THE STATE UNIVERSITY OF ZANZIBAR

SCHOOL OF NATURAL AND SOCIAL SCIENCES

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

MARKING GUIDELINE FOR FINAL PRESENTATION OF IoT-BASED FINAL YEAR PROJECT 2024/2025

	MARKED ITEM	POINTS
1.	Presentation Skills Physical appearance, Personality, Quality of Presentation, language proficient and NOTE TAKING	5%
2.	System Architecture and Design	10%
3.	User Interface and Usability	10%
4.	Security and Data Management (Encryption, Form validation, Login system, SQL injection)	10%
5.	Scope Coverage and Functionality (CRUD operations, sensor data acquisition, processing, and actuator control, data visualization, remote control, and real-time monitoring, report generation when applicable)	20%
6.	Knowledge of the Work	35%
7.	Supervisor Assessment	10%
8.	TOTAL	100%

ASSESMENT GUIDELINE DURING IoT-BASED FINAL YEAR PROJECT

The following are assessment criteria that will be used to access students and system demonstration during the final year project. These criteria are categorized into two groups

I.   INDIVIDUAL: In this type of criteria, students will be assessed individually and each student may be given different score.
II. GROUP: In this type of criteria, student will be accessed as a group where by all students are given the same score.

Assessment Criteria Description:

1. **Presentation skills (Physical appearance, Personality, Quality of Presentation, language proficient and note taking**
   Student must ware descent(OFFICIAL) clothes and establish eye contact with panel during presentation.
   Dresses such as T-shirt, skins tights, jeans are not allowed
   Student must prepare a short and clear PowerPoint presentation with simple slides layout and visibility.
   Student must also show various skills such as Presentation skills, and nice flow of English language during presentation, take a notes of all comments given by the panel.

2. **System Architecture and Design**
   The student should present a clear and well-organized architecture diagram, including components like sensors, microcontrollers, communication modules, and cloud or edge computing. Evaluation of the hardware design, including schematic diagrams, hardware prototype design, and firmware logic. Integration of different components should be seamless and justified.

3. Security and Data Management **(Encryption, Form validation, verification, Login system, SQL injection)**
   System must have various basics security features such as Encrypting sensitive information (eg. Passwords, Security keys, etc.) using appropriate algorithms, secure cloud storage, data privacy, validating and verifying user input using client side and ~~server side~~ validation, tracking authentication and authorization, and privileges, secure SQL injection and provide secure role based login system,

4. **Scope Covered (CRUD operations, functionalities and REPORT GENERATION)**
   The system should cover the full scope of the project, demonstrating all required functionalities, such as sensor data acquisition, processing, and actuator control. The system should showcase the intended IoT functionalities, including data visualization, remote control, and real-time monitoring. Where applicable, integration with cloud services, data analytics, or machine learning should be demonstrated.

5. **Knowledge of the work**
   The student should show deep knowledge of the IoT system, explaining how the components work together and justifying the choices made during development. Familiarity with the programming languages, tools, and technologies used in the project is essential. The student should be able to answer questions confidently and accurately, demonstrating a thorough understanding of their project

Note: Student should provide a valid answer to questions that might be asked during presentation and should not interfere when other members of his/her group answering the questions.

6. **Supervisor:**

The supervisor will assess the student's commitment to the project, consistency in attending supervision meetings, and overall engagement in the development process.