Project specification:

SEN 2241: Object Oriented Analysis Design and Implementation

(OOADI)

Instructor: Tekoh Palma

Project Presentation Period: 1st Week of June

Description:

This document is meant to guide students of OOADI towards the realization of their projects which will count as their final Exams with a weight of 70%.

At the end of this Project, students are expected to come up with:

* A comprehensive Report of their project Hard and soft copies (word or pdf) (20%)
* A full functional Application (Desktop, Mobile or Web) (60%)
* A Presentation accompanied by a power point slide (Not more than 20slides) of their project (20%)

NB: The final presentation date of Projects will be announced by the lecturer (1st Week of June 2024)

# Phase 1: Team Organization and workflow management (1week)

During this phase of the project students are expected to:

* Organize themselves to highly cross-functional scrum teams of Six (6) team members
* Apply the skills on team organization and workflow management learned in class
* Each team is expected to have a GitHub repository for their project with each member actively contributing to it.

NB: Grading will be based on each members commit history

# Phase 2: Project Selection and Requirements Analysis Phase (1week)

During this phase students are expected to:

* Define clearly the Requirements of their system
* Analyse the feasibility of the various requirements
* Come up with a product backlog for their system

# Phase 3: Object Oriented Design (UML) (1 Week)

Task: Design and Documentation of UML Diagrams to meet your system specifications

* Comprehensive use case diagram
* Class diagram
* A Sample Object Diagram of your system
* At least 5 sequence diagrams depicting different aspects of your system

Phase 4: Implementation (4 Weeks)

* Using any technology stack of your choice, Build, Build and Build More!

# Phase 5: Deployment and Presentation (1 Week)

During this closing phase of your project each group is expected to

* Package and make their desktop available for distribution
* As for web applications, deploy them to be readily available online
* Mobile Applications should be deployed to their appropriate market Place

(Google Play store, Appstore, Windows store etc)

* (NB: Web applications not deployed will be graded on 50% of the overall score)

PROJECT REPORT TEMPLATE

## Course Code/Course Title

Group

Number

Project

Topic

Link to GitHub Repository

Group

Leader

Group Information

|  |  |  |  |
| --- | --- | --- | --- |
| SN | Member’s Name | Registration Number | Team Role |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |

Note:

- The following format at minimum must be used for the Project Presentation (This is just a guide but you are not limited to it, you are allowed to expand it further)

## CHAPTER ONE: INTRODUCTION

* General Introduction

* Aim and Objectives

* Problem Statement

## CHAPTER TWO: LITERATURE REVIEW

* Software Development Methodologies

* Comparison between different Software Development Methodologies

* Reason for the choice of Scrum Methodology

* General review of related concepts with respect to your chosen project

* Review of related literature with respect to your chosen project

## CHAPTER THREE: METHODOLOGY AND MATERIALS

* Research Methodology
* System Requirements (Functional and Non-Functional)  System Design
  + Architecture of your system (HLD)
  + UML Diagrams
* Application of scrum
  + Team organization
  + Workflow management
  + Conflict Resolution
  + Challenges encounter and how you overcame them
* Scrum Artifacts (Product backlog and Sprint backlog)
* A Test Case document
* Proposed Algorithms
* Materials and technologies used (briefly list the name of the technology or material and its role in realizing your system)

## CHAPTER THREE: RESULTS AND DISCUSSIONS

 Screenshots of various application scenarios  Screenshots of various API Request/Response  Etc..

## CHAPTER FOUR: RECOMMENDATIONS AND CONCLUSION

In not more than 3 paragraphs summarize what your team has been able to achieve, the difficulties you encountered and recommendation for further studies

## CHAPTER TWO: LITERATURE REVIEW

* Software Development Methodologies

* Comparison between different Software Development Methodologies

* Reason for the choice of Scrum Methodology

* General review of related concepts with respect to your chosen project

* Review of related literature with respect to your chosen project