**Features:**

- The game is motivated around inspecting the surrounding area to learn of the different plants and animals affecting the area.
- Collectables/Achievements to customize character look and possibly increase certain abilities (such as speed, distance from the child, speed the fear meter increases/decreases)
- Leveling up/Gathering Skills (Swimming, Climbing, other tools) to find new areas and new plants (Skill book)
- Fog of war – hidden areas
- Random Generated Events – Quick times
- Breaking the fourth wall (talking to the player)

High Concept:

The game revolves around the main character (whose fiancée is kidnapped) and (s)he must search around for clues to the fiancée's whereabouts, and soon finds out their brother knows how to analyze the clues. You must now help your brother so that he can help you find your fiancée.

Game Description:

The player explores the areas and investigates the plants and animals in them to help find clues that can help find the fiancée. The brother's lab will be used as a main base for the character to set up the extras or finish quests. The brother will be the main quest giver to keep the player on track to find these clues. Doing the work for your brother involves identifying the plants and animals in the area and then filling out the worksheet for the brother, then with the currency given from your brother, you can unlock hats or skills to get to different areas and find more plants. Exploring an area 100% will help to unlock collectables that can be useful as the player goes on. The game mechanics will be focused around top-down exploration. The player will use Arrow Keys to move around the areas and find the specific plants/animals needed. The fog of war will hide areas until the player can visit and identify objects in those areas. The player uses their skill book to customize the skills they unlock, the hat they're wearing, and the plants they have found or need to find. The quick time events will "randomly" occur and at this point the game will switch to a sidescroller where the player will have to quickly identify the plants or animals from earlier in order to make it through the quick time event. Completing these are optional, if they succeed they unlock special collectables whereas nothing bad happens if the player fails to complete it.
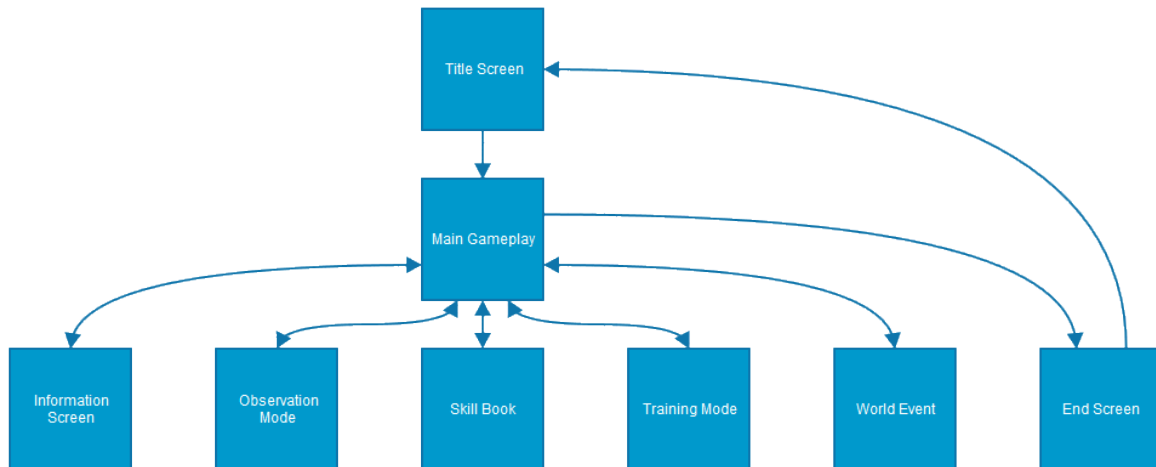
- Title Screen – This is the main game menu. Start, Help, End Game buttons appear here.
- Main Gameplay – This is the top-down adventure mode that will serve as the majority of gameplay.
- Information Screen – Contains information about plants and animals that have been discovered.
- Observation Mode – This is a first person view to observe and identify wildlife.
- Skill Book – Lists all skills and gives descriptions about what they do and how to unlock them.
- Training Mode – Contains a little bit of everything to teach most of the mechanics.
- World Event – Random event to test what the player has learned.
- End Screen – The game moves to this screen when the game has been completed, then returns to Title Screen.

Game Mechanics

Title Screen: The title screen will give you the ability to select what game play mode you want to enter. You can select to enter the main game play mode of exploration or any of the other modes as illustrated above

Information screen: there is no major mechanic here for game play you will select a flower or plant and read the bio on it.

Observation mode: The mechanic here is similar to I spy. You must select a plant from the given landscape using your mouse. The character will be in first person and the view will not change. Once you collect a plant you will receive a short informational sheet on the plant that will be of use later in the information screen.

Skill book: This is your exploration home base. You will be able to select or insert points into skills in order to further progress in exploration mode. The skills are swimming, climbing, gathering, hiking, and

tracking.

Training mode: Training mode consists of mini games that will help the player develop skills for real world exploration. The mini games will be plant matching game, work sheet demo game, and the escape mode trivia game. These unlock further currency or skill gains.

World event mechanic: Flee from oncoming danger as you are forced to identify plants or be rooted. Game view will be side stroller as the character runs left to right.

End Screen: no mechanic. Credits roll and then the game is returned to the base camp.

Asset List

~~Removed or not implemented in time~~

Programming:

- ➢ Screen Management -- ability to switch between screens
- ➢ Canvas Layering
- ➢ Main isometric top-down gameplay
  - ○ Character movement
  - ○ Collisions
    - ■ General (borders and objects)
    - ■ Advanced (Interaction collisions)
  - ○ Interactions with…
    - ■ World Events
    - ■ ISpy events
    - ■ Other characters
    - ■ Interactable Terrain (Swimming, Climbing, etc.)
  - ○ Summoning guide
  - ○ Base Camp
    - ■ Opening Sequence
    - ■ Transport to zones (Random direction)
    - ■ Interact with sibling
    - ■ Interact with store
    - ■ Plant Index Wall
  - ○ Camera Moves as character reaches edges
  - ○ Parallaxing Background
  - ○ Map Creation
- ➢ Menus
  - ○ Title
  - ○ End

- Skill Book
- Information Screen
  - Click plants to show info
  - Un-harvested plants not displayed
- Pause Screen
  - Shows world map
- Character Selection
➢ World Events gameplay
- Moving wall (Became Botnip)
- Plants appearing
- Quizzed on plants
- Character Movement (Slows on wrong answer, speed jump on correct)
- End game scenario.
➢ I-Spy gameplay
- Randomly generate un-harvested plants
- Allow player to choose the plants
- Identify plants
- Exit ISpy mode
- Save identified plants
➢ Implementing Hats
➢ Code for Parsnip
- Dialogue
➢ Code for Sibling
- Dialogue
- Hat Inventory
➢ ~~Code for critters~~
- ~~AI movement~~
- ~~Character Interaction~~
➢ ~~Code for guide~~
- ~~Dialogue~~
➢ Code Cleaning
- Make all classes become objects themselves
➢ Research Plants

Art:

➢ Main character male and female
- Sketch
- Rough Draft Male
- Rough Draft Female
- Polished Male
- Polished Female
- Rough Walking Animation Male

- - Rough Walking Animation Female
  - Polished Walking Animation Male
  - Polished Walking Animation Female
  - Rough Full Animation Male
  - Rough Full Animation Female
  - Polished Full Animation Male
  - Polished Full Animation Female
- Younger sibling male and ~~female (Female was not implemented)~~
  - Sketch
  - Rough Draft Male
  - ~~Rough Draft Female~~
  - Polished Male
  - ~~Polished Female~~
  - Rough Animation Male
  - ~~Rough Animation Female~~
  - Polished Animation Male
  - ~~Polished Animation Female~~
- Dr. Parsnip
  - Sketch
  - Rough Draft
  - Polished Draft
  - Rough Animation
  - Polished Animation
- Hats--Many hats did not get implemented
  - Progression Hats
    - Explorer Hat
    - ~~Miner/Climber Hat~~
    - ~~Weighter Hat~~
    - ~~Conductor's Hat~~
  - Luxury Hats
    - ~~Bike Helmet~~
    - Scuba Goggles
    - ~~Gathering Goggles~~
    - ~~Overpowered Hint Goggles~~
    - ~~Hat of Invisibility~~
- ~~Critters (regular woodland animals and mythical ones) Critters never made it to implementation~~
  - ~~Squirrels~~
  - ~~Badgers~~
  - ~~Deer~~
  - ~~Bear~~
  - ~~Raccoon~~
  - ~~Phoenix~~

- o ~~Unicorn~~
- o ~~Jack-a-lope~~
- o ~~Jack o' lantern~~
- ➢ ~~Guide -- forms   Guid was never implemented~~
  - o ~~Squirrel~~
  - o ~~Bear~~
  - o ~~Owl~~
  - o ~~Fox~~
- ➢ Environments -- Based off four given parks
  - o Cliff/Mountainous
  - o Prairie
  - o Water/Marsh
  - o Forest
- ➢ Plants
  - o Plants to be determined by client
- ➢ Base Camp
  - o Brother's research center and gift store
    - ■ Opens to new area where player can go talk to the brother (to continue the quests), purchase hats, or see the info wall
  - o Teleporter
    - ■ Opens Menu to choose one of four zones, greyed out if they are unaccessible.
  - o Training Mode Building
    - ■ Opens Menu Screen to choose ISpy or WorldEvent game mode to play for funzies
- ➢ UI
  - o Text box
    - ■ big
    - ■ small
  - o Shop Screen
  - o Compass
  - o Map
  - o Inventory
- ➢ Tokens
  - o Rock
  - o Water
  - o Speed (Became currency for the character)

Sound: (Not a lot of sound effects or Voiced Dialogue was added in)

- ➢ Background music
- ➢ ~~Sound Effects~~
  - o ~~Water~~
  - o ~~Swimming~~

- ~~○ Running~~
- ~~○ Climbing~~
- ~~○ Boulders~~
- ~~○ Animals~~
- ~~➢ Voiced Dialogue~~

Script: (Script was very rough, and story didn't exist much)

- ➢ Written Dialogue
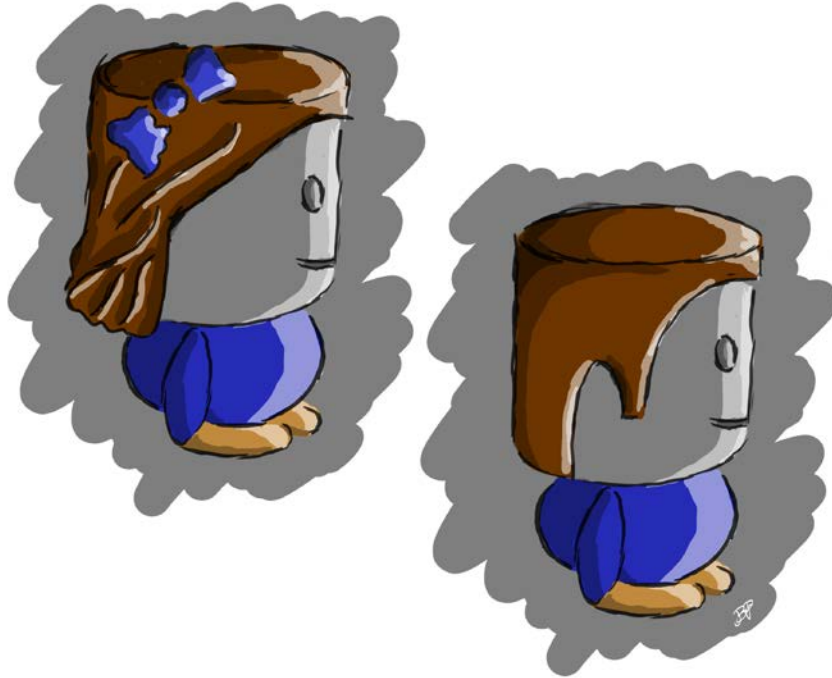 - ○ Rough Draft for…
    - ■ Main Character
      - ● Male
      - ● Female
    - ■ Sibling
      - ● Male
      - ● Female
    - ■ Dr. Parsnip
    - ■ Guide
    - ■ Fiancee
      - ● Male
      - ● Female
  - ○ Polished Draft for…
    - ■ Main Character
      - ● Male
      - ● Female
    - ■ Sibling
      - ● Male
      - ● Female
    - ■ Dr. Parsnip
    - ■ Guide
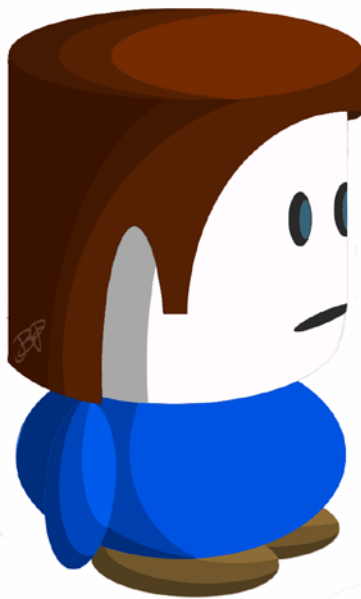   - ■ Fiancee
      - ● Male
      - ● Female

Storyboards
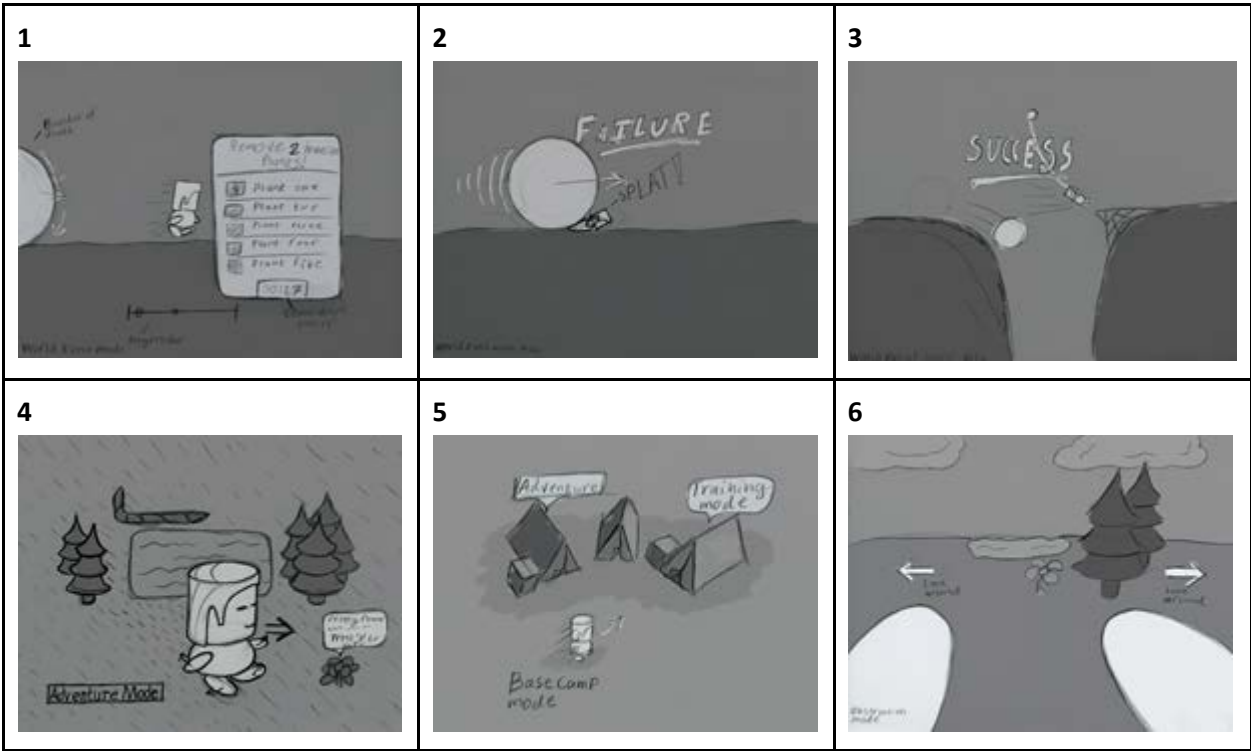
Main Character Concept
Benjamin Pease

Main Character Concept 2
Benjamin Pease

Tests

Our game was tested on several browsers, and platforms and is currently hosted at www.adamholcombe.com/FoliageFeud/src/main.html and works well for Windows and Mac within Firefox and works in Safari for Mac. It ran in Internet Explorer for Windows, but was thoroughly laggy and did not run well. Within Chrome for both Mac and Windows, it does not load past a certain point and is unplayable. The game was also tested on Android through the Chrome web browser. It worked with a little lag, but it would only be playable if the phone has a keyboard attached to it. Therefore we made a demo version that makes our game modes playable without a keyboard, and this can be found at www.adamholcombe.com/FoliageFeud/src/demo.html and runs with a little bit of lag.

Future Paths

There are several things that could be added and expanded upon within the game to improve upon it. The following is a list we would like to expand upon in the future.

- Optimization -- Our game can be optimized a lot more to make it efficient. In the shortened time period of production, we typically went with just what worked instead of what worked best. Our Rendering function located within CameraController.js is an example of something I'd like to refine a lot more.
- Optimization for mobile -- I would love to also move our game into more of a mobile field, and allow it to be played through smartphones and tablets. This would involve making a more mobile style gameplay to it and optimizing our assets to be run more quickly. I also would like to port it into a different language and make it an app. My initial thought would be in C++ to allow more control over memory management and allow the game to run faster at a higher quality. Another thought is to make it through Java for Android specifically, and possibly later port it into Objective-C to then be launched for iOS.
- More, more, more -- Given more time, it would be fun to add in more customization in for the characters, allowing them to choose different hair styles/colors as well as heads, bodies, and such. It would also be fun to add in more unlockables, including character skins and hats, that could then be shown on your character. We could have some more fun with it by coming up with creative designs for it, such as famous characters or hats/masks. I also believe that we could expand upon a more interactive and entertaining story, and even add in more different game modes to it as well.