Assignment 2: Ontology

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I chose to do my ontology assignment on cat breeds. In order to make my ontology as accurate as possible I consulted information on different breed standards. My ontology consists of 45 different pedigreed breeds. I began my class hierarchy with the term Cat, I then made breed a sub-class. Under breeds, I entered each breed as its own sub-class of breed and added annotations. Next, I entered 4 object properties (HasTailType, HasCoatType, HasCoatLength, HasTailLength). Once I entered the object properties with annotations, I went back to classes and entered the property sub-classes. For example, for coat colour I entered solid, bi-colour, calico, colourpoint, tortoiseshell and tabby (which also has 4 varieties that were added as a sub-class). I followed the same process with the other object properties adding tail length varieties as well as coat type and length varieties. Once my terms were entered and defined, I disjointed the breed class with the tail type, coat colour, coat type and coat length classes. I then began to make connections between breeds and the object properties. I entered in the most common varieties known to each breed. By selecting the plus sign under sub-class and selected the object restriction creator in order to select my options. In the left column I selected an object property and in the right I selected the class that belonged. For example, I clicked on the breed American Bobtail, and then I opened the

object restriction creator and selected HasTailType as an object property and selected Bobbed as the sub-class. With certain breeds like the manx, I had to repeat certain properties because the specific breed can have 5 different tail lengths. Additionally, while some breeds can come in a variety of colours, I entered only the most common colour related to the breed standard.