my-app/

├── pom.xml

├── src/

│ ├── main/

│ │ ├── java/

│ │ │ └── com/

│ │ │ └── mycompany/

│ │ │ └── elephantmanagement/

│ │ │ ├── Elephant.java

│ │ │ ├── HealthRecord.java

│ │ │ ├── FeedingSchedule.java

│ │ │ └── Main.java

│ │ └── resources/

│ │ └── application.properties

│ └── test/

│ ├── java/

│ │ └── com/

│ │ └── mycompany/

│ │ └── elephantmanagement/

│ │ ├── ElephantTest.java

│ │ ├── HealthRecordTest.java

│ │ └── FeedingScheduleTest.java

│ └── resources/

│ └── test.properties

└── target/

**Dashboard**

**Elephant information conservation efforts**

**Health record donation**

**Feeding record reports**

**Tracking settings**

**Incident report**

1. Elephant Information Database: This database would store basic information about each elephant. This could include:

1. Basic Information:

* Elephant ID: A unique identifier for each elephant.
* Name: The name of the elephant.
* Sex: The sex of the elephant (Male/Female).
* Date of Birth: The birth date of the elephant. This can be used to calculate the elephant’s age.

2. Physical Characteristics:

* Height: The height of the elephant.
* Weight: The weight of the elephant.
* Tusk Length: The length of the elephant’s tusks, if applicable.

3. Origin and Location Information:

* Place of Birth: The place where the elephant was born.
* Current Location: The current location of the elephant. This could be a specific area within a park or reserve.

4. Social Information:

* Herd ID: The identifier of the herd to which the elephant belongs.
* Relationships: Information about the elephant’s relationships with other elephants, such as its mother, siblings, or offspring.

5. Behavioral Information:

* Behavioral Traits: Any notable behavioral traits or habits of the elephant.
* Training Information: Details about any training the elephant has received.

6. Conservation Status:

* Endangered Status: The conservation status of the elephant, based on classifications like those used by the IUCN (International Union for Conservation of Nature).

Elephant Information Database:

Elephant ID: 001

Name: Raja

Sex: Male

Date of Birth: 1995-05-01

Physical Characteristics:

Height: 9 feet

Weight: 5000 kg

Tusk Length: 1.2 feet

Origin and Location Information:

Place of Birth: Pinnawala Elephant Orphanage, Sri Lanka

Current Location: Yala National Park, Sri Lanka

Social Information:

Herd ID: H001

Relationships: Mother - Maya (Elephant ID: 002), Sibling - Gaja (Elephant ID: 003)

Behavioral Information:

Behavioral Traits: Calm, friendly

Training Information: Trained for health checks and basic commands

Conservation Status:

Endangered Status: Endangered (as per IUCN classification)

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Elephant ID: 002

Name: Maya

Sex: Female

Date of Birth: 1990-04-12

...

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Elephant ID: 003

Name: Gaja

Sex: Male

Date of Birth: 2000-03-15

...

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Elephant ID: 004

Name: Kavi

Sex: Female

Date of Birth: 2002-02-20

...

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Elephant ID: 005

Name: Mala

Sex: Female

Date of Birth: 1998-06-10

...

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Elephant ID: 006

Name: Nila

Sex: Female

Date of Birth: 2001-07-30

...

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Elephant ID: 007

Name: Suriya

Sex: Male

Date of Birth: 1997-08-15

...

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Elephant ID: 008

Name: Chandra

Sex: Female

Date of Birth: 1999-09-25

...

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Elephant ID: 009

Name: Pawan

Sex: Male

Date of Birth: 2003-10-05

...

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Elephant ID: 010

Name: Tara

Sex: Female

Date of Birth: 2004-11-12

...

Elephant ID: 011

Name: Kala

Sex: Female

Date of Birth: 2004-01-15

Elephant ID: 012

Name: Bandara

Sex: Male

Date of Birth: 2002-02-20

Elephant ID: 013

Name: Muthu

Sex: Male

Date of Birth: 2003-03-25

Elephant ID: 014

Name: Nila

Sex: Female

Date of Birth: 2005-04-30

Elephant ID: 015

Name: Indra

Sex: Female

Date of Birth: 2006-05-05

Elephant ID: 016

Name: Arjuna

Sex: Male

Date of Birth: 2007-06-10

Elephant ID: 017

Name: Chandra

Sex: Female

Date of Birth: 2008-07-15

Elephant ID: 018

Name: Ravi

Sex: Male

Date of Birth: 2009-08-20

Elephant ID: 019

Name: Sita

Sex: Female

Date of Birth: 2010-09-25

Elephant ID: 020

Name: Lakshmi

Sex: Female

Date of Birth: 2011-10-30

Elephant ID: 021

Name: Kumari

Sex: Female

Date of Birth: 2005-11-15

Elephant ID: 022

Name: Aruna

Sex: Male

Date of Birth: 2006-12-20

Elephant ID: 023

Name: Sumana

Sex: Female

Date of Birth: 2007-01-25

Elephant ID: 024

Name: Vijaya

Sex: Male

Date of Birth: 2008-02-30

Elephant ID: 025

Name: Ananda

Sex: Male

Date of Birth: 2009-03-05

Elephant ID: 026

Name: Damayanthi

Sex: Female

Date of Birth: 2010-04-10

Elephant ID: 027

Name: Nihal

Sex: Male

Date of Birth: 2011-05-15

Elephant ID: 028

Name: Sanduni

Sex: Female

Date of Birth: 2012-06-20

Elephant ID: 029

Name: Rohana

Sex: Male

Date of Birth: 2013-07-25

Elephant ID: 030

Name: Kamala

Sex: Female

Date of Birth: 2014-08-30

2. Health Records Database: This database would store medical records for each elephant. This could include:

* Past Illnesses: Information about any diseases or illnesses the elephant has had in the past.
* Treatments: Information about any treatments the elephant has received.
* Vaccinations: Information about any vaccinations the elephant has received.

Health Records Database:

-----------------------------------

Elephant ID: 011

Name: Kala

Last Checkup Date: 2024-01-15

Common Health Issues: Seasonal allergies

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 012

Name: Bandara

Last Checkup Date: 2024-02-20

Common Health Issues: Mild arthritis

Current Health Status: Under treatment for arthritis

Vaccination Status: Up-to-date

Elephant ID: 013

Name: Muthu

Last Checkup Date: 2024-03-25

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 014

Name: Nila

Last Checkup Date: 2024-04-30

Common Health Issues: Digestive issues

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 015

Name: Indra

Last Checkup Date: 2024-05-05

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 016

Name: Arjuna

Last Checkup Date: 2024-06-10

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 017

Name: Damayanthi

Last Checkup Date: 2024-07-15

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 018

Name: Ravi

Last Checkup Date: 2024-08-20

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 019

Name: Sita

Last Checkup Date: 2024-09-25

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

Elephant ID: 020

Name: Lakshmi

Last Checkup Date: 2024-10-30

Common Health Issues: None

Current Health Status: Healthy

Vaccination Status: Up-to-date

3. Feeding Schedule Database: This database would store information about each elephant’s diet and feeding schedule. This could include:

* Diet: Information about what the elephant eats.
* Feeding Times: Information about when the elephant is fed.

Feeding Schedule Database:

-----------------------------------

Elephant ID: 011

Name: Kala

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 012

Name: Bandara

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 013

Name: Muthu

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 014

Name: Nila

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 015

Name: Indra

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 016

Name: Arjuna

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 017

Name: Damayanthi

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 018

Name: Ravi

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 019

Name: Sita

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

Elephant ID: 020

Name: Lakshmi

Feeding Times: 10.00 am, 12.00 pm, 02.00 pm, 05.00 pm[^1^][5]

Diet: Grass, leaves, fruits, and bark[^2^][1]

4. Tracking Database: If the elephants are being tracked (for example, using GPS collars), this database would store location data for each elephant. This could include:

* Location Data: Information about the elephant’s current location and past movements.
* Behavior Changes: Information about any changes in the elephant’s behavior or habitat that have been observed.

Tracking Database:

-----------------------------------

Elephant ID: 011

Name: Kala

Last Known Location: Near Udawalawe National Park, Sri Lanka

Date of Last Update: 2024-01-15

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 012

Name: Bandara

Last Known Location: Near Yala National Park, Sri Lanka

Date of Last Update: 2024-02-20

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 013

Name: Muthu

Last Known Location: Near Wilpattu National Park, Sri Lanka

Date of Last Update: 2024-03-25

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 014

Name: Nila

Last Known Location: Near Minneriya National Park, Sri Lanka

Date of Last Update: 2024-04-30

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 015

Name: Indra

Last Known Location: Near Kaudulla National Park, Sri Lanka

Date of Last Update: 2024-05-05

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 016

Name: Arjuna

Last Known Location: Near Wasgamuwa National Park, Sri Lanka

Date of Last Update: 2024-06-10

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 017

Name: Damayanthi

Last Known Location: Near Gal Oya National Park, Sri Lanka

Date of Last Update: 2024-07-15

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 018

Name: Ravi

Last Known Location: Near Horton Plains National Park, Sri Lanka

Date of Last Update: 2024-08-20

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 019

Name: Sita

Last Known Location: Near Sinharaja Forest Reserve, Sri Lanka

Date of Last Update: 2024-09-25

Tracking Method: GPS Collar[^1^][4]

Elephant ID: 020

Name: Lakshmi

Last Known Location: Near Pinnawala Elephant Orphanage, Sri Lanka

Date of Last Update: 2024-10-30

Tracking Method: GPS Collar[^1^][4]

5. Incident Reports Database: This database would store reports of any incidents involving the elephants. This could include:

* Incident Details: Information about the incident, such as what happened, when and where it happened, and who was involved.
* Response: Information about how the incident was handled and what actions were taken.

Incident Reports Database:

-----------------------------------

Elephant ID: 011

Name: Kala

Incident Date: 2024-01-15

Incident Type: Human-Elephant Conflict[^1^][1]

Incident Description: Kala wandered into a nearby village and caused minor property damage. No injuries were reported[^1^][1].

Elephant ID: 012

Name: Bandara

Incident Date: 2024-02-20

Incident Type: Train Accident[^2^][3]

Incident Description: Bandara was involved in a train accident near Yala National Park. He survived with minor injuries[^2^][3].

Elephant ID: 013

Name: Muthu

Incident Date: 2024-03-25

Incident Type: Human-Elephant Conflict[^1^][1]

Incident Description: Muthu was found in a farmer's field, damaging crops. The farmer used firecrackers to scare him away[^1^][1].

Elephant ID: 014

Name: Nila

Incident Date: 2024-04-30

Incident Type: Health Issue[^3^][5]

Incident Description: Nila showed signs of illness. A vet was called and she was treated for a minor infection[^3^][5].

Elephant ID: 015

Name: Indra

Incident Date: 2024-05-05

Incident Type: Human-Elephant Conflict[^1^][1]

Incident Description: Indra wandered into a village and caused some property damage. No injuries were reported[^1^][1].

Elephant ID: 016

Name: Arjuna

Incident Date: 2024-06-10

Incident Type: Train Accident[^2^][3]

Incident Description: Arjuna was involved in a train accident near Wasgamuwa National Park. He survived with minor injuries[^2^][3].

Elephant ID: 017

Name: Damayanthi

Incident Date: 2024-07-15

Incident Type: Human-Elephant Conflict[^1^][1]

Incident Description: Damayanthi was found in a farmer's field, damaging crops. The farmer used firecrackers to scare her away[^1^][1].

Elephant ID: 018

Name: Ravi

Incident Date: 2024-08-20

Incident Type: Health Issue[^3^][5]

Incident Description: Ravi showed signs of illness. A vet was called and he was treated for a minor infection[^3^][5].

Elephant ID: 019

Name: Sita

Incident Date: 2024-09-25

Incident Type: Human-Elephant Conflict[^1^][1]

Incident Description: Sita wandered into a village and caused some property damage. No injuries were reported[^1^][1].

Elephant ID: 020

Name: Lakshmi

Incident Date: 2024-10-30

Incident Type: Train Accident[^2^][3]

Incident Description: Lakshmi was involved in a train accident near Pinnawala Elephant Orphanage. She survived with minor injuries[^2^][3].

6. Conservation Efforts Database: This database would store information about conservation efforts related to the elephants. This could include:

* Population Monitoring: Information about the size and health of the elephant population.
* Anti-Poaching Initiatives: Information about efforts to prevent poaching and protect the elephants.

Conservation Efforts Database:

-----------------------------------

Elephant ID: 011

Name: Kala

Conservation Efforts: Habitat protection, community engagement, awareness programs[^1^][3][^2^][5]

Last Update: 2024-01-15

Elephant ID: 012

Name: Bandara

Conservation Efforts: Establishment of new National Parks, increasing the size of conservation areas[^3^][4]

Last Update: 2024-02-20

Elephant ID: 013

Name: Muthu

Conservation Efforts: Establishment of elephant corridors, allowing the safe passage of elephants from one area of habitat to another[^3^][4]

Last Update: 2024-03-25

Elephant ID: 014

Name: Nila

Conservation Efforts: Habitat protection, community engagement, awareness programs[^1^][3][^2^][5]

Last Update: 2024-04-30

Elephant ID: 015

Name: Indra

Conservation Efforts: Establishment of new National Parks, increasing the size of conservation areas[^3^][4]

Last Update: 2024-05-05

Elephant ID: 016

Name: Arjuna

Conservation Efforts: Establishment of elephant corridors, allowing the safe passage of elephants from one area of habitat to another[^3^][4]

Last Update: 2024-06-10

Elephant ID: 017

Name: Damayanthi

Conservation Efforts: Habitat protection, community engagement, awareness programs[^1^][3][^2^][5]

Last Update: 2024-07-15

Elephant ID: 018

Name: Ravi

Conservation Efforts: Establishment of new National Parks, increasing the size of conservation areas[^3^][4]

Last Update: 2024-08-20

Elephant ID: 019

Name: Sita

Conservation Efforts: Establishment of elephant corridors, allowing the safe passage of elephants from one area of habitat to another[^3^][4]

Last Update: 2024-09-25

Elephant ID: 020

Name: Lakshmi

Conservation Efforts: Habitat protection, community engagement, awareness programs[^1^][3][^2^][5]

Last Update: 2024-10-30

7. Donation Page:

Create a separate page in your application dedicated to donations. This page should provide information about why donations are needed and how they will be used.

Donation Form: Include a form on your donation page where users can enter their donation amount and payment information. You might also consider allowing users to make a donation in someone else’s name, or to donate towards a specific cause or project.

Payment Gateway Integration: To accept donations, you’ll need to integrate with a payment gateway. This could be a service like PayPal, Stripe, or Square. These services provide APIs that you can use to process payments securely.

Database: You’ll need a database to store donation records. This should include information like the donor’s name (if they choose to provide it), the donation amount, and the date of the donation.

Receipts: After a user makes a donation, send them a receipt via email. This should include details of their donation, as well as information for tax purposes.

Transparency: Consider providing a way for donors to see how their money is being used. This could be a page on your site that details your projects and expenses.

. Donor Information:

* Donor ID: A unique identifier for each donor. This could be automatically generated by the system.
* Name: The name of the donor. Some donors might choose to remain anonymous.
* Contact Information: Information like email address or phone number, used to send donation receipts or updates.

2. Donation Details:

* Donation ID: A unique identifier for each donation.
* Donation Amount: The amount of the donation.
* Donation Date: The date when the donation was made.
* Payment Method: Information about how the donation was made (credit card, bank transfer, etc.).

3. Donation Purpose:

* Purpose: If you allow donors to specify where their donation should be used (for example, for food, medical care, conservation efforts, etc.), this field would store that information.

4. Receipt Information:

* Receipt Sent: A flag indicating whether a receipt has been sent for the donation.
* Receipt ID: A unique identifier for each receipt.

| **Donor ID** | **Name** | **Contact Information** | **Donation ID** | **Donation Amount** | **Donation Date** | **Payment Method** | **Purpose** | **Receipt Sent** | **Receipt ID** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 001 | John Doe | johndoe@example.com | D001 | $50 | 2024-01-01 | Credit Card | General | Yes | R001 |
| 002 | Jane Doe | janedoe@example.com | D002 | $100 | 2024-01-02 | Bank Transfer | Medical Care | Yes | R002 |

**8. Reports:**

* **Data Selection:** You need to decide what data you want to include in the report. For example, if you’re creating a health report, you might want to include data like the elephant’s ID, name, last checkup date, common health issues, and current health status.
* **Report Generation:** Once you’ve selected the data, you need to generate the report. In Java, you could use a library like JasperReports or Apache POI. These libraries allow you to create complex reports with tables, charts, and other elements.
* **Report Presentation:** Decide how you want to present the report. For example, you might generate a PDF that can be downloaded and printed. Alternatively, you could create an interactive dashboard that allows users to explore the data.
* **Report Access:** You need to control who has access to the reports. For example, you might allow all users to view basic reports, but only allow administrators to view detailed reports.

**9. Settings:**

* **User Settings:** These are settings that are specific to each user. For example, you might allow users to change their password, set their preferred language, or customize the interface.
* **System Settings:** These are settings that affect the entire system. For example, you might have settings for configuring email notifications, managing user roles and permissions, or setting the system’s timezone.
* **Elephant Settings:** These could be settings related to the elephants in your system. For example, you might have settings for adding new elephants to the system, removing elephants, or updating elephant information.
* **Database Settings:** These are settings related to your databases. For example, you might have settings for configuring database connections, managing database backups, or optimizing database performance.

**10. Help:**

[**1. User Guides:** Detailed guides on how to use the system, including how to view elephant profiles, update health records, manage feeding schedules, track elephants, report incidents, view conservation efforts, make donations, generate reports, and change settings](https://www.worldwildlife.org/species/african-elephant?ref=interblg.com)

**2. FAQs:** A list of Frequently Asked Questions (and their answers) about the system. [This could include questions about how to use the system, troubleshooting common issues, understanding the data in the system, and more3](https://www.elephantmanagers.org/FAQs).

**3. Troubleshooting Guides:** Guides to help users troubleshoot common issues with the system. [This could include issues like login problems, errors when updating records, issues with generating reports, etc4](https://support.elephantdrive.com/hc/en-us).

**4. Contact Information:** Information on how to contact the support team for further assistance. [This could include an email address, phone number, or a form to submit a support ticket1](https://www.worldwildlife.org/species/african-elephant?ref=interblg.com)[2](https://www.elephantmanagers.org/).

[**5. Training Resources:** Resources like video tutorials, webinars, or online courses to help users learn how to use the system effectively1](https://www.worldwildlife.org/species/african-elephant?ref=interblg.com)[2](https://www.elephantmanagers.org/).

[**6. Updates and Announcements:** Information about system updates, new features, planned maintenance, and other announcements](https://www.worldwildlife.org/species/african-elephant?ref=interblg.com)