**INFO 5100 Application Engineering and Development Final Project**

**Wildlife Management System**

**Problem Statement:**

Our application goal is to conserve the world’s largest wild places of the three continents, viz. Asia, Africa and North America; home to more than 50% of the world’s biodiversity.

We would be developing a Java Swing application to collaborate various organizations involved in protecting wildlife species across these continents. The application would act as a mediator in implementing conservation plans on species or populations that in particularly endangered, engaging various organizations in providing solutions to curb activities that are harmful to the habitat. Protect endangered species by curbing poaching, deforestation and other illegal activities.

**How do we plan to achieve this?**

Our application would handle various scenarios, like:

* Maintaining database of all the species present in a region which includes attributes like, the count, migratory properties, life span, status (Near threatened(NT), Vulnerable(VU), Endangered(EN), Critically Endangered(CR), Extinct in the wild(EW), Extinct(EX)), etc.
* Maintaining the organizations involved in supporting these species by providing them health benefits as well as protection.
* The system will handle request of various categories like immediate attention in an area and their preventive measures. The request will be categorized as high, medium and low. Each request will have its deadline for action as 8hrs, 16hrs and 24hrs for high, medium and low category threats respectively.
* In an event of an overdue of a critical deadline an alert would be generated across the system for prompt action.
* Involving citizens and setting up hotlines in an event of an emergency.
* Maintaining records of all the donations received.
* We will also attempt to implement live tracking system. In this system, we will track the location of specific category of wildlife like critically endangered species, live on a map. The location will be fed into the system from the tracking tag present on the animal. The system will take in the last known location of the animal and based on specific parameters like location updates, we can also detect poaching patterns if present.