**Award: Network and Software Systems**

**Module: Systems Analysis 60%**

**Module: Relational Database 60%**

**Module: Windows Programming 30%**

**Module: Object Oriented Programming 40%**

**This brief is used for all four of the above modules but serves a different purpose within each module.**

**Assessment: Animal Management System for Dublin Zoo**

Dublin Zoo, in Phoenix Park, Dublin, Dublin Zoo is the largest zoo in Ireland and one of Dublin's most popular attractions. Opened in 1831, the zoo describes its role as conservation, study, and education. Its stated mission is to "work in partnership with zoos worldwide to make a significant contribution to the conservation of the endangered species on Earth".

Covering over 28 hectares (69 acres) of Phoenix Park, it is divided into areas named World of Cats, World of Primates, The Kaziranga Forest Trail, Fringes of the Arctic, African Plains, Birds, Reptiles, Plants, City Farm, Endangered Species.

The capacity of the Zoo has increased over the last number of years and the current system is no longer operational . Various problems have arisen in the recent years with regards to the recording and managing of animals due to the current system. Also producing reports have been a major problem due to the fact that the information needed for these is stored in a variety of locations and in different formats.

Another problem has been the managing of existing data. There have been numerous HR issues relating to who has the responsibility for recording and managing the data. Management has also concerns over the security of information. At the moment in theory at least all staff can access all data.

### Present System

At present there is no specific policy with regards to the recording of animal and management of details. The Current system is mainly manual with records being variously kept in paper/hardcopy format or in electronic form, or in a mixture of both. the location of these records is, usually, only known to the particular area manager.

Details

* Current system is in the main manual with some managers using simple spreadsheets or word.
* The Zoo currently has in excess of 400 animals.
* All species and animals are listed on the Dublin Zoo Website.
* Animals are grouped by their class namely
  + Mammals
  + Birds
  + Reptiles
  + Amphibians
  + Invertebrates
* Create new animal records
* Update and delete records
* Search records using minimum of 3 options to choose from (animal id, animal name…..)

**What is required from the new system**

* A menu-driven application which will allow Zoo management to manage Zoo animals. It should be possible to enter new animals in the system as they arrive or are born at zoo and also manage animal records. It should be possible to search for animals by a minimum of any 3 criteria.
* The system which will provide various types of reports, eg All animals in a particular area, all animals of a certain type. etc
* Management would like you to create a number of reports which would be useful to them. (Min 20)
* The system should be user friendly with the minimum amount of input required, eg data entry should be by selection rather than by typing.

**Clarification on any of the above may be obtained from class tutors.**

* Create a frame to insert new animals
* Create a frame to manage animals(search, update and delete)(search animals by minium of 3 criteria eg= name, type, country of origin etc)
* Create reports like (all the animals in a certain area , all animals of a certain type in the zoo) these are basically a drop down boxes with pre-prepared sql statements (15-20)