

Zoo Management System Documentation

Overview

The Zoo Management System is designed to efficiently manage various aspects of a zoo, including animals, habitats, staff, and visitors. This document provides an overview of the system's structure, including its source code organization and available documentation resources.

Source Code Structure

Packages

- **com.zoo.animals** Contains classes related to different types of animals in the zoo.
 - `Animal.java`
 - `SwimmingAnimal.java`
 - `WalkingAnimal.java`
 - `FlyingAnimal.java`
 - `Mammal.java`
 - `Bird.java`
 - `Fish.java`
- **com.zoo.habitats** Contains classes related to various habitats within the zoo.
 - `Habitat.java`
 - `Forest.java`
 - `Ocean.java`
 - `Desert.java`
- **com.zoo.management** Manages the operations and staff within the zoo.
 - `AnimalManager.java`
 - `HabitatManager.java`
 - `ZooKeeperManager.java`
- **com.zoo.models** Contains models representing people and schedules in the zoo.
 - `ZooKeeper.java`
 - `Visitor.java`
 - `Schedule.java`

- **com.zoo.reports** Generates reports related to animals and habitats.
 - `ReportGenerator.java`
 - `AnimalReport.java`
 - `HabitatReport.java`
- **com.zoo.utils** Provides utility classes for input handling and validation.
 - `InputHandler.java`
 - `Validator.java`

Main Application

- **Main.java**
The entry point of the Zoo Management System application.

Documentation

Diagrams

The documentation includes various diagrams to help understand the system's architecture and functionality.

Class Diagrams

Located in `diagrams/class-diagrams/`, these diagrams illustrate the relationships between classes in different packages.

- `animals-class-diagram.puml` / `animals-class-diagram.png`
- `habitats-class-diagram.puml` / `habitats-class-diagram.png`
- `management-class-diagram.puml` / `management-class-diagram.png`
- `models-class-diagram.puml` / `models-class-diagram.png`
- `reports-class-diagram.puml` / `reports-class-diagram.png`

Use Case Diagrams

Located in `diagrams/use-case-diagrams/`, these diagrams depict the interactions between users and the system.

- `use-case-diagram.puml` / `use-case-diagram.png`

Sequence Diagrams

Located in `diagrams/sequence-diagrams/`, these diagrams show the sequence of operations within the system.

- `sequence-diagram.puml` / `sequence-diagram.png`

Activity Diagrams

Located in `diagrams/activity-diagrams/`, these diagrams represent the workflow of various processes.

- `activity-diagram.puml/` `activity-diagram.png`

Component Diagrams

Located in `diagrams/component-diagrams/`, these diagrams illustrate the components and their interactions.

- `component-diagram.puml/` `component-diagram.png`

Conclusion

The Zoo Management System is a comprehensive solution for managing zoo operations. The organized structure of the source code and detailed documentation resources provide a solid foundation for understanding and extending the system.