route, refresh)
- Button > "Return Home" > /home

State updates:
- If enough coins > subtract cost, add selected item to inventory
- If not > display "You don't have enough coins!" (conditional message)

6. /meadow - Collect Feathers

Purpose: Gather soft feathers used to build decorative or luxury nests.

Layout:
- Text: "The Meadow — feathers drift on the breeze."
- Image displayed on enter
- Button > "Collect feathers" > /collect_feathers
- Button > "Return Home" > /home

State updates:
- Add feathers to inventory
- Add "meadow" to visited locations
- No image shown on collection page

7. /hill - Search for Cloth or Twine

Purpose: Collect twine or cloth, which unlocks more advanced nest types.

Layout:
- Text: " The Hill — rocky, maybe useful scraps here."
- Image displayed on enter
- Button > "Search the hill" > /search_hill
- Button > "Return Home" > /home

State updates:
- Adds either cloth or twine to inventory
- Add "hill" to visited locations
- No image shown on collection page

8. /forage_minigame - Berry Bush Minigame

Purpose: Add variety and give players a chance to earn random rewards.

Layout:
- Text: Introductory message
- Image displayed on enter
- Buttons:
    - "Bush A"
    - "Bush B"
    - "Bush C"

State updates:
- Random reward: berries, coins, or nothing
- No image shown in result screen
- Buttons: Play Again / Return Home

9. /restart - Reset Game State

Purpose: Restart the game without returning to the name-entry page.

State updates:
- Resets:
    - coins
    - inventory
    - visited_locations
    - nest_progress
    - lifetime_coins
- Keeps duck_name
- Sends player to /home

10. /summary - Progress Summary / End Screen

Purpose: Review your journey and see if your nest is complete.

Layout:
- Title: "Your Nesting Progress"
- Inventory displayed in grouped format, for example:
    - Sticks x 2

- - Moss x 1
    - Feather x 3
  - Shows:
    - Current coins
    - Lifetime coins
    - Nest progress %
    - Nest type (see list below)
  - Nest Types Supported:
    - Cozy Nest
      - reeds + sticks + moss
    - Decorative Nest
      - pebble + feathers
    - Luxury Nest
      - cloth + twine + moss
    - Survival Nest
      - sticks + cloth
    - Berry Nest
      - berries + reeds
    - Mixed Materials Nest
      - If the player has materials but no specific recipe matches
    - Unfinished Nest
      - If the player lacks essential materials
  - Button > "Return Home" > /home
  - Button > "Restart Game" > /restart

State updates:
  - None, just read and display state data

Navigation Summary:

[home] > [town]
[home] > [forage_minigame]
[home] > [summary]

[pond] > [home]
[forest] > [home]
[meadow] > [home]
[hill] > [home]
[town] > [home]
[forage_minigame] > [home]
[summary] > [home]