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Title:

## Animal's Life Cycle Simulation Program

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Author:

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Date:

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Date:

Project:
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### Revision History:

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Approval: \_\_\_\_\_

Date:

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**1.** Title Animal's Life Cycle Simulation Program

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**1. Introduction**

This Software will define the detail of animal's life cycle and food chain according to the image of Saskatchewan Wildlife Federation. In terms of the customer's requirements, this project will help students to study that the life cycle of animals, which live in a certain natural environment in Saskatchewan. And then the software will simulate the model of animal's life cycle. In the software, those animals will be placed in a virtual place, and looking for the food to decide they will live or die.

**1.1 Scope**

The software will be coded by Java. A group is asked to design a simulation program that make student to add or delete a bunch of different animals in a simulated place to see what happens between various animals. From the wildlife image we can see the life circle but this is not complete. Therefore, we need to make sure we can add more animals at any time in the software.

**1.2 Related Documents**

See Internal Design Section

**1.3 External Requirements**

- 1) The user can define which animals will in the life cycle, and they can add or delete the animals which they want or do not want

**1.4 Internal Requirements**

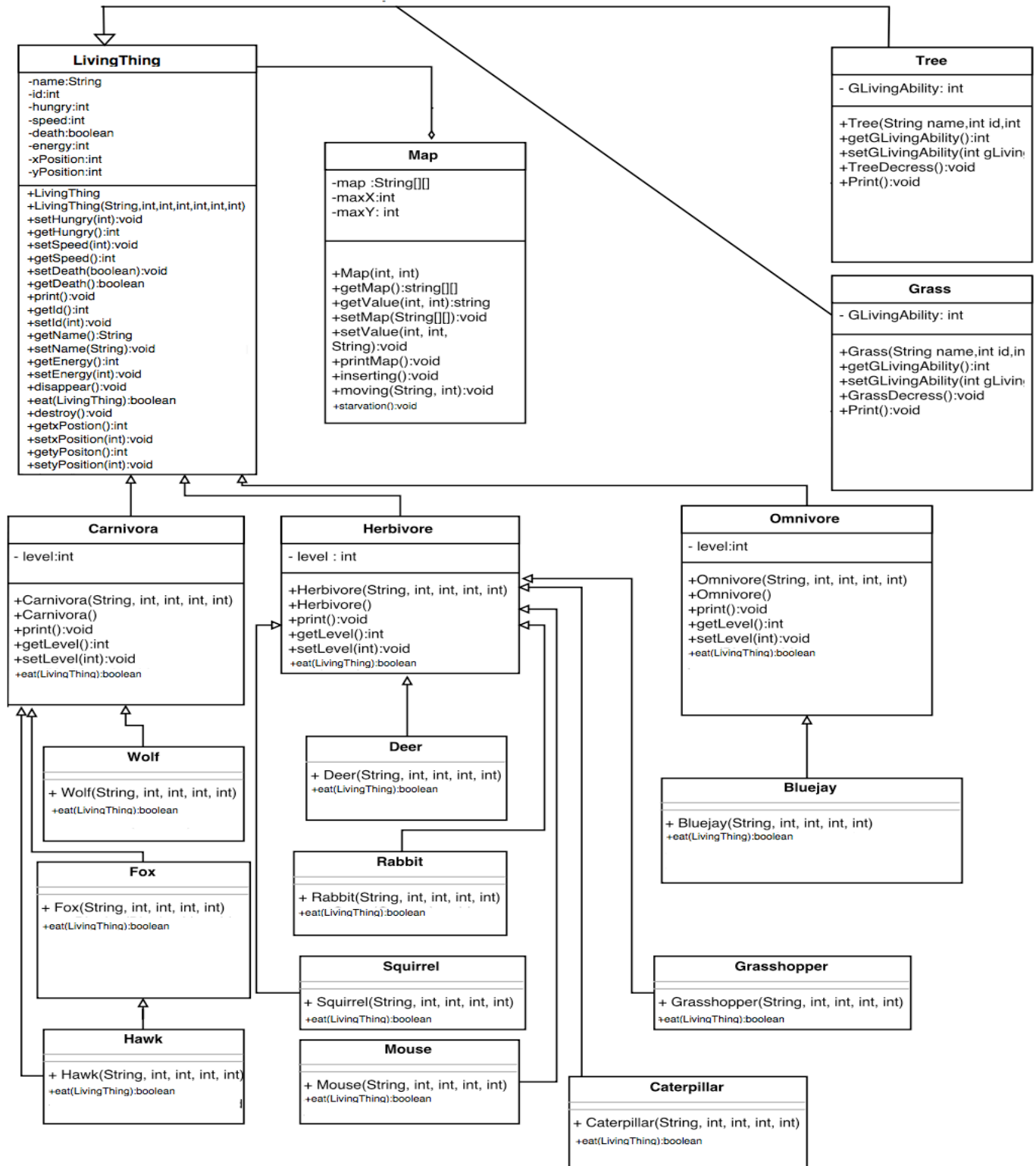
- 1) Use Jave
- 2) Use inheritance
- 3) Work in a group
- 4) Work with Github

**1.5 Design issues**

- 1) Mouse and BlueJay (Multiple Inheritance)
- 2) Mouse and BlueJay are in the different life cycle

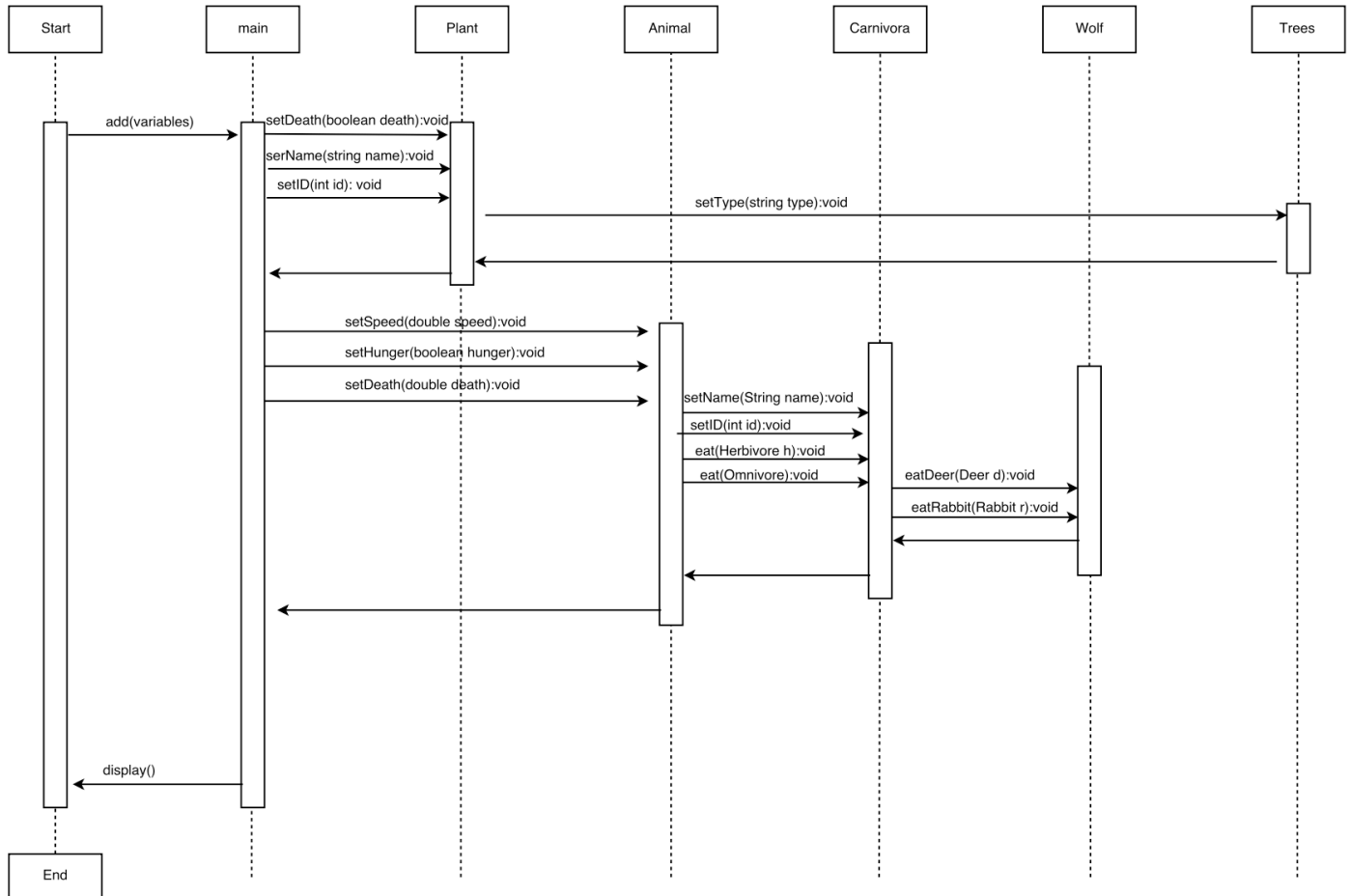
# 1. Title Animal's Life Cycle Simulation Program

## 2. Internal Design



# 1. Title Animal's Life Cycle Simulation Program

## 2.1 Data Flows



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## 2.2 Version

### 1. Version1

- 1) Basic structure
- 2) All different kind of animal class

### 2. Version2

- 1) Add eat function
- 2) Add artificial map
- 3) Add death function
- 4) Add destroy function