

**Production Management and Labor Organization System (PMLOS)**

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| Capstone project code |  | |

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**Table of contents**

[1. Introduction 5](#_Toc25336771)

[1.1. Purpose 5](#_Toc25336772)

[1.2. Project Information 5](#_Toc25336773)

[1.3. The People 5](#_Toc25336774)

[1.3.1. Supervisor 5](#_Toc25336775)

[1.3.2. Team Members 5](#_Toc25336776)

[1.4. Background 6](#_Toc25336777)

[1.4.1. History of Quang Hanh - TKV 6](#_Toc25336778)

[1.4.2. Organizational structure of Quang Hanh – TKV 6](#_Toc25336779)

[1.4.3. Business in Quang Hanh – TKV 6](#_Toc25336780)

[1.4.4. Responsibility in business of each department 6](#_Toc25336781)

[1.4.5. Current system 6](#_Toc25336782)

[1.4.6. Business between TCLD department and other departments 6](#_Toc25336783)

[1.4.7. Existing system 6](#_Toc25336784)

[1.4.8. Conflict and difficulty of current system 6](#_Toc25336785)

[1.5. The Proposed system 6](#_Toc25336786)

[1.5.1. The idea 6](#_Toc25336787)

[1.5.2. Technical requirement 6](#_Toc25336788)

[1.5.3. Functional requirement 6](#_Toc25336789)

[1.5.4. Out-of-Scope Functions 6](#_Toc25336790)

[2. Software project management 7](#_Toc25336791)

[2.1. Problem Definition 7](#_Toc25336792)

[2.1.1. Name of this Capstone project 7](#_Toc25336793)

[2.1.2. Problem Abstract 7](#_Toc25336794)

[2.1.3. Project Overview 7](#_Toc25336795)

[2.2. Project organization 7](#_Toc25336796)

[2.2.1. Software Process Model 7](#_Toc25336797)

[2.2.2. Roles and Responsibilities 7](#_Toc25336798)

[2.2.3. Tools and Techniques 7](#_Toc25336799)

[2.3. Project management plan 7](#_Toc25336800)

[2.3.1. Tasks 7](#_Toc25336801)

[2.3.2. Task Sheet: Assignments and Timetable 7](#_Toc25336802)

[2.3.3. All Meeting Minutes 7](#_Toc25336803)

[2.4. Coding Convention 7](#_Toc25336804)

[2.5. Other material 7](#_Toc25336805)

[3. Software Requirements Specifications (SRS) 7](#_Toc25336806)

[3.1. User requirement specification 7](#_Toc25336807)

[3.2. System requirement specification 7](#_Toc25336808)

[4. Software Design Description (SDD) 7](#_Toc25336809)

[4.1. Overview 7](#_Toc25336810)

[4.2. Overall System Architectural 7](#_Toc25336811)

[4.3. Architectural Layer Design 7](#_Toc25336812)

[4.4. Software detailed design 7](#_Toc25336813)

[4.4.1. Activity process 7](#_Toc25336814)

[4.4.2. Context diagram 7](#_Toc25336815)

[4.4.3. Detail description 7](#_Toc25336816)

[4.5. Database Design or Data Structures 7](#_Toc25336817)

[4.5.1. Entity Relationship diagram 7](#_Toc25336818)

[4.5.2. Data Description 7](#_Toc25336819)

[4.6. References 7](#_Toc25336820)

[5. Software Test Documentation (STD) 8](#_Toc25336821)

[5.1. INTRODUCTION 8](#_Toc25336822)

[5.1.1. Purpose 8](#_Toc25336823)

[5.1.2. Background information 8](#_Toc25336824)

[5.2. Test plan 8](#_Toc25336825)

[5.2.1. Scope of testing 8](#_Toc25336826)

[5.2.2. Constraints 8](#_Toc25336827)

[5.2.3. Risk list 8](#_Toc25336828)

[5.2.4. Requirements for Test 8](#_Toc25336829)

[5.2.5. Test strategy 8](#_Toc25336830)

[5.2.6. Resource 8](#_Toc25336831)

[5.2.7. Test milestones 8](#_Toc25336832)

[5.2.8. Deliverables 8](#_Toc25336833)

[5.3. Test Design 8](#_Toc25336834)

[5.4. Testcase 8](#_Toc25336835)

[5.5. Test Defect 8](#_Toc25336836)

[5.6. Test Report 8](#_Toc25336837)

[6. Software User’s Manual (SUM) 8](#_Toc25336838)

[6.1. User’s Guide 8](#_Toc25336839)

[6.1.1. Purposes 8](#_Toc25336840)

[6.1.2. Detailed Guidelines 8](#_Toc25336841)

# Introduction

## Purpose

PMLOS is the system that helps to Quang Hanh TKV helps Quang Hanh TKV company to change the way manage production and labor from ineffective way (by excel) to manage by software to increase work efficiency and reduce risk.

## Project Information

* Project name: **Production Management and Labor Organization System**
* Project code: **PMLOS**
* Project group name**: Ready Team**
* Product type: **Web application**
* Timeline: **Dec 08 th , 2017 – Nov 13 th, 2018**

## The People

### Supervisor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
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### Team Members

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## Background

### History

### Organizational structure

### Department introduction

### Responsibility in business of each department

### Current system

### Business between TCLD department and other departments

### Existing system

### Conflict and difficulty of current system

## The Proposed system

### The idea

Considering the problems of the current manual system, PMLOS was created to solve all those problems. This will be an intuitive, comprehensive management system, help the management becomes faster, multitasking, simpler, more efficient, eliminating the limitations of the system manual, improve productivity efficiency, minimize risk of error. Employees will be managed by department and certificate will be managed by employee. PMLOS will provide searching employee feature and filter by department feature to make searching information of an employee and his/her certificate more easily.

### Technical requirement

Because the business of Quang Hanh Company involves work in the mines. Mine is an extremely dangerous place with difficult and complicated. It is difficult to carry many devices, equipment and in addition the managers do not know much about computers and complex technology. With the condition of a Wi-Fi pit, PMLOS is built to website, that will best suit with above conditions. With users using office IT to get acquainted with the software faster and more user-friendly during using. Software will manages the server power, automatically disconnects data, links and takes over the control of the Company's existing digital radio system for power outage operation.

### Functional requirement

Because there are many different positions in the labor organization department, the features and the screens will be assigned and only authorized people can handle the features and screens. There are positions in the labor organization department such as paperwork managers, certificate managers, mobilization managers, recruitment and termination managers, labor productivity managers, and department managers. So the features will be developed based on the positions and jobs in the labor organization department .

For paperwork managers, because their current difficulty is that the management on excel is scattered in many different files,this wastes a lot of time for searching to add new or update, due to the risk of lossing data, the software will help the paperwork manager to manage more focusly. There will be a screen of employees record management in the company by list. When selecting the employee will have a screen showing all the information of this employee. The manager can add and edit information in this employee's profile. The software will also provide the ability to search by employee code, employee name or employee filtering by department to help find information of employees to edit quickly. The manager can also easily see what the employee's profile is missing so that he can notify the employee to add. After the addition of the record, the history of the record addition will also be kept for the manager to manage.

For recruit and terminating contracts managers, their difficulty is the management of the recruited employee records as well as the employee termination records. This makes it difficult for the company's labor statistics as well as total of recruitment and termination. The software will support the feature of creating contract termination and recruitment of employees. After the manager has obtained a decision code from the board of directors, the manager will fill in the decision code on this form. The software will handle both decided and undecided form. After an employee has made a decision to recruit, it will be managed by the software in the company profile and with the decision to terminate the contract will be stored in the profile outside the company. The number of terminations and employment of the two departments : Mechatronics and Exploitation will be re-listed to serve for making monthly and annual reports on total termination and employment easily.

For the company's certificate and employee’s certificate manager, they are currently facing a lot of difficulties and are time-consuming with this, mainly focusing on looking for employee records and adding certificates as well as renewing certificates for them, besides managing whether employees are working have certificates for the assigned tasks or not. The software will support by having both the certificate management feature of both the company and the employee. For the whole company's certificate management, when it needs to add new, edit information or remove Out-of-date certificates, the software will make this easier and employees who have this certificate will automatically be dropped. Valid or expired certificate status will also be shown. The certificate manager can also track employees who are assigned to a task who have a certificate for that task yet in the task certificate tracking screen. At this screen, the manager can renew for the expired employee certificate and add a new certificate for the non-certified employee. Searching and filtering functions will also be added to the software to help managers find employees and certificates more easily.

For managers who mobilize employees, the difficulty they encounter is similar to recruit and terminating contracts managers when they have to manage the mobilization orders that have a decision code and have no decision code. from the board of directors. Besides, they have to notify the factory that employees are transferred to the factory to managers for assigning work and take daily attendance for this employee. The software will also assist the manager to easily manage the dispatched units that have decision and no decision. After the decision of the application is made, the assigned employee is automatically added to the list of employees in the assigned factory. The ability to search and filter employees by workshop is also added to make it easy and quick to find employees.

### Out-of-Scope Functions

# Software project management

## Problem Definition

### Name of this Capstone project

### Problem Abstract

### Project Overview

## Project organization

### Software Process Model

### Roles and Responsibilities

### Tools and Techniques

## Project management plan

### Tasks

### Task Sheet: Assignments and Timetable

### All Meeting Minutes

## Coding Convention

## Other material

# Software Requirements Specifications (SRS)

## User requirement specification

## System requirement specification

# Software Design Description (SDD)

## Overview

## Overall System Architectural

## Architectural Layer Design

## Software detailed design

### Activity process

### Context diagram

### Detail description

## Database Design or Data Structures

### Entity Relationship diagram

### Data Description

## References

# Software Test Documentation (STD)

## INTRODUCTION

### Purpose

### Background information

## Test plan

### Scope of testing

### Constraints

### Risk list

### Requirements for Test

### Test strategy

### Resource

### Test milestones

### Deliverables

## Test Design

## Testcase

## Test Defect

## Test Report

# Software User’s Manual (SUM)

## User’s Guide

### Purposes

### Detailed Guidelines