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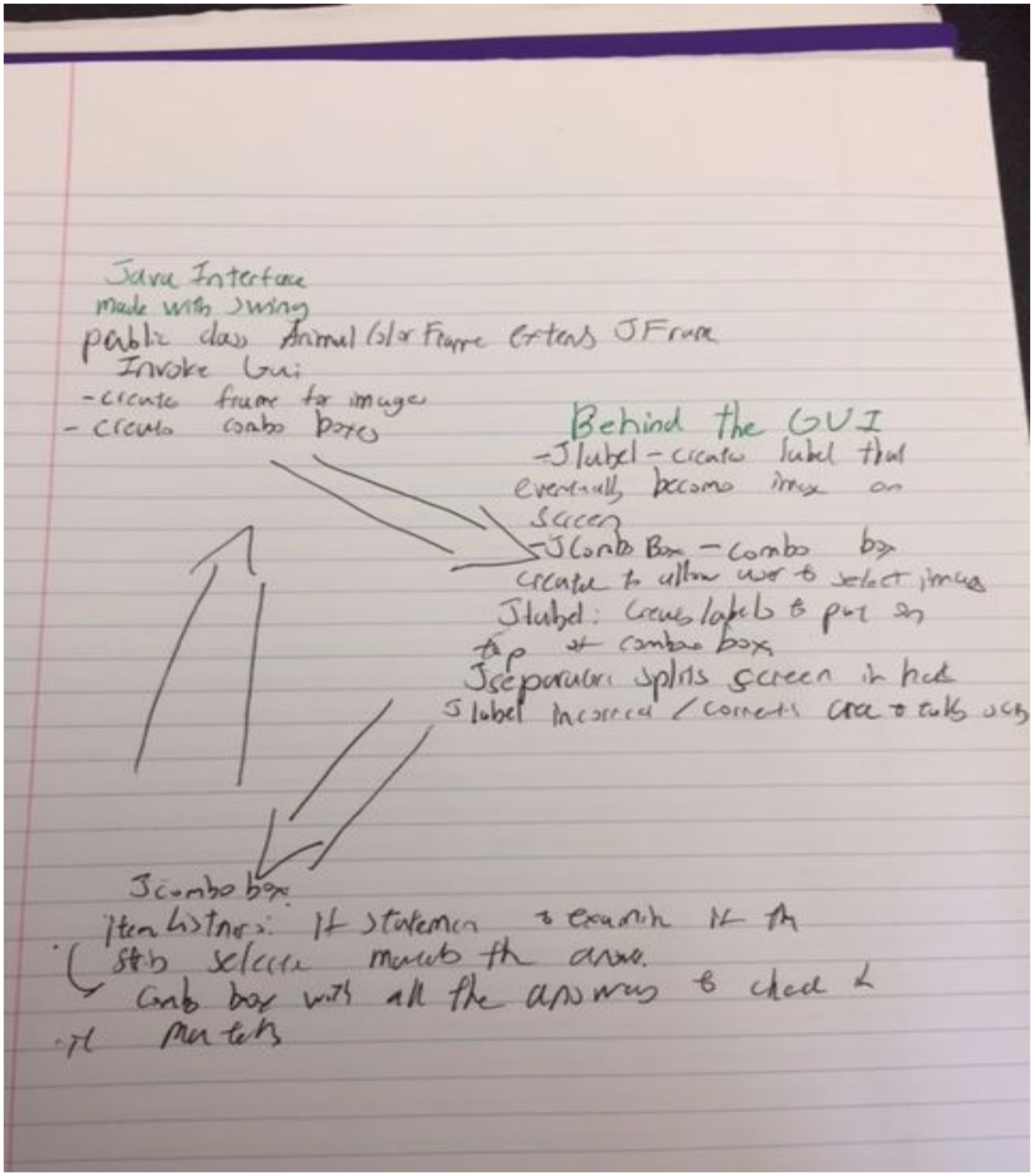
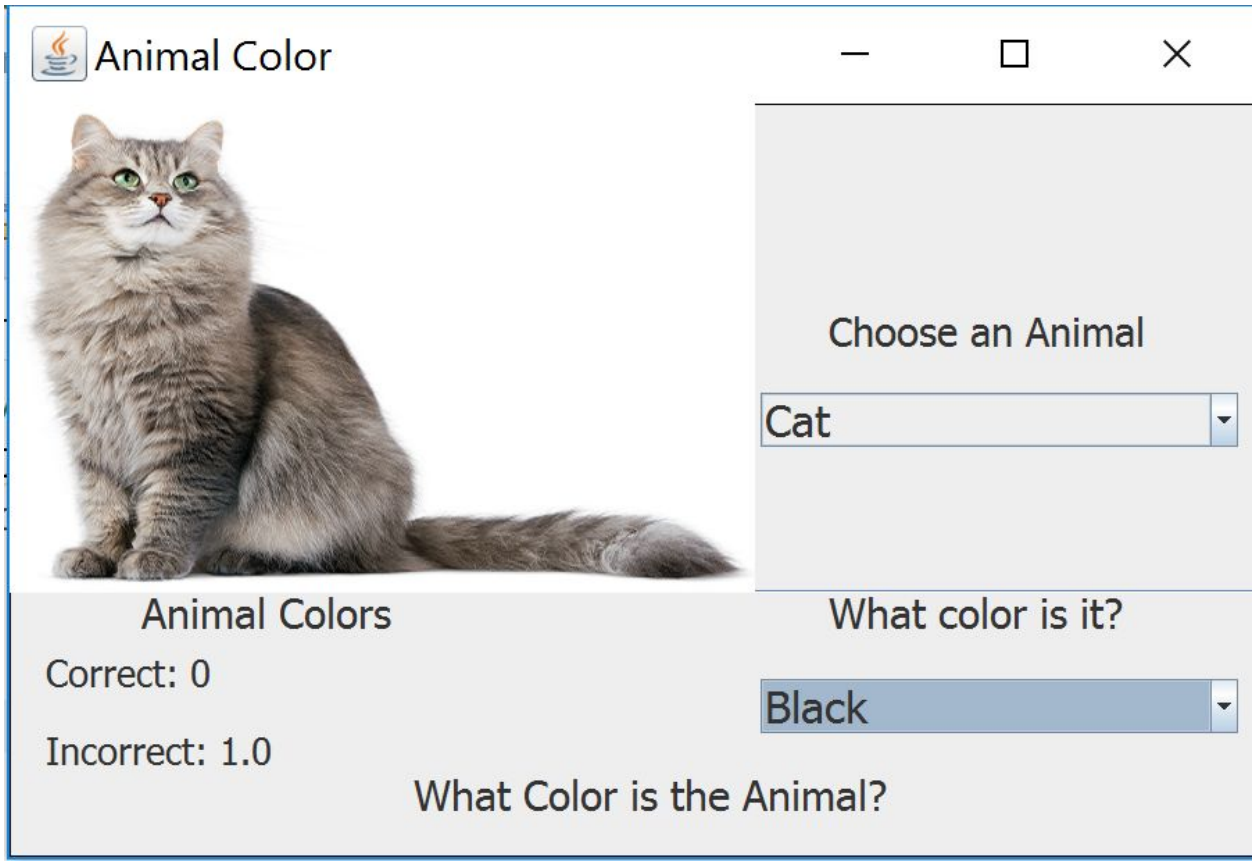
Java Project
5/9/2017
Software Development I

UML Diagram





The objective of the Color Project is to create a java program that is capable of identifying the color of an image and then utilizing the information to create a simple guessing game. Ideally, the preset images and uploaded images of the color project will be animals and so users can then guess the main color of the animal in the image. The motivation behind this project comes from the desire to help color blind children who need assistance developing the skills to identify colors to keep up with other children. The physical requirements for this project will only be a computer with some form of an interactive equipment (mousepad, touchscreen or mouse). Next, I will get into the functionality behind the code.

Originally I wanted the code to be based off of JavaFx and Opencv, however, after coming across a few complication I decided that Java Swing would better fit my needs. In the

process I decided that it would be much easier to make the program on the basis of if statements that are preset for maximum efficiency. The way the code works is like this, in the diagram you see above the user can first choose an image they wish to select. Once the image is selected the user must then choose a color that matches the animal that is being shown. Once a color has been selected the code then matches the string against the preset answer with the image to see if the answer is correct or not. After the string has been examined the if statements either returns a true or false on the correct and the tally is added up and is added to either the correct or incorrect section, as seen in the image above.

The project was an awesome experience in which I learned a lot about myself as a coder. As stated earlier at first I was unable to grasp JavaFX and a lot of my development time went towards that. However, as time begin to close upon I needed to use my critical thinking skills as a coder and decide what was best as I continued to move forward with my project. The aspect of being a good coder is often finding the best solution giving the circumstances you are in. In this case I decided that simplicity would get me the closest to my goal without sacrificing performance and giving colorblind kids a way to learn colors by having fun with a game while looking at cute animals. This task has made me grow a lot as a coder and has also made me appreciate all the knowledge that is available on the internet for us to teach ourselves as we become the coders of the future.