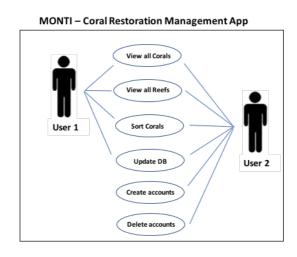
PDA: Software Development Level 8

Student: David Sanchez Rodriguez

EVIDENCE: UNIT A & D

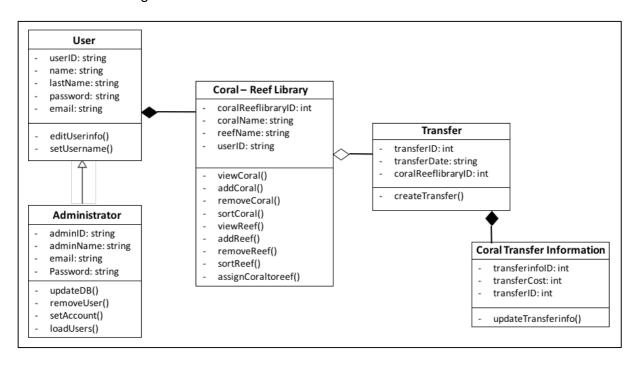
Ref: A.D. 1

• A Use Case Diagram



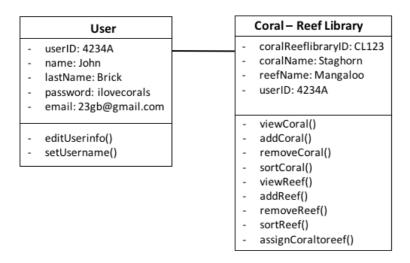
Unit: A & D Ref: A.D. 2

A Class Diagram



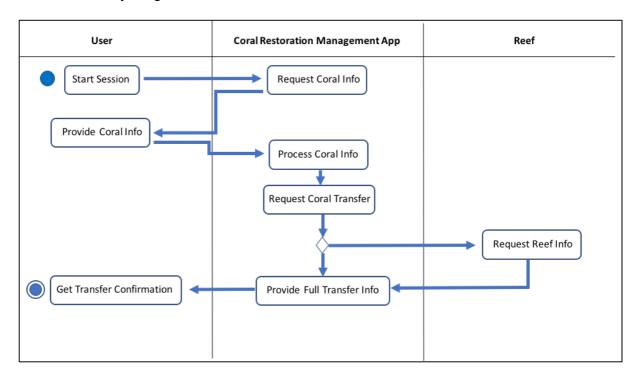
Ref: A.D. 3

• An Object Diagram



Ref: A.D. 4

An Activity Diagram



Ref: A.D. 6

Produce an Implementations Constraints plan detailing the following factors:

- Hardware and software platforms
- Performance requirements
- Persistent storage and transactions
- Usability
- Budgets
- Time

Topic	Possible Effect of Constraint on Product	Solution
Hardware and software platforms	When the user at the reef / university is not able use the app using different types of devices (PC, Tablet, Phone), it restricts the usability of the product, limiting the access from anywhere around the world.	Undertake a research project to determine which devices the target sector mostly uses.
Performance requirements	The app do not open in every browser, making the accessability to the coral information more tedious. Also, depending on the browser used, some visual characteristic could be different.	Using semantic HTML would help because web app semantic tags make it clear to the browser what the meaning of a page and its content is.
Persistent storage and transactions	When the user is using the app needs to store the coral information in the table for coral to be transfered. If the user is not able to do it, it surely would lead to dissatisfaction and delays in the procedures undertaken by the user.	The app must be tested previous to be launched in order to avoid serious complaints. The app must be able to save information in the Database and also it must be able to call back information from it in order to be shown in the table.
Usability	The coral information must be displayed in a clear and organized way in order to avoid dissatisfaction from the user which could lead to a rejection from the users.	Investing in User Experience (UX) will provide the necessary tools to build a more friendly and usable app for the target users.
Budgets	Running out of budget during the project would lead to an app with limited functionalities which will compromise the success of the product.	Prioritize first the basic and most important functionalities in order to have a simple app but functional.
Time limitations	Running out of time during the project would lead to an incompleted app, with possible bugs due to an incomplete testing, which will not meet the user needs.	Work on time-based schedule and apply TDD methodologies during the project. Complete the main functionalities first and then the extension.

Ref: A.D. 5 An Inheritance Diagram

