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

Best of Luck! – Tekoh Palma