NATURE KINGDOM

Team 15: Zoo Database

Types of data that can be added, modified, and deleted

As a zoo, our main responsibilities lie in keeping track of our animals, visitors, and products.

- Animals have stored individual information that can be added, edited, and deleted by authorized employee roles. Feedlogs and medical records are additionally stored separately with similar restrictions.
- Visitors create accounts containing their personal information, which can be updated and deleted at their choosing. Additional information regarding their tickets, memberships, and gift shop purchases is also available.
- Memberships and tickets can be bought by visitors, and modification access to them is restricted to certain authorizations. Similarly, our gift shop products are stored through an inventory system that can be used to add, modify, and delete specific products. All purchases require visitors to log in, and logs are created tying the account to the order log.

Additional information stored includes:

- Exhibits and their locations that contain multiple enclosures to which animals are assigned.
- **New enclosures** can be created and assigned to existing exhibits.
- **Event data** can also be added, updated, and deleted by certain employee roles.

Types of user roles in the application

There are 4 different types of users who will be interacting with our zoo application: visitors, employees, managers, and admins.

- The visitors' login page can be found on the right side of the header
- The employee, manager, and admin login page can be found on the left of the footer

Visitors:

- The Visitor Dashboard
 - Allows the visitor to edit their account information as well as delete their account.
 - Allows viewing of current tickets, membership status, and gift shop purchase history. (Clicking on the buttons of these will route to pages displaying more information on these topics)
- Additional info for Visitors
 - Can view our Exhibits, Enclosures, and Animals via the exhibits page.
 - Can view our current Events and upcoming Events via the homepage and the events page.
 - Can purchase tickets, memberships, and gift shop products.

Employees:

Zookeepers-

- View the Enclosures they're assigned
 - Includes: Current Capacity, Max Capacity, Status(active, closed, under_maintenance), temperature control, and the Exhibit
- View the animals from their assigned Enclosures.
 - View animal information (name, species, animal type, health status, date of birth)
 - View specific animal feed log history and add new feed logs.
 - Mark animal health statuses based on their observations.
 - Marking an animal's health status off of healthy will notify veterinarians

Veterinarians-

- View a list of the animals that are marked as 'NEEDS CARE' or 'CRITICAL'.
 - View and edit the Medical History for each of these animals.
 - Create a new Medical Record containing information:
 - Diagnosis
 - Treatment
 - Record Type
 - Additional Notes

Giftshop Clerks-

- View Gift Shop dashboard that contains

- Inventory Summary (total items, total stocked items, number of items low on stock)
- Inventory view (shows all items, their current stock, status, and last stocked date)
 - The 'Restock' items button allows them to restock items.

Managers:

- All managers can view time sheets containing employees assigned to them

General/Zookeeper Manager-

- View the Zookeeper Manager Dashboard
 - View Revenue Report
 - Enclosures, Animals, and Feed Logs Entry Forms
 - Pages to Add/Modify/Delete data into the system regarding these entities

Veterinarian Manager-

- Notification for Animals in Critical Health
- View the Veterinarian Manager Dashboard
 - Animal Health Overview (Quantities of animals in each Health Status)
 - View Medical Records Report
 - View filterable page displaying:
 - Total Medical Records
 - Total Unique Animals in Records
 - Most Common Record Type
 - View Medical History Entry Form
 - Pages to Add/Modify/Delete data into the system regarding these entities
 - View Zoo Keeper Portal
 - View Veterinarian Portal

Gift Shop Manager-

- Notification for Products in Low Stock
- View the Gift Shop Manager Dashboard
 - Inventory and Sales overview.
 - View Gift Shop dashboard portal (same page as Giftshop Clerks)
 - Additionally can add edit and delete items from inventory (Clerks can only restock)
 - View Gift Shop Sales Data ('View Sales Data' button)
 - View a filterable page displaying:
 - Total Revenue
 - Total Orders
 - Total Products sold
 - Best/Worst Grossing Item
 - Most/Least Sold Item

Admin:

- Admin dashboard has access to:
 - Employee, Tickets, Visitors, Event Entry Form
 - Pages to Add/Modify/Delete data into the system regarding these entities

Semantic Constraints:

Health Status Trigger - ensures no animal in CRITICAL condition goes unseen:

health_status_alert

- Trigger creates an alert when an animal's health status becomes 'CRITICAL', notifying all veterinarians.

resolve health alert

Resolves the alert automatically when the animal's status updates to 'HEALTHY,'
updating the alert status to resolved.

Product Stock Triggers - ensures low stock products are seen and restocked:

stock alert after update

- Trigger creates an alert when a product's stock drops to 4 or fewer units, notifying the responsible gift shop manager via notification.

stock resolved after update

- Resolves alert when the product is restocked above 4 units, and logs a resolution notice.

Reports and Data Queries

The reports included in our project are the medical records report, the gift shop records report, and the revenue report.

Revenue Report:

- Pulls data from Orders, Tickets, and Membership tables
- Filters records by date range and product type
- Shows summary stats for total products and total profits sold
- Displays a detailed table of the products

Medical Records Report:

- Pulls data from the Medical record, employees, and exhibits table
- Filters records by date range, employee, record type, species, and enclosure
- Shows summary stats and a pie chart of record types
- Displays a detailed table of medical records

Giftshop Report:

- Pulls data from Orders, Order Items, and Products tables
- Filters orders by date range, products, and total price
- Shows summary stats for Total Revenue, Orders made, Products sold, best/worst grossing items, most/least sold items.

- Toggle displays between two detailed tables: orders or order items

Data Entry Forms Available (for adding, modifying, and deleting):

- Enclosures
- Animals
- Feed Logs
- Medical history
- Employees
- Tickets
- Visitors
- Events

Weblink: https://black-river-089b82310.6.azurestaticapps.net/

Github URL: https://github.com/AngelSaravia/Nature Kingdom

Login Info

Visitor Account - (or feel free to make a new one) johndoe
Johnd1234.

Manager Accounts:

General/Zookeeper Manager

mrodriguez@manager.naturekingdom.com MariaRodriguez2023!

Giftshop Manager

ewilson@manager.naturekingdom.com EmmaWilson2023!

Veterinarian Manager

Ibrown@manager.naturekingdom.com LatishaBrown2023!

Employee Accounts:

Zookeeper Employee

Itorres@zookeeper.naturekingdom.com LenaTorres2023!

Giftshop Employee

rmoreno@giftshop.naturekingdom.com RubyMoreno2023!

Veterinarian Employee

ebaker@giftshop.nautrekingdom.com Ethanbaker2023!

Admin Account:

mzhang@admin.naturekingdom.com MeiZhang2023!