BCCG
Requirements Document

Bay Marine Rescue

Team Members:

219004781, Chloé Clemence

215351843, Patrick Bamber

217775616, Chad Conning

65%

78/120

Date Submitted: <10 05 2021>

TABLE OF CONTENTS

1 SYSTEM OVERVIEW

1.1 Problem Description

Admitting animals for rehabilitation is a daily task for dedicated animal rescue centres (like SANCCOB: Southern African Foundation for the Conservation of Coastal Birds). Generally, admitting animals makes use of writing admission notes on paper and updating notes on the progress of the animal in a logbook as time goes on. This project proposes to digitize the process of generating admission records to save time and money.

Bay Marine Rescue caters for a vast range of marine animals.

Bay Marine Rescue staff shall access software through an on-site desktop that allows for creating a digital record of admission and rehabilitation for the animals. This includes information such as the admission or administrative staff member admitting the animal, the type of animal, the animal's status, the animal gender, and animal species. The admission process will record the type of animal by assigning a specified code using TagNo.

The system also allows administrators to manage staff by adding staff, modifying staff, removing staff.

Animals are kept in either the ICU department, if they are critically injured, or the Rehabilitation department, if they could be released back into the wild at some point in the future.

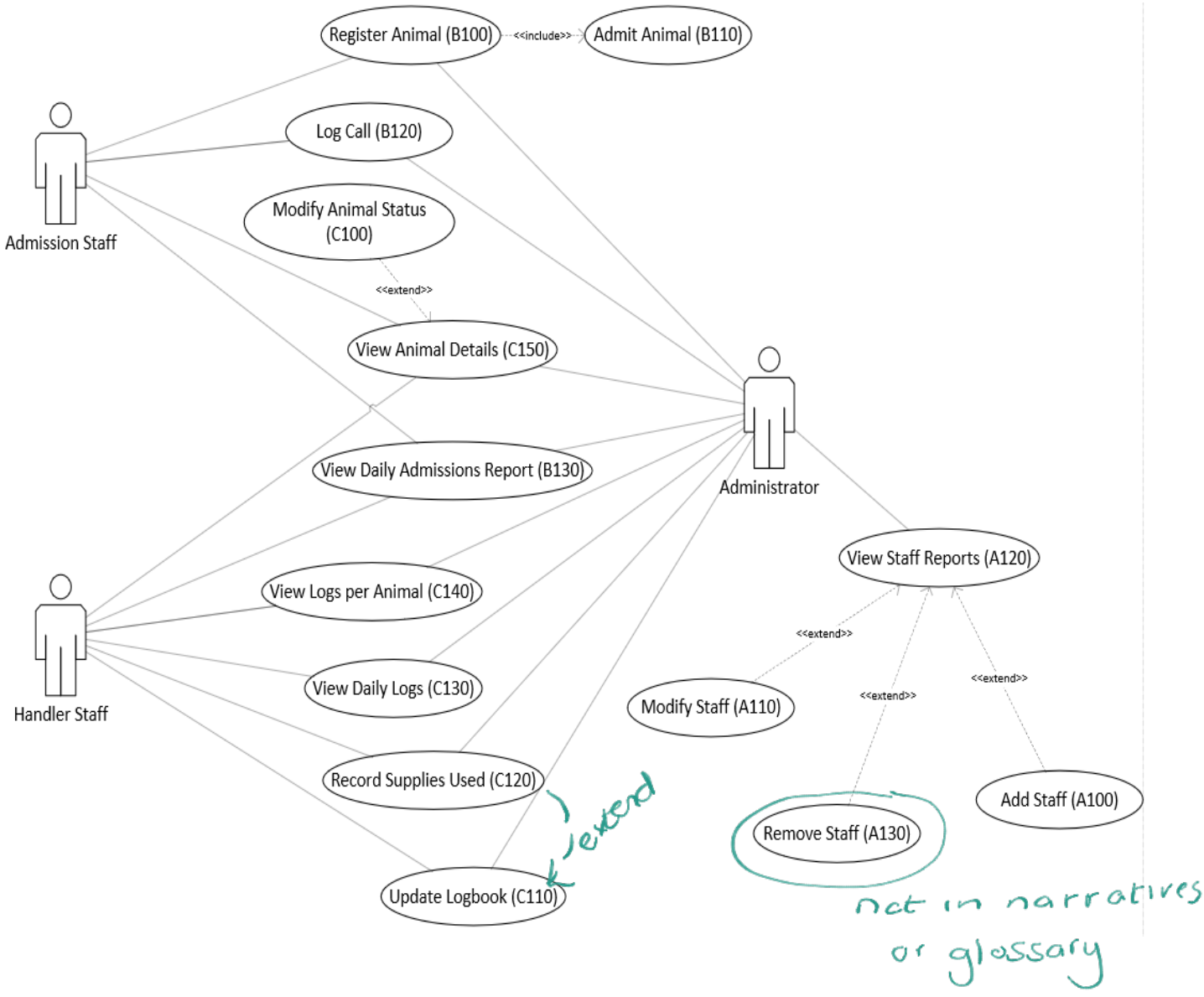
Records of each animal can be accessed throughout the day to update information on daily report cards. Records are maintained until such point to where the animal is either release back into the wild or put down for health-related reasons.

1.2 Project Assumptions

- Assume visitors not allowed
- Animal can only be admitted once it has been registered on the system
- Often in NPOs it can be difficult to have lots of separate paid staff, staff usually crossover to multiple roles
- Most admission staff will be admins
- Employees are full time
- All animals are admitted, none are rejected
- We are only focussing on one centre and will not have an entity for centres.
- There is a continuous supply of supplies, and none will ever run out or need to be ordered, for the sake of simplicity.
- All logged calls will result in an admission.

2 FUNCTIONAL REQUIREMENTS

2.1 Business Use Case Model



2.2 Use Case Glossary

Package Name: Admin		
Use Case Id	**Use Case Name**	**Actors**
A100	Add Staff	Administrator
A110	Modify Staff	Administrator
Queries/Reports		
A120	View Staff Reports	Administrator

Package Name: Admissions		
Use Case Id	**Use Case Name**	**Actors**
B100	Register Animal	Admissions, Administrator
B110	Admit Animal	Admissions, Administrator
B120	Log Call	Admissions, Administrator
Queries/Reports		
B130	View Daily Admissions Report	Admissions, Administrator

Package Name: Animal Management		
Use Case Id	**Use Case Name**	**Actors**
C100	Modify Animal Status	All
C110	Update Logbook	Handler, Administrator

C120	Record Supplies Used	Handler, Administrator
Queries/Reports		
C130	View Daily Logs	All
C140	Logs per Animal	Handler, Administrator
C150	View Animals Details	All

2.3 Use Case Narratives (User Stories)

2.3.1 Package A: Admin

Use Case ID	Use Case Name
A100	Add Staff
Primary Business Actors	**Other participating Actors**
Administrative staff	None
Description	This allows the administrator to add a staff member onto the system.
Pre-Conditions	The user must be logged on. The staff member to be added must not exist on the system.
Triggers	The user selects the add staff member option.
Post-Conditions	The system is populated with a new staff member. or Called from A120
Basic Flow of Events	1. ~~Add staff member option is selected~~ trigger 2. The system displays the new staff member screen with various options that should be included when creating a new staff member such as staff name and password 3. The form is filled out and the user saves the changes and a new staff member is created 4. ~~The use case then begins again~~. Return to Home
Alternative flow of events	3. The user clicks cancel 4. The user is redirected to the home page.

Use Case ID	Use Case Name
A110	Modify Staff
Primary Business Actors	**Other participating Actors**
Administrative staff	None
Description	This allows the administrator to modify staff members that currently exist on the system.
Pre-Conditions	The user must be logged on. The staff member to be modified must exist on the system.
Triggers	The user selects the modify staff member option. or called from A120
Post-Conditions	The system is updated with the modified fields of the existing staff member.
Basic Flow of Events	1. ~~The user selects the modify staff option~~ trigger 2. The system displays the modify staff screen where the user can update the necessary information of a particular staff member such as changing access levels or changing staff member information 3. The user selects the relevant staff member from the drop-down menu 4. When the steps are complete the staff member will be modified 5. ~~The use case begins again~~ Return to Home
Alternative flow of events	4. The user clicks cancel 5. The user is redirected to the home page.

Use Case ID	Use Case Name	
A120	View Staff Reports	
Primary Business Actors		**Other participating Actors**
Administrative staff		None
Description	This allows the user to view information of staff members.	
Pre-Conditions	The user must be logged on.	
Triggers	The user selects the view staff reports option.	
Post-Conditions	The staff reports should be displayed.	
Basic Flow of Events	1. A report with all staff information is displayed. 2. The user views the necessary data. manual step 3. The user clicks close. 4. The user is redirected to the home page.	
Alternative Flow of Events	2. User selects to modify staff member information. 3. Calls A110.	
Alternative Flow of Events	2. User selects to add a new staff member. 3. Calls A100.	

1. Select criteria
2. Display

A130 ?

2.3.2 Package B: Admissions

Use Case ID	Use Case Name	
B100	Register Animal	
Primary Business Actors		**Other participating Actors**
Admission Staff		Administrative staff
Description	This allows an admission staff member to register an animal on the system.	
Pre-Conditions	The user must be logged on. A new animal must have arrived at the enclosure or must've been born in the enclosure.	
Triggers	The user selects the register an animal option.	
Post-Conditions	The new animal should be registered.	
Basic Flow of Events	1. A window to enter the new animal's details is displayed. 2. The user enters the relevant data of the animal being registered. 3. The system validates the inputs. 4. The user clicks on Save. 5. The user is redirected to the home page.	
Alternative Flow of Events	4. The user clicks on Cancel. 5. The user is redirected to the home page.	

call B110 to Admit

Use Case ID	Use Case Name	
B110	Admit Animal	
Primary Business Actors		**Other participating Actors**
Admission Staff		Administrative staff
Description	This allows the user to record the admission details of an animal.	
Pre-Conditions	The user must be logged on. The animal must be registered.	
Triggers	The user selects the admit an animal option.	
Post-Conditions	The new animal's admission details should be recorded.	
Basic Flow of Events	1. A window to enter the new animal's admission details is displayed. 2. The user enters the relevant data of the animal being admitted. 3. The system validates the inputs. 4. The user clicks on Save. 5. The user is redirected to the home page.	
Alternative Flow of Events	4. The user clicks on Cancel. 5. The user is redirected to the home page.	

(called from B100)

Use Case ID	Use Case Name	
B120	Log Call	
Primary Business Actors		**Other participating Actors**
Admission Staff		Administrative staff
Description	Allows the user to log calls received about animal reports.	
Pre-Conditions	The user must be logged on. A staff member must receive a call. Animal reported must be alive	
Triggers	The user selects the log call option.	
Post-Conditions	The call details should be recorded.	

what is the purpose of Call Log, will it be linked to Admissions later? Will it create a dummy record in admissions until bird is admitted?

Basic Flow of Events	1. A window to enter the call details is displayed. 2. The user enters the relevant data of the call being recorded. 3. The system validates the inputs. 4. The user clicks on Save. 5. The user is redirected to the home page.
Alternative Flow of Events	4. The user clicks on Cancel. 5. The user is redirected to the home page.

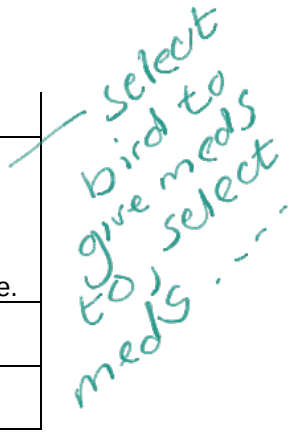
2.3.3 Package C: Animal Management

Use Case ID	Use Case Name
C100	Modify Animal Status
Primary Business Actors	**Other participating Actors**
Handler Staff	Administrative staff Admission Staff
Description	This allows the staff member to modify the animal status.
Pre-Conditions	The user must be logged in. The animal is registered.
Triggers	The user selects the modify animal status option
Post-Conditions	The animal status is modified.
Basic Flow of Events	1. The modify animal status form is displayed with a list of all the animals. 2. The user selects the animal whose status they are wanting to modify. 3. The current status of the selected animal is displayed, and the options to change the status of the animal. 4. The user selects the option and clicks save. 5. The user is redirected to the home page.
Alternate Flow of Events	4. The user clicks cancel. 5. The user is redirected to the home page.

Use Case ID	Use Case Name
C110	Update Logbook
Primary Business Actors	**Other participating Actors**
Handler Staff	Administrative staff
Description	This allows the user to add a log, to update the logbook.
Pre-Conditions	The user must be logged in. The animal is registered. The animal is in the centre.
Triggers	The user selects the Update Logbook option
Post-Conditions	A new log is added to the logbook.
Basic Flow of Events	1. The form with the relevant information for the logbook is displayed. 2. The user inputs the relevant data. 3. The user clicks save button. 4. The user is redirected to the home page.
Alternate Flow of Events	3. The user clicks cancel button. 4. The user is redirected to the home page.
Alternate Flow of Events	3. The user clicks the clear button. 4. The form reloads with all default values.

Use Case ID	Use Case Name
C120	Record Supplies used
Primary Business Actors	**Other participating Actors**
Handler Staff	Administrative staff
Description	This allows the user to record the supplies used.
Pre-Conditions	The user must be logged in. The supply must exist in the list of supplies/medication
Triggers	The user selects the Record Supplies Used option

Post-Conditions	The supplies used are recorded.
Basic Flow of Events	1. The form with relevant information needed to record supplies is displayed. 2. The user inputs the relevant information. 3. The user selects the save button. 4. The information is saved and the user is redirected to the main page.
Alternate Flow of Events	3. The user selects the cancel button 4. The user is redirected to the main page
Alternate Flow of Events	3. The user selects the clear button. 4. The form reloads with the default values.



Use Case ID	**Use Case Name**
C130	View Daily Logs
Primary Business Actors	**Other participating Actors**
Handler Staff	Administrative staff
Description	This displays the logs for the selected date to be viewed.
Pre-Conditions	The user must be logged in.
Triggers	The user selects the View Daily Logs option.
Post-Conditions	The report for the logs for selected date is displayed.
Basic Flow of Events	1. The View Daily Logs form is displayed with a list of possible dates to select. 2. The user selects the date for which they want to view the logs. 3. The logs for that date are displayed as well as the option to select another date. 4. The User clicks the close button. 5. The user is redirected to the home page.

Use Case ID	**Use Case Name**
C140	View Logs per Animal
Primary Business Actors	**Other participating Actors**
Handler Staff	Administrative staff
Description	This displays a report of the logs for the selected animal.
Pre-Conditions	The user must be logged in. Selected animal must exist.
Triggers	The user selects the Logs per animal option.
Post-Conditions	The report for the logs for selected animal is displayed.
Basic Flow of Events	1. The form with a list of animals is displayed 2. The user selects the animal whose logs they wish to view. 3. The logs for the animal are displayed. 4. The user selects the view another animal. 5. The list of animals is displayed.
Alternate Flow of Events	4. The user selects the close option. 5. The user is redirected to the home page.

3 NON-FUNCTIONAL REQUIREMENTS

3.1 Interface Requirements

Interface requirements will be sub-categorized by usability goals, user experience goals and the user requirements. These requirements will help to shape the look and feel of the application.
Usability goals:

- Intuitive and easy to understand
- Simple and easy to navigate
- Effective in realizing day-to-day requirements
- Easy to remember how to navigate and use
- Efficient at achieving what is needed
- Easy to learn with little training needed to master the system
- Should keep information safe
- Offer users control and freedom to make changes
- Be consistent in design
- Errors should be easy to avoid
- Aesthetic and minimalist in design

User experience goals:
The experience should be useable, helpful, aesthetically pleasing, accessible, useful, findable, and desirable.

User requirements:

- Characteristics: ability, background, and computer knowledge
- System use: novice, casual, expert
- Novice: clear information, clear instructions, constrained navigation
- Casual: Clear instructions, shortcuts
- Expert: flexibility, access, shortcuts

in terms of your system what does this mean?

3.2 Performance Requirements

- The system must allow for multiple users to concurrently access it at any given time.
- Reports need to be available when required.
- The capturing, updating and processing of information needs to be efficient, with fast response time.
- The system must be efficient in processing possible large volumes of information.
- This system helps in the management of rescued animals and therefore needs to reliable and always be available for use.

3.3 Security Requirements

assume that staff is added without requesting, else you need to model this

The system has 3 different user types: administrator, admission staff and handler staff. This is controlled by the log in screen where they can either sign in with a verified account or register with all needed. The register option is merely a request to be added and the administrator will then add the staff. There are restrictions on each of the users. An administrator can make use of all the functionalities that the system has to offer. An admissions staff member is able register and admit animals. They also log all the calls received. They are also able to view the daily admissions. The handler staff can view, edit and add any details regarding the animals. They can modify the status of any animal, update the logbook, record any supplies used, view daily logs report, view the logs per animal and view animal details.

3.4 Operational Requirements

- The desktop requires a Windows 10 operating system and minimum hardware required for running it.
- The system would need a relatively large processor and more RAM for processes to be efficient and for fast response time.
- There needs to be multiple desktops for concurrent use.
- There needs to be a Local Area Network (LAN) with internet connectivity.

4 DATA REQUIREMENTS

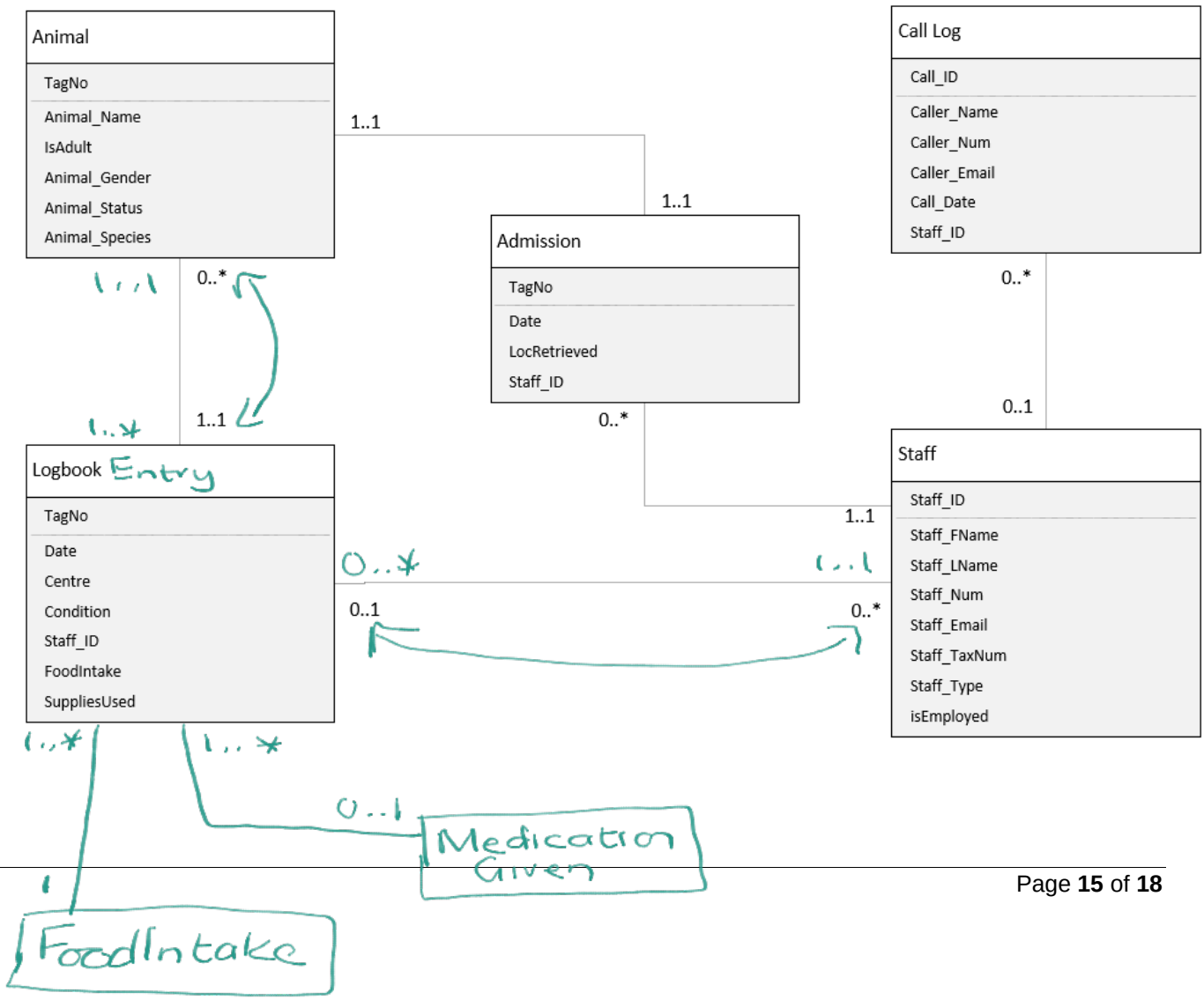
4.1 Preliminary List of data and attributes

Entity	Entity Attributes
Staff	StaffID (PK), StaffFirstName, StaffLastName, StaffPhoneNumber, StaffEmailAddress, StaffTaxNumber, StaffType (admin, admission, handler), isCurrEmployed
Animal	TagNo (PK), AnimalName, isAdult, AnimalGender, AnimalStatus (admitted, released, deceased), AnimalSpecies
Admissions	TagNo (PK, FK), Date (PK), LocationRetrieved, StaffID (FK)
CallLog	CallID (PK), CallerName, CallerPhoneNumber, CallerEmail, CallDate, StaffID (FK)
Logbook	TagNo (PK, FK), Date (PK), Centre (ICU, Rehab), Condition, StaffID (FK), FoodIntake, MedicationOrSuppliesUsed

call details
follow up

seperate classes

4.2 Domain Class Diagram



5 Preliminary Schedule of Responsibilities

Use Case ID & Name	Team Member Responsible	
	Student Number	Name
C100 – Modify Animal Status C110 – Update Logbook C120 – Record Supplies Used C130 – View Daily Logs C140 – Logs per Animal	**219004781**	**Chloé Clemence**
A100 – Add Staff A110 – Modify Staff C150 – View Animals Report	**215341843**	**Patrick Bamber**
A120 – View Staff Reports B100 – Register Animals B110 – Admit Animals B120 – Log Call B130 – View Daily Admissions Report	**217775616**	**Chad Conning**

6 Researching the Requirements

10 User Interview Questions

1. What do you want the application to do in general?
2. What functionalities are essential in a day-to-day situation?
3. What exceptions are there to these functionalities?
4. How often will the application be used?
5. What reports do you require?
6. What hardware do you currently have access to?
7. Would you ever require the reports externally?
8. How will the information in the system be used?
9. What limitations do you currently face that can be fixed in the application?
10. What is the core focus of the application?

NELSON MANDELA UNIVERSITY

Department of Computing Sciences Plagiarism Declaration - Requirements Document

Module code: WRRV301

We,

Name	Student Number	Contribution % [Total = 100]
Chloé Clemence	**219004781**	34
Patrick Bamber	**215351843**	33
Chad Conning	**217775616**	33

hereby declare that this submission is our own, original work.

We further declare that:

1. No part of this submission has been copied from another person/group,
2. We **did not** work with another person/group on this submission,
3. We acknowledged all consulted sources in the text and submitted a list of references, and
4. Parts without references are entirely our own work
5. That we have all equally contribute to the work or as indiciated in the contribution % above.

(Delete any of the above if not applicable)

We understand that, should this declaration be false, we may be charged with academic misconduct and/or plagiarism and that a disciplinary hearing may be brought against us.

1. SIGNED: .....C Clemence..... DATE .....2021/05/09.....
2. SIGNED: .....PR Bamber..... DATE .....2021/05/09.....
3. SIGNED: .....CD Conning..... DATE .....2021/05/09.....