ENSE 374 Lab 4

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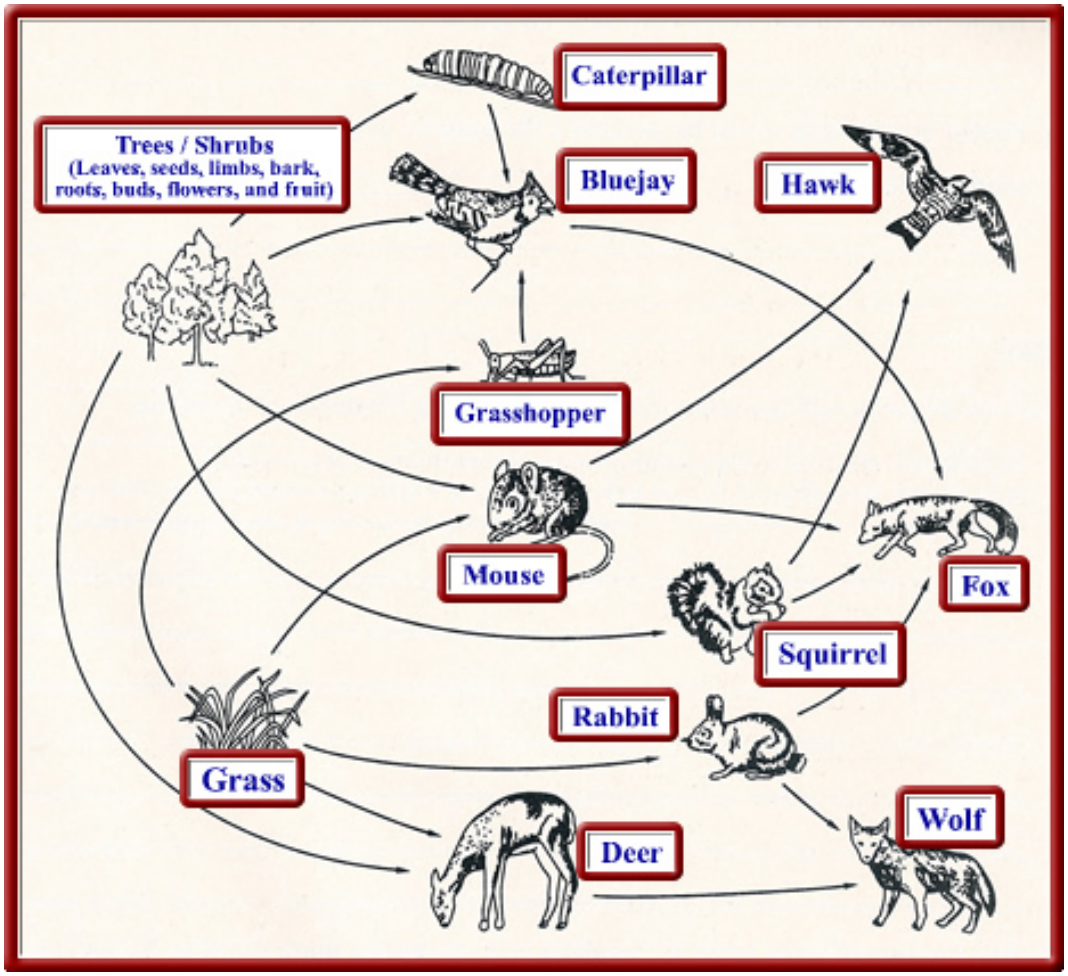

1 Objective

The objective of this lab is to introduce the students to design methodolgies that aid in the design life cycle of a software project. The students will be given a sample problem and will engineer a software solution over the next few labs.

2 Requirements

This will be a goup project with no more than 3 members. The project will be placed under revision control (GitHub if you choose) with all group members contributing. You can create an organization in github or just add collaborators to your repository. Remember part of your grade will be determined by contributions to the project. All design documentation and source code will be placed under revision control. The application will be written in Java and groups may choose what IDE, if any, they would like to develop in.

3 Assignment - Due next lab period

The image on the first page came from Sask Wildlife Federation and details the food chain for animals that live here on the prairies. The federation has a desire to study the life cycle of animals that live in a certain habitat in Saskatchewan. They would like our students to model their habitat and create a software simulation modelling their life cycle. The animals will be placed in a virtual world and seek out food and will live or die depending on what happens in their world. The first phase is to analyze the problem and gather requirements. In this case the lab instructor will be the customer so the first portion of the lab will be to interview the customer and discover some of the requirements. From this you will begin to create a Software Design Document. Also, please use the Forum on URCourses to ask questions about the project so all groups can join in the discussion. Part of the Software Design Document will also include a UML Class Diagram. You can also begin coding to this Class diagram. Phase 1 will be due by next lab period.

4 Phase 1 Requirements

- Create a class diagram based on the Sask Animal Image.
- Create a Software design document
- Begin Stub coding to that class diagram