

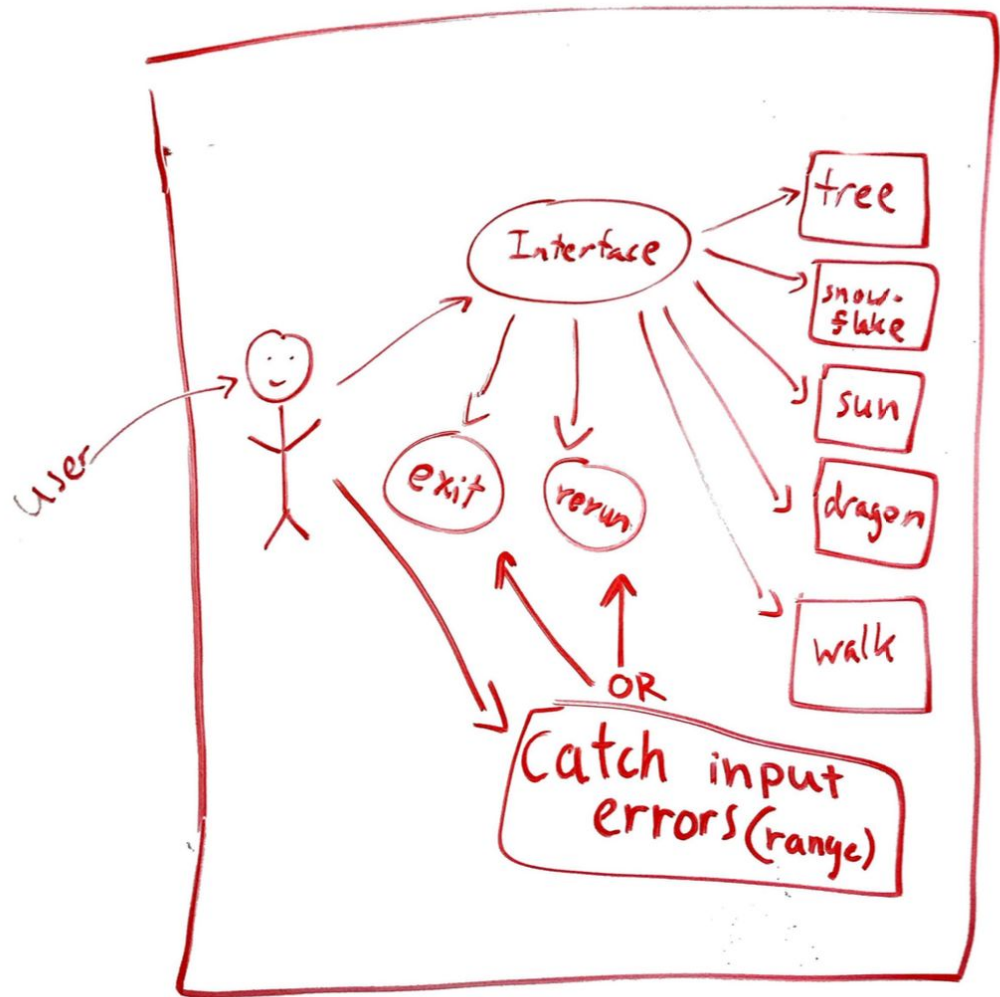
# Fractal Art

The Italians (Ben Berube, Giacomo Radaelli, Sara Vanaki)

*Showcase a variety of fractal images by utilizing object-oriented program design*

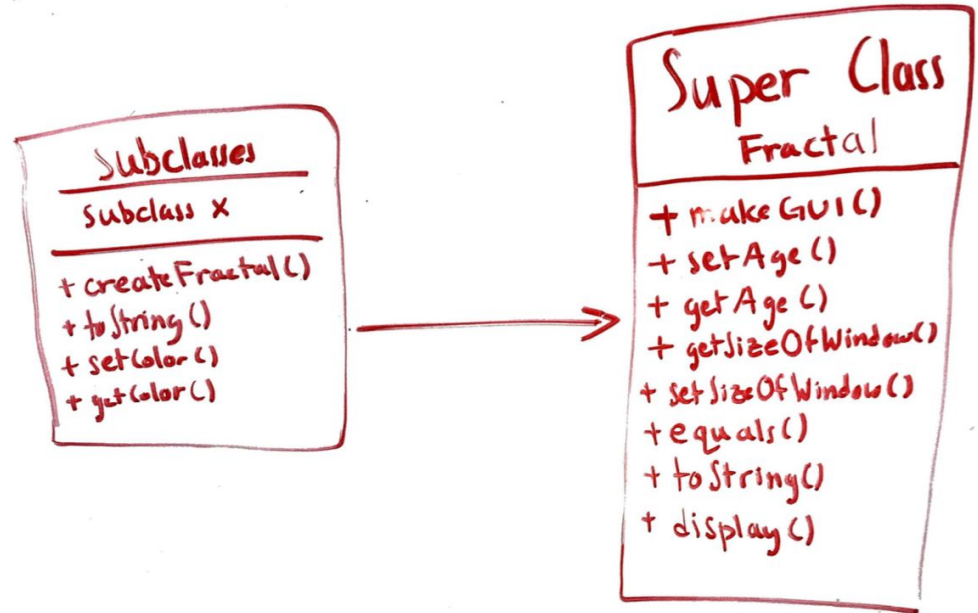
# Use Case

- We are showcasing the actress “user” interacting with the interface
- The user chooses between 7 options (tree, snowflake, sun, dragon, walk, exit, rerun)
- If user chooses options out of range, input error will be caught and prompt the user to try again



# UML

- This UML documents the relationship between parent and child class in our O-O system
- The parent class handles the construction/simulation of the GUI, as well as defines abstract classes
- The child class handles the creation of a specific fractal piece, and identifies particular instance variables such as **color**



# Agile Product Backlog

- Key features
  - Fractals being properly displayed
  - Unique designs for each subclass
  - Implements OOP for efficient code
- Plan(now - 11/7/2021) (Priority #1)
  - Writing up our presentation
  - Finalizing our methods and different fractals we want to use
  - Building project timeline
- Build(11/7/2021 - 11/21/2021) (Priority #2)
  - Write the code for our fractals
  - Need to make parent class and subclasses
  - Debugging before moving to the next class
- Test(11/21/2021 - 12/05/2021) (Priority #3)
  - Trying out different colors to see which one is aesthetically pleasing
  - Trying it with other students to see what other fractal ideas they may have
  - Checking for any bugs or ways to improve for the next iteration
- Review(12/05/2021 - 12/17/2021) (Priority #4)
  - More of our checks in each class
  - Optimizing our code
  - Asking for more feedback from professor and areas of improvement

User asked us to create a fractal program in order to display their top 5 favorite pieces of art. User also wants to specify the color and age of the fractal. Then wants the options to rerun or exit the program.

# Mockup Design

Welcome to our fractal art program!

Please select your desired image below:

1. Tree

2. Snowflake

3. Sun

4. Dragon

5. Walk

6. Exit

Please select desired age and  
color of your fractal:

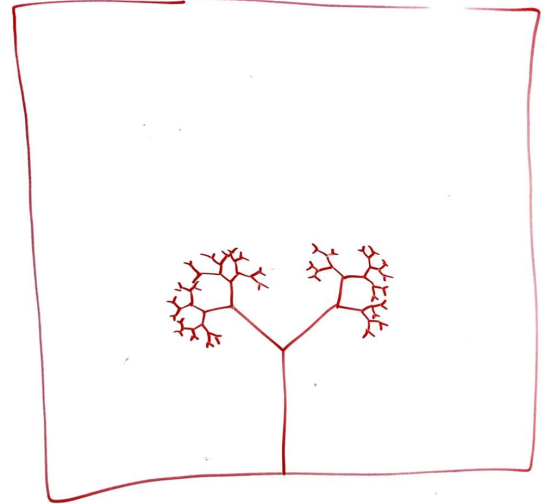
Age: (input)

Color: (input)

Interface



Ex. Fractal



Age:

Color:

Ex. GUI