



URS

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## **Agreement/decisions:**

### **Waterfall release:**

Our team agreed with the client that the highest priority is animal and employee management, this includes being able to add employees to the system, remove them from the system, assign the task to an employee, update employee information, and view it. For animals also adding new animals to the system, updating their details such as location, healthstatus, and personal information.

Managing animals' welfare is more complex compared to employee management.

Adding, removing, changing, and viewing all employees and animal information will be done by the manager including attendance and scheduling. Resource planners have access to the information they need to create schedules such as feeding timetable schedules to manage animal's welfare

Caretakers should be able to view data of the animals they are responsible. Employees can however view their own information.

Employees in the future will have a website in which they can log in to view and adjust their personal information and view information about their work shifts.

All these functionalities will be available in the desktop application. As of now, after the first client meeting, we will be working on the website.

On our website, we will be having online ticket sales, and customer complaint handling, as an additional feature we would have statistics on our animals.

In addition to these functionalities, we also agreed to design a logo for Zoo Bazaar, which is going to be seen on this document's title page.

### **Iterative 1:**

After the second interview with the client, we decided as a team that the highest priority is finishing the whole implementation for animals since the schedule for employees is dependent on that. This includes the general table, the feeding timetable, and the health situation table.

Another thing that we are going to do, is store data in a database. For that, we are going to make a database design and then we are going to write queries to apply the CRUD functionalities and at the end connect the logic layer to the database layer.

In addition to these functionalities, we also agreed to edit some things in our UI to have a perfect design for the client needs.

## Functional & non-functional requirements:

### Waterfall release:

#### - Functional requirements:

##### ○ Administration:

##### ▪ Employees:

- FR-01: an admin should be able to search through the employees by ID, name, last name, etc.
- FR-02: an admin should be able to promote an employee.
- FR-03: an admin can edit the information of an employee.
- FR-04: an admin should be able to remove an employee.
- FR-05: an admin should be able to add an employee with a unique id.

##### ▪ Animals:

- FR-06: an admin should be able to search through the animals by ID, name, type, etc.
- FR-07: an admin should be able to remove an animal.
- FR-08: an admin should be able to add an animal with a unique id.

##### ○ Login:

##### ▪ Administration:

- FR-09: Administrator should be able to login and be directed to the part of the system that is only meant for the administration.

##### ▪ Scheduler:

- FR-10: schedulers should be able to login and be directed to the part of the system that is only meant for the resource planners.

#### - Non-functional requirements:

- The desktop application should be only used by administration and resource planners.
- The system should be able to handle about 100000 users without performance deterioration.
- No one can access the application without having an ID and a password.
- Resource planners cannot access the features of the administration.
- The administration is not able to access the features of the resource planners.
- Images are loaded fast.

### Iterative 1:

#### - Functional requirements:

##### ○ Administration:

##### ■ Animals:

- FR-01: an admin should be able to edit an animal.
- FR-02: an admin should be able to check the feeding timetable of an animal.
- FR-03: an admin should be able to edit the feeding timetable.
- FR-04: an admin should be able to check the health situation of an animal.
- FR-05: an admin should be able to edit the health situation of an animal.

##### ○ Scheduler:

- FR-06: a scheduler should be able to check the information of an animal.
- FR-07: a scheduler should be able to make the feeding timetable for animals.
- FR-08: a scheduler should be able to assign an employee to feed an animal.

## Use cases:

### Waterfall release:

- **Use case-01:** Search for employees

**Actor:** Admin

**Requirements:** FR-01

#### **Main Success Scenario:**

1. Actor opens the required page in employee section.
2. System requires information to search with ID.
3. Actor fills in the Id.
4. System shows the required employee.

#### **Extensions:**

3. There is no employee with such an Id. End scenario.

- **Use case-02:** Promote an employee

**Actor:** Admin

**Requirements:** FR-02

#### **Main Success Scenario:**

1. Actor fills in the needed info to find the employee by ID.
2. System shows the required employee.
3. Actor promotes the shown employee.
4. Employee is promoted in the system.

#### **Extensions:**

4. The employee is an Admin, can't be promoted to higher. End scenario.

- **Use case-03:** Edit the information of an employee

**Actor:** Admin

**Requirements:** FR-03

**Main Success Scenario:**

1. Actor fills in the id of an employee.
2. System shows the required employee and all his information.
3. Actor changes the information that needs to be changed or updated.
4. System changes / updates the information about that employee.

**Extensions:**

2. employee id doesn't exist.

End scenario.

- **Use case-04:** Remove employee

**Actor:** Admin

**Requirements:** FR-04

**Main Success Scenario:**

1. Actor opens the required page in employee section.
2. System requires information about the employee.
3. Actor fills in the employee Id.
4. System shows the required employee and all his information.
5. Actor removes the shown employee.
6. System shows employee is removed.

**Extensions:**

3. Employee id doesn't exist.

End scenario

- **Use case-05:** Add an employee

**Actor:** Admin

**Requirements:** FR-05

**Main Success Scenario:**

1. Actor opens the required page in employee section.
2. Actor fills in the employee information with an unique ID in order to add a new employee.
3. Actor adds the employee.
4. System shows that employee is added.

**Extensions:**

2. ID already exist.

End scenario.

- **Use case-06:** Search for animals

**Actor:** Admin

**Requirements:** FR-06

**Main Success Scenario:**

1. Actor opens the search page in animal section.
2. System requires information to search with ID.
3. Actor fills in the id.
4. System shows the required animal/animals.

**Extensions:**

3. There is no animal with such an Id.

End scenario.



- **Use case-07:** Remove animals

**Actor:** Admin

**Requirements:** FR-07

**Main Success Scenario:**

1. Actor opens the tab related to removing animals.
2. System requires information to identify with ID.
3. Actor fills in the ID.
4. System removes the required animal.

**Extensions:**

3. There is no animal with such an Id.  
End scenario.

- **Use case-08:** Add animal

**Actor:** Admin

**Requirements:** FR-08

**Main Success Scenario:**

1. Actor opens the required tab in animal section.
2. System requires data for the animal.
3. Actor fills in the animal id with the animal information such as type and name.
4. System adds the animal.

**Extensions:**

3. ID already exist.  
End scenario.

- **Use case-09:** Login

**Actor:** Admin

**Requirements:** FR-09

**Main Success Scenario:**

1. Actor runs the application.
2. Actor inserts the username and password that belongs to the administration.
3. Actor enters the application successfully.
4. System shows the related home page to Admin.

**Extensions:**

3. a) Password or username incorrect: return to step 2.  
b) Password or username incorrect.  
End scenario.

- **Use case-10:** Login  
**Actor:** Scheduler  
**Requirements:** FR-10

**Main Success Scenario:**

1. Actor runs the application.
2. Actor inserts the username and password that belongs to the Resource planners.
3. Actor enters the application successfully.
4. System shows the related home page to Resource planner.  
End success scenario.

**Extensions:**

3. a) Password or username incorrect: return to step 2.  
b) Password or username incorrect.  
End scenario

### Iterative 1:

- **Use case-01:** Edit the information of an animal

**Actor:** Admin

**Requirements:** FR-01

#### **Main Success Scenario:**

1. Actor fills in the id of an animal.
2. System shows the required animal and all his/her information.
3. Actor changes the information that needs to be changed or updated.
4. System changes / updates the information about that employee.

#### **Extensions:**

2. Animal id doesn't exist.

End scenario.

- **Use case-02:** Check the feeding timetable

**Actor:** Admin

**Requirements:** FR-02

#### **Main Success Scenario:**

1. Actor opens the feeding timetable.
2. System shows the feeding timetable.
3. Actor checks the table.

#### **Extensions:**

2. Feeding timetable doesn't exist.

End scenario.

- **Use case-03:** Edit the information of the feeding timetable.

**Actor:** Admin

**Requirements:** FR-03

**Main Success Scenario:**

1. Actor opens the feeding timetable.
2. System shows the feeding timetable.
3. Actor changes the information that needs to be changed or updated.
4. System changes / updates the information in the feeding timetable.

**Extensions:**

5. Feeding timetable doesn't exist.
- End scenario.

- **Use case-04:** Check the health situation of an animal

**Actor:** Admin

**Requirements:** FR-04

**Main Success Scenario:**

1. Actor opens the health situation schedule.
2. System shows the health situation schedule.
3. Actor checks the table.

**Extensions:**

2. Health situation table doesn't exist.
- End scenario.

- **Use case-05:** Edit the health situation of an animal.

**Actor:** Admin

**Requirements:** FR-05

**Main Success Scenario:**

1. Actor opens the health situation table.
2. System shows the health situation table.
3. Actor changes the information that needs to be changed or updated.
4. System changes / updates the information in the health situation table.

**Extensions:**

5. health situation table doesn't exist.

End scenario.

- **Use case-06:** Check the information of an animal

**Actor:** Scheduler

**Requirements:** FR-06

**Main Success Scenario:**

1. Actor opens the general schedule.
2. System shows the general schedule.
3. Actor checks the schedule.

**Extensions:**

2. General schedule doesn't exist.

End scenario.

- **Use case-07:** Make the feeding timetable

**Actor:** Scheduler

**Requirements:** FR-07

**Main Success Scenario:**

1. Actor selects time, animal, food type, and amount of food.
2. System selects the information.
3. Actor adds the selected information.
4. System adds the information into the table.

**Extensions:**

1. Actor doesn't select the right information.
- End scenario.

- **Use case-08:** Assign an employee to feed an animal

**Actor:** Scheduler

**Requirements:** FR-08

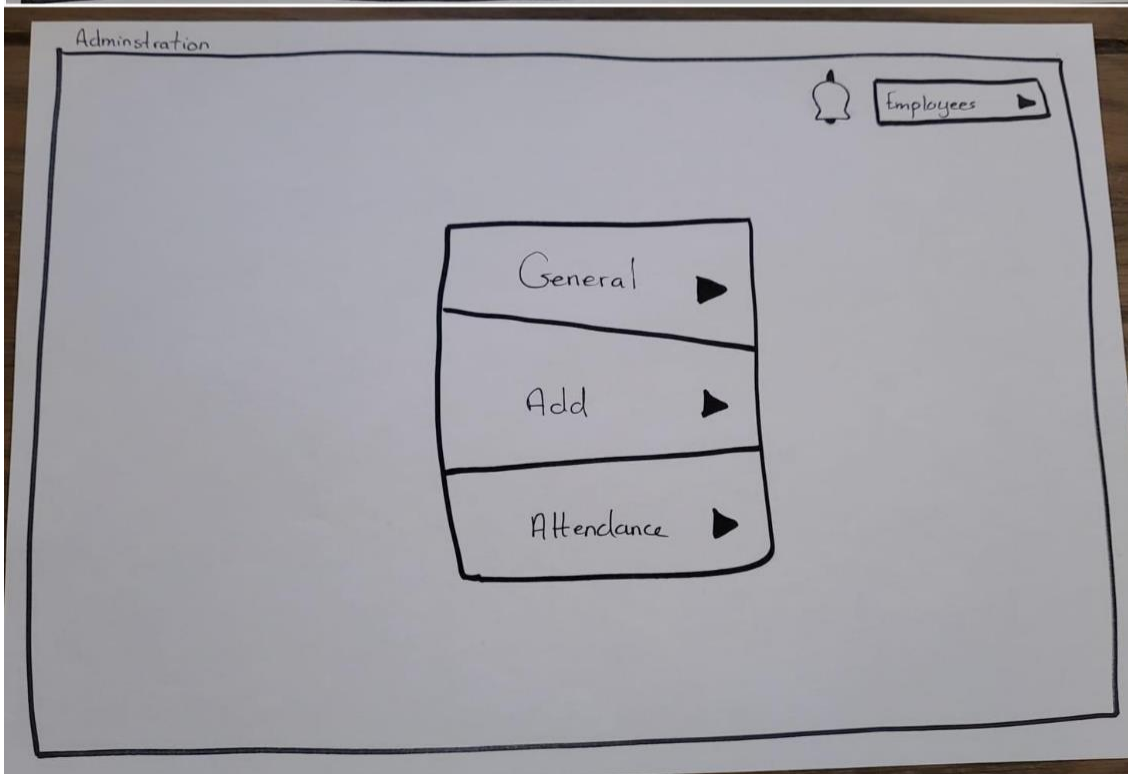
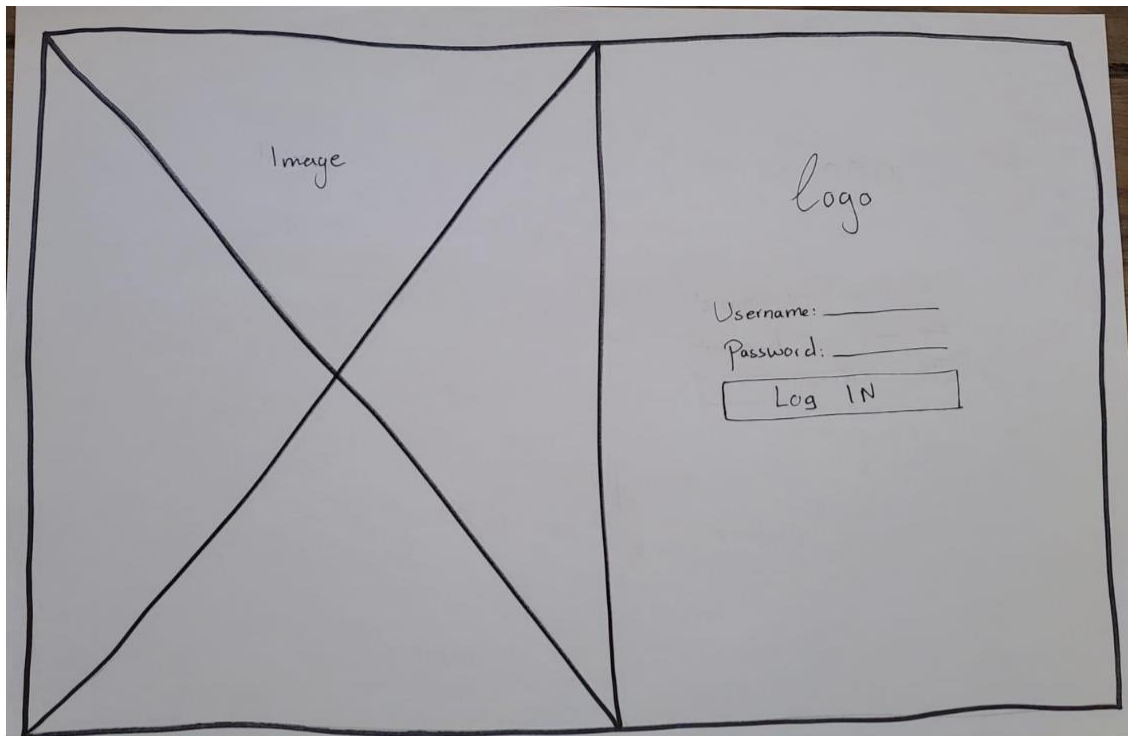
**Main Success Scenario:**

5. Actor selects an employee and an animal.
6. System selects the information.
7. Actor assigns the selected information.
8. System adds the information into the feeding timetable.

**Extensions:**

1. Actor doesn't select the right information.
- End scenario.

## Paper prototypes:



### Administration: General Employees

Name:  Last name:  ID:

ID	Name	Last name
1	Aya	Shikh Suliman

goes to a  
dashboard  
where information  
is found about the  
employee


### Administration: Add: Employees

ID: auto generated  
Password: auto generated  
first name:   
last name:   
Email:   
Phone number:   
Position:   
Age:    
Address:   
CV: file.pdf  
Profile Picture: .png

Employees:



Administration

 Animals ▶

General ▶

Nutrition ▶

Health ▶

Administration: Attendance - Employees

◀ Today's date ▶

Employee name	Availability
Erlon Alizada	Sick

Administration: General: Animals

ID:  Name:  Type:

ID	Name	Type
1	Nars	Cat

Dashboard      Location

Administration: Nutrition: Animals

◀ Today's Date ▶

Time	ID	Animal	Type of feed	Amount of Feed
09.00	2	Sam	Plants	20 gram



Resource planner: General: Employees

ID:  Name:  Last name:

Assign Employee

→ to another form

Schedule Employee

→ to another form

Resource planner: Reports: Animals reports uploaded by employees

Date:  Number:  Name:

Number	Date	Name

Download

Resource planner:



Animals

General



Create



Resource planner: General: Animals

ID:  Name:  Type:

ID	Name	Type