



UNIVERSITY OF GHANA

(All rights reserved)

DEPARTMENT OF COMPUTER ENGINEERING

SCHOOL OF ENGINEERING SCIENCES

APRIL 4, 2021/2022 ACADEMIC YEAR

CPEN 207: INTRODUCTION TO SOFTWARE ENGINEERING

PROJECT 1

Course Instructors:

- Name : Mr. John Korankye Assiamah and Mr. Kenneth Broni
- Office Location:
- Office Hours:
- E-mail: kinkorankye@gmail.com, kbroni123@gmail.com

Teaching Assistant

Name: Mr. Titus Anang

Office:

E-mail: adoteititus1@gmail.com

Web Programming: CPEN Online Repository:

Problem:

Graduate Students in the University of Ghana after completing their final project have their report published on the University of Ghana **UGSPACE** website (<http://ugspace.ug.edu.gh/>). However, for undergraduate students, only hard copies of their work is taken and packed on shelves in the Department Office. There are no digital means of accessing undergrad project report online and this has become a burden for the department since finding space for the increasing number of hard copy project report has become a daunting task. As a software engineer, you are to develop a system that addresses the problem.

Objectives: The main objective of this project is for students to develop a web application using the Django Framework. In the course of this project, students are expected to leverage on the concepts and skills from the task project and apply same into building an Online Repository for the Computer Engineering Department.

A summary of the task are outlined as follows:

1. Design an interface using **HTML, CSS and Bootstrap**
2. Create a Django Project
3. Create an APP for Users and another for Dashboard
4. Create a User Registration and Login Authentication System for the entire web application

5. Use the concepts in **CRUD** to provide an avenue for an administrator to add project work report of students in PDF file format onto the web application.
6. Use the concepts in **CRUD** to provide an avenue for users to read published project work reports.
7. Use a PostgreSQL database for this project

Note:

Visit the UGSPACE website via the link <http://ugspace.ug.edu.gh/> to explore and familiarize yourself with the system. This is to help you understand what is expected of you to build. The goal is **not** to reproduce exactly what you see but using the system will take away a lot of the abstractions and ambiguity you may be confronted with. Emphasis should be placed on simplicity and usability of the system and not too much aesthetics.

In a PowerPoint presentation, the Software Development Project Cycle, the Model used, UML Use Case and Sequence Diagrams must be highlighted. The Functional and Non-functional requirements for the project must also be highlighted. The tools and resources used in the project must be highlighted. The role(s) individual team members played must be explicitly stated. Project cost estimation must be highlighted. Any other relevant information must also be highlighted.

Presentation: Live demonstration of web application. Submit ppt to Titus a day before presentation. No changes to ppt slides will be entertained on the day of presentation.

Submission: Codes and other resources must be submitted to a cloud repository such as *github*. Send URL of your cloud repository to Titus who will compile them as a *text file* for onward submission.

Submission: 22-April-2022 @ 23:59hrs GMT. Presentation: 22-April-2022 @ 10:30am