

# **PROJECT PROPOSAL**

**CST243-3**

System for Janajaya Farmer's Association

**Computer Science and Technology**

**Department of Computer Science and Informatics**

**Uva Wellassa University**

**April 2021**

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## **Chapter 1. Introduction**

### **Title of the project**

System for Janajaya Farmer's Association

### **Project Description and Motivation**

The Janajaya Farmers' Association of the Anuradhapura area is a farmer's association made up of a large number of farmers. Today, all the activities in the Anuradhapura area are working with technology to solve their problems. Today, this farmers' association is able to sell a large harvest. However, many problems have arisen in obtaining paddy from the farmers through the Farmers' Association and in the transfer of money related to it.

They also do not have a proper idea of the amount of harvest obtained by the Farmers' Association at each time in this area. Therefore, we hope to create a system to properly manage the harvest of this Farmers' Association.

### **Project Background**

There is a large number of farmers in the Janajaya Farmers Association in Anuradhapura area. Today there is a big crisis for farmers that is because they can't afford their hard-earned harvest at a good price therefore, the farmer's association and the farmers have arisen due to farmers not being able to get agricultural fertilizer on time and not having enough money to buy Seeds for the next Goop. The Janajaya farmer's Association has not been able to transact money properly because it has not been able to inform Farmers of the exact price. Another reason for this that they record data in books and they are not recorded properly

### **Project Scope**

Our project will be able to solve their problems and move this forward in a proper manner. We will create a system here to store their data and calculate the amount of money required to give to the Farmer according to the quantity of Paddy taken. Therefore the Farmer can get the value immediately and they can get correct information about the quantity of Paddy in the Warehouse.

## **Chapter 2. Requirements**

This chapter of the project document provides system features of the proposed system. This describes about Functional requirements, Non-functional requirements, User level and User roles of proposed system.

### **2.1 Functional / Non-functional requirements**

#### **Functional requirements**

- User Registration
- User Logging
- User profile management
- Manage Payments
- Manage Store

## Non-functional Requirements

- **Efficiency**

User should be able to get details quickly and The Login information shall be verified within five seconds.

- **Availability**

It should be available in anytime of the day

- **Security**

All system data and user's personal data will be protected and only Admin able to view/access the data.

- **Maintainability**

The System should be easy to maintain

## User Roles and User Levels

- **Admin (Manager)**

- Register to the system
- Login to the system
- Manage profiles of users
- Add, Update and Delete details of paddy
- Manage payment

## Chapter 3 . Methodology

In this project we are going to use the Rapid Application Process Development process model which is based on prototyping and iterative development with no specific planning involved. A prototype is a working model that is functionally equivalent to a component of the product. In this process requirements are flexible and can be changed in the later of the process. According to the different features and functions prototypes will be created and then after by showing that to the client relevant changes will be done to the prototype. In this model client can be involve and with the process and customer's feedbacks are encouraged, because of that it will reduce the risk of non-conformance with the actual user requirements. There are 4 phases in this RAD process,

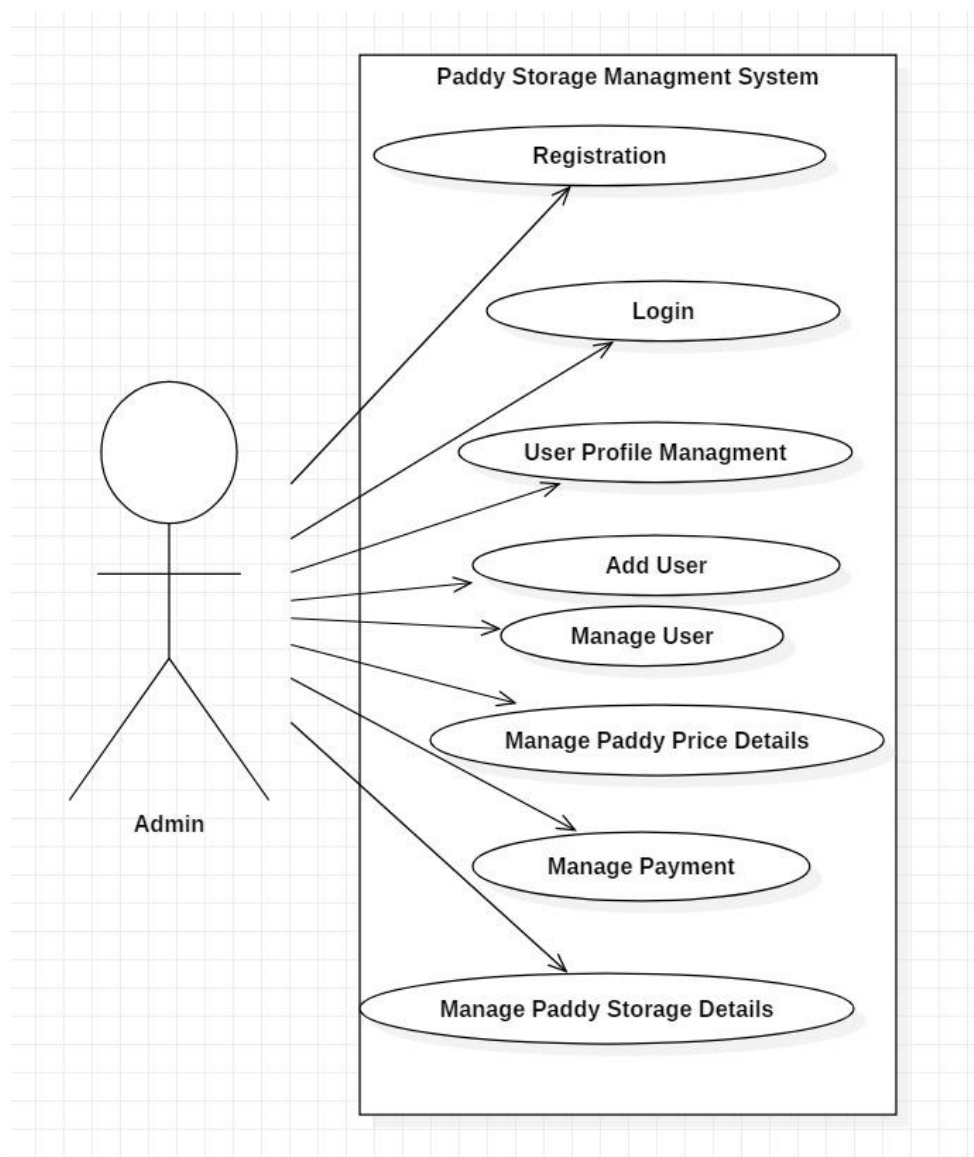
- Requirements Planning -Concept Definition
- User Design – Functional Design
- Construction
- Cutover – Deployment

In the requirements planning phase focus on initial requirements and the project scope. Requirements will be gathered and finalize will be done. In the designing phase requirements will be analyze in more detail and prototypes will be design and client will test them and relevant changes will be done through the communication with the customer. In the construction phase takes the prototypes and beta systems from the design phase and converts them into the working model and converts the data model into a functional database. This phase may also be repeated as required and until the application is completed. Cutover phase is the implementation phase where the finished product goes to launch. It includes data conversion, testing, and changeover to the new system, as well as user training.

In this project we have identified the requirements and have analyzed them, by using that we have designed a low fidelity prototypes using storyboarding concept. It consists with a series of sketches. It shows the how our client/manager of the mall interact with the application. In the first slide it shows the price of the paddy according to various paddy type and give a chance to go to the next

step. By going to the next phase stored paddy details will be shown and clients have two choices whether update or exit. By choosing the update he can go further of the process and whether customer is a new or a if he is an already member process will be different. In here it shows the how it will be happened if the customer is a new member. By entering customer/farmer details he can be a registered customer and for selling paddy stock customer should be a registered customer. After the paddy stock transaction, according to the transaction stock, stored paddy details will be changed. Whether client's sake he can see the stored paddy details and after that he can exit from the application.

## Use case Diagram



## Storyboarding

<b>Paddy Price Details</b> <table border="1"><thead><tr><th>Paddy Type</th><th>Price (Per 1kg)</th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table> <div>NEXT</div>	Paddy Type	Price (Per 1kg)											<b>Paddy Price Details</b> <table border="1"><thead><tr><th>Paddy Type</th><th>Price (Per 1kg)</th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table> <div>NEXT</div>	Paddy Type	Price (Per 1kg)											<b>Stored Paddy Details</b> <table border="1"><thead><tr><th>Paddy Type</th><th>Total Amount (Kg)</th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table> <div>UPDATE</div> <div>EXIT</div>	Paddy Type	Total Amount (Kg)																						
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## Chapter 4. Resources (Hardware / Software) and Technologies

### Software

IntelliJ IDEA 2020.3.3

MySQL 5.7.14(64 bit)

### Technologies

SQL

Java

### Hardware

Windows 10- 64 bit

Ram 4GB

Hard space 500GB

## Chapter 5. Project Plan (Gantt Chart)

Activity	Duration (Weeks)										
	1	2	3	4	5	6	7	8	9	10	11
Finding a topic & Requirement gathering											
Defining scope and requirement analysis											
Interface Designing											
Documentation											
Database design											
Prototypes build in using Medium fidelity											
Prototypes build in using Hi fidelity											
Testing											
Debugging, implementation And Final testing											
Final Report Submission/ Final presentation											

**Group Members:**

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