

System Requirement Specification

Animal Species Repository System

Version: 1.1

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1. Introduction

1.1. Purpose

The purpose of this document is to describe detailed information of “Animal Species Repository System”. The document will illustrate the purpose and use of the developed ASRP System.

1.2. Scope

The ASRS is web application designed for users who wants to view the information of any animals of India. ASRS uses RDBMS for storage and retrieval of data. There will only be one super user who has all rights.

The Animals information in our RDBMS is divided into the following 5 Category types:-

Critically Endangered

A **critically endangered (CR) species** is one which has been categorized by the International Union for Conservation of Nature (IUCN) as facing a very high risk of extinction in the wild. It is the highest risk category assigned by the IUCN Red List for wild **species**.

Endangered

An **endangered species** is one which has been categorized by the International Union for Conservation of Nature (IUCN) as a species of animal or plant that is seriously at risk of extinction.

Vulnerable

A **vulnerable species** is one which has been categorized by the International Union for Conservation of Nature (IUCN) as likely to become **endangered** unless the circumstances threatening its survival and reproduction improve. **Vulnerability** is mainly caused by habitat loss or destruction of the **species** home.

Near Threatened

A **near-threatened** species is a species which has been categorized as "Near Threatened" (NT) by the International Union for Conservation of Nature as that may be considered threatened with extinction in the near future, although it does not currently qualify for the threatened status.

Least Concern

A **least concern (LC) species** is a species which has been categorized by the International Union for Conservation of Nature as evaluated but not qualified for any other category. As such they **do** not qualify as threatened, near threatened, or (before 2001) conservation dependent.

The Category further contain the following sub-categories of animals:-

- *Birds*
- *Mammals*
- *Reptiles*
- *Invertebrates*
- *Fish*
- *Amphibians*

1.3. Definitions, Acronyms, and abbreviations

Term	Definition
ASRS	Animal Species Repository System

2. Functional Requirements

2.1. Functionality

This sub-section contains the requirements for the ASRS.

2.1.1. Provide Search facility.

- The system shall enable user to enter the search text on the screen.
- The system shall display all the matching results based on the search
- The system shall display only 10 matching result on the current screen.
- The system shall enable user to navigate between the search results.
- The system shall notify the user when no matching product is found on the search.
- The user will be able to filter information like animal name, age, height, weight, population, location and many more based on location, categories, sub-categories, Animals and many other characteristics.

3. Database Requirements

A relational database is used. The data formats to be supported are integer, double, string, datetime, date, text, password, Boolean, image.

Procedural Language/PostgreSQL will be used for the system.

Business Constraints

3.1. Standard Development Tools

The system shall be built using a standard web page development tool that conforms to WWW standards.

4. Information About Animal Species Repository System

- Category contains category_id, category_name.
- Sub-category contains sub_category_id, sub_category_name.
- Main-category has main_category_id, sub_category_id, category_id, animal_id.
- Main-category can have multiple categories and sub-categories.
- Animal has animal_id, name, height, weight, sci_name, age, life_span, color, gender.
- One animal can be found in multiple cities.
- Animal details has animal_id, city_id, population.
- Animal can belong to one sub-category.
- City has city_id, city_name, state_id.
- State has state_id, state_name.
- One city has only one state & one state can contain many cities.