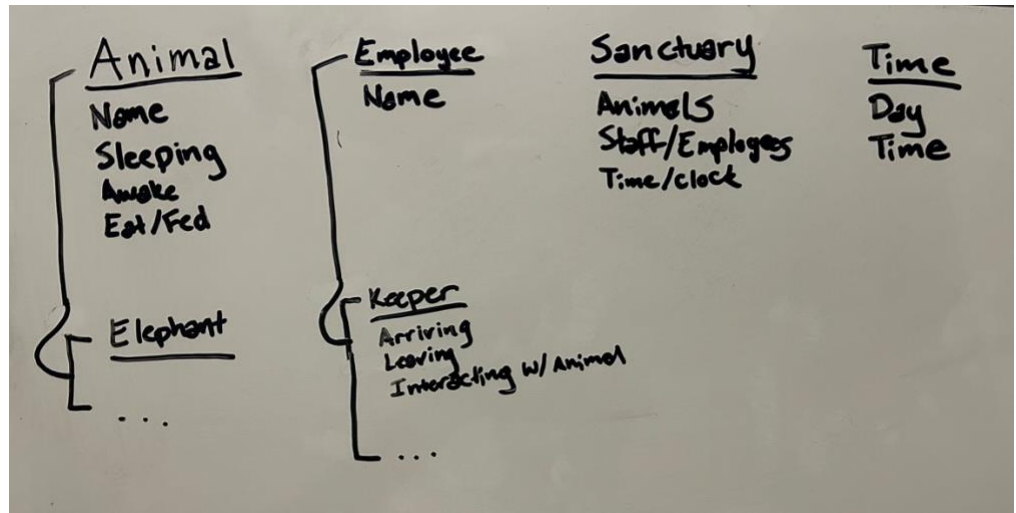


Project 7 Report

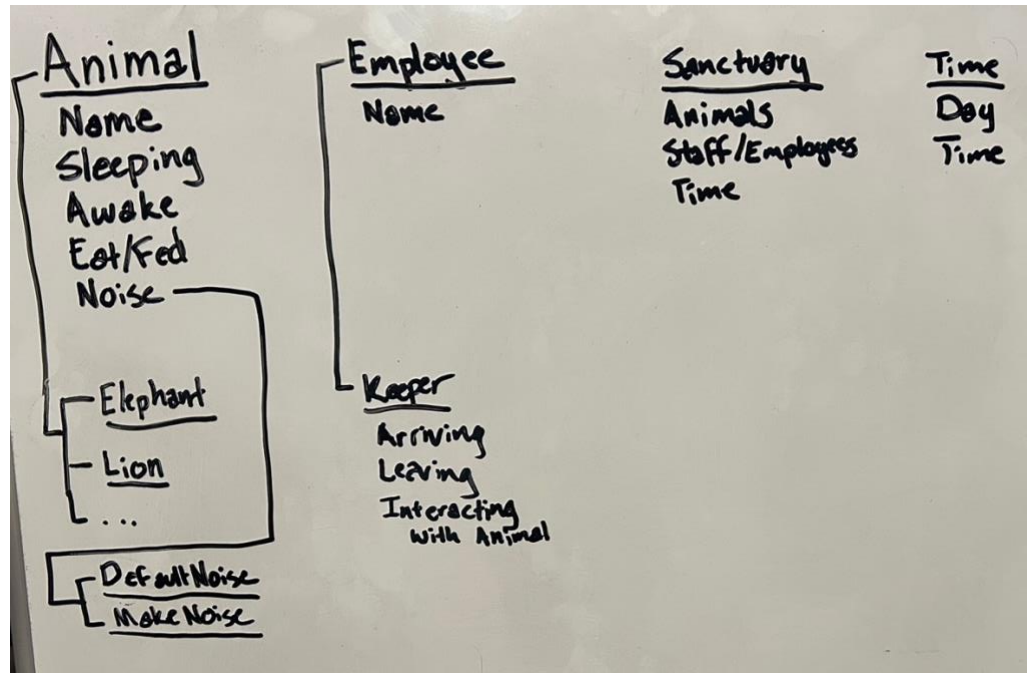
1. Animal Sanctuary
 - a. Tyler Learned
2. The final state of the project is it is mainly working. I've made an animal superclass that has a factory pattern for the animal subclasses. An animal noise class with a strategy pattern. I have an employee superclass with a keeper subclass. There is aa sanctuary class with a singleton pattern. And finally, a time class to keep track of days and stuff at the sanctuary and to create and observable element between the keeper and time.

3.

a. Original



i.
b. Updated



- ii. There have been more animal classes named and completed. There was a noise class added for the animals from project 5/6 to 7. There has been a removal of some human classes. Everything else pretty much stayed the same.
 - iii. There is a singleton pattern in the sanctuary class. There is a factory pattern and a strategy pattern in the animal class. There is an observer pattern in the keeper class.
- 4. I used some help from geeks for geeks to get the idea for the factory and singleton patterns.
 - a. <https://www.geeksforgeeks.org/singleton-design-pattern/>
 - b. <https://www.geeksforgeeks.org/factory-method-design-pattern-in-java/>
- 5.
 - a. It was nice to be able to work on this when I wanted since I was in a group all by myself.
 - b. It was a bit hard to stay motivated at some points because I just felt like I was doing too much or too little and was overthinking a lot.
 - c. It took me a bit more time than expected for some specific parts and pattern implementation making me cut some classes from the start and add some new features and classes.