

# UGANDA TECHNOLOGY AND MANAGEMENT UNIVERSITY

## WEEKLY JOURNAL REPORT

MUHWEZI ASAPH

SEP23/BSC/3567U/F

### BACHELOR OF SCIENCE COMPUTER SCIENCE

WEEK 3: 13<sup>th</sup>/July/2025 – 19<sup>th</sup> /July/2025

#### 1. What have been your successes/accomplishments?

- Successfully completed a JavaScript-enhanced interactive portfolio project.
- Built a clean HTML layout, applied CSS styling, and wrote JavaScript code to add interactivity.
- Implemented JavaScript DOM manipulation to dynamically populate a skills list.
- Used JavaScript to toggle a dark/light theme.
- Practiced separating HTML, CSS, and JavaScript into structured files.

#### 2. What have been the challenges/fears?

- Initial difficulty understanding how to interact with the DOM using JavaScript.
- Debugging form behavior, especially with radio buttons and text areas.
- Adjusting from designing static pages to implementing dynamic functionality.
- Uncertainty about how deep JavaScript is required for future internship phases.

#### 3. What is the relationship between your internship and your previous job training?

- The internship expands on the foundational knowledge gained in school.
- Prior training provided basic theory; the internship adds real-world practice and project experience.
- Got introduced to version control using GitHub, which complements prior academic skills.

#### 4. What is the difference between what you observed in the field and what you learned in class?

- Classroom learning focused on theory, while the internship emphasizes practical application.
- In the field, real-time debugging, browser developer tools, and client-like expectations are common which is not the case in classroom learning.
- Internship projects are more open-ended, requiring critical thinking and real problem-solving compared to the ones of classroom.

- Field work shows how HTML, CSS, and JavaScript integrate to build usable interfaces and such was not covered in classroom.

## 5. What experience have you gained so far from being part of the organization/community?

- Learned to manage weekly tasks and meet deadlines.
- Gained confidence in building projects from scratch.
- Improved problem-solving skills when encountering coding errors.
- Experienced version control and GitHub uploads for professional tracking.
- Understood the importance of UI/UX (user interface and user experience) in frontend development.

## 6. List activities done for the week:

- Day 1: Introduction to JavaScript syntax, variables, and data types.
- Day 2: **Functions and operators.**
- Day 3: **Conditionals and control flow.**
- Day 4: **Loops and Arrays.**
- Day 5: **DOM manipulation basics.**
- Day 6: **DOM events and final mini project.**

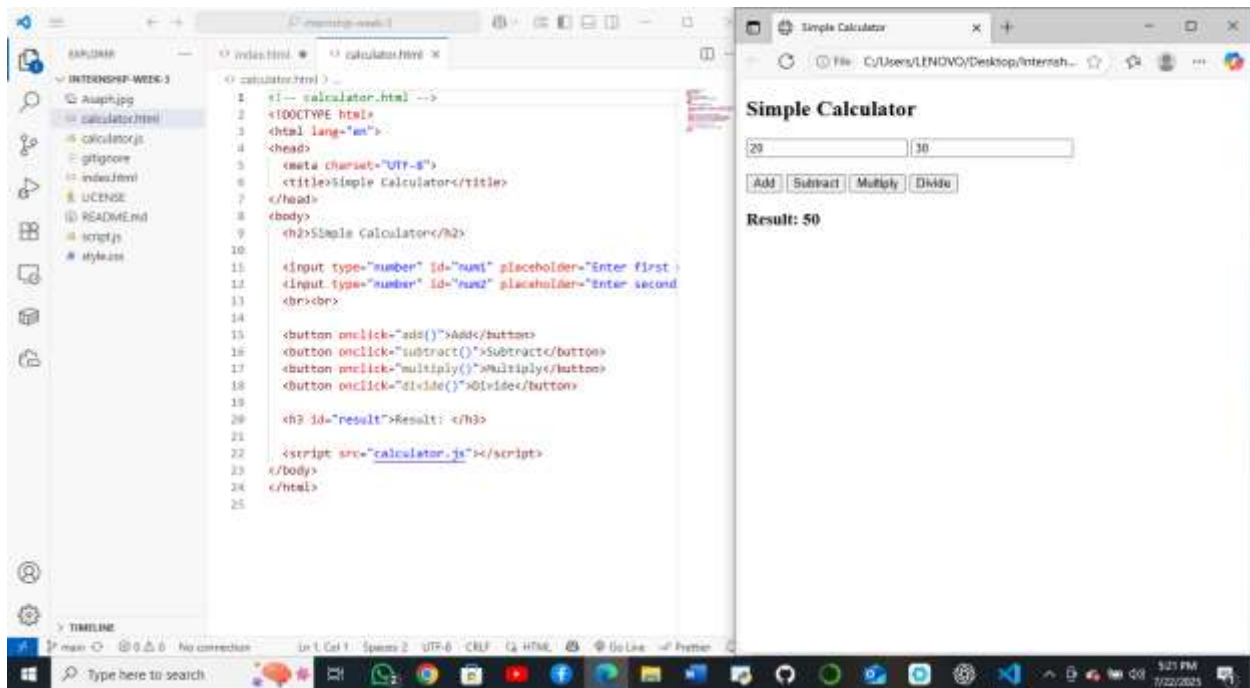


Figure 1 screenshot of the created simple calculator functions sub project

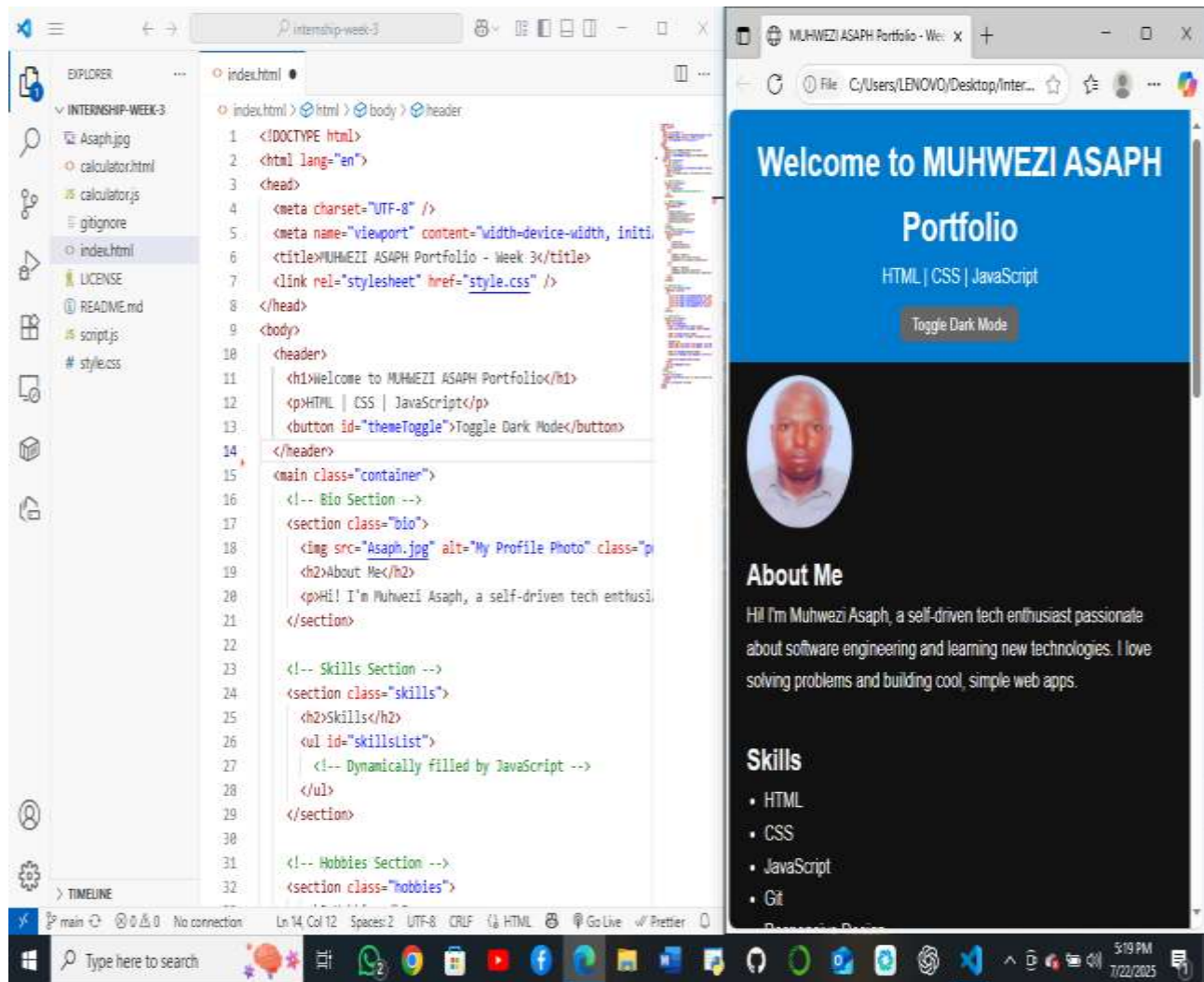


Figure 2 screenshot of the mini project of the incorporated JavaScript in the personal profile webpage

## DAILY RECORD OF PROGRESS

Week 3 internship at Zentrix Africa Technologies institute

Internship Duration: 30 June 2025 – 18th August 2025

Week covered: Week 3 (14<sup>th</sup> July – 20<sup>th</sup> July 2025)

Location: National ICT Innovation Hub, Nakawa (Physical) and Online

### DAY BY DAY DETAILED BREAKDOWN

Day 1 – Monday, 14<sup>th</sup> June 2025 (Physical)

Activity: Introduction to JavaScript

Key concepts covered:

- Learned what JavaScript is and why it is important in web development.
- Explored basic syntax, variables ('let', 'const'), data types (strings, numbers, Booleans).
- Practiced using 'alert ()', 'console.log ()', and string concatenation.

Lesson Learned:

- JavaScript is a powerful scripting language used to add interactivity to web pages.
- Variables help store and manipulate data.
- Output methods ('console.log', 'alert') are used to test and debug code.

Challenges:

- Confusing between 'let' and 'const' usage.
- Typing errors in syntax (like missing semicolons or brackets).

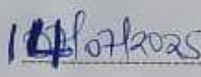
Recommendations:

- Practice more small code snippets.
- Use browser developer tools console to test JavaScript interactively.

I declare that all the information provided is true



Signed by trainee



Date



Signed by field supervisor



Figure 3 shows screenshot of record of progress day 1

Day 2 Tuesday, 15<sup>th</sup> July 2025 (online)

Activity: Functions and Operators

Key concepts covered:

- Learned how to define and call functions.
- Explored arithmetic, comparison, and logical operators.
- Created basic calculator functions using user inputs.

Lesson Learned:

- Functions allow code reuse and organization.
- Operators are used for calculations and decision-making.

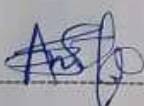
Challenges:

- Understanding return values vs. direct outputs.
- Forgetting to use `()` when calling functions.

Recommendations:

- Reinforce function syntax and behavior through practice.
- Try building mini function-based tools (e.g., calculator, greeting app).

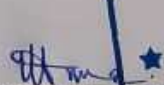
I declare that all the information provided is true



Signed by trainee

15/07/2025

Date



Signed by field supervisor



Figure 4 shows screenshot of record of progress day 2

Day 3 Wednesday, 16th July 2025 (physical)

Activity: Conditionals and control flow

Key concepts covered:

- Used 'if', 'else if', and 'else' to make decisions in code.
- Explored 'switch' statements.
- Built login form simulation with conditionals.

Lesson Learned:

- Control flow structures guide how code executes based on conditions.
- Logical thinking is key to structuring conditions properly.

Challenges:

- Nesting conditionals became confusing.
- Struggled with '=' vs '==' comparisons.

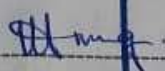
Recommendations:

- Use flowcharts to visualize conditional logic.
- Prefer '==' for strict comparison.

I declare that all the information provided is true

  
Signed by trainee

16/07/2025  
Date

  
Signed by field supervisor

Date



Figure 5 shows screenshot of record of progress day 3



Day 4 – Thursday, 17<sup>th</sup> July 2025 (online)

Activity: Loops and Arrays

Key concepts covered:

- Learned about `for`, `while`, and `do...while` loops.
- Created arrays and iterated through them.
- Built student marks array and displayed results using loops.

Lesson Learned:

- Loops automate repetitive tasks.
- Arrays store ordered collections of data.


Challenges:

- Forgot to increment counters in loops (causing infinite loops).
- Misused loop conditions.

Recommendations:

- Practice with small loop tasks.
- Break loops into smaller logic steps.

I declare that all the information provided is true



Signed by trainee

17/07/2025

Date



Signed by field supervisor

Date



Figure 6 shows screenshot of record of progress day 4

Day 5 – Friday, 18<sup>th</sup>/July 2025 (physical)

Activity: DOM manipulation basics

Key concepts covered:

- Explored how to access HTML elements using 'getElementById', 'querySelector'.
- Changed content, styles, and attributes using JavaScript.

Lesson Learned:

- The DOM (Document Object Model) connects HTML and JavaScript.
- JavaScript can change how the page looks and behaves in real time.


Challenges:

- Forgetting to link JS file to HTML properly.
- Using incorrect element selectors.

Recommendations:

- Use browser Developer tools to inspect element IDs and classes.
- Ensure script tags are loaded after HTML.

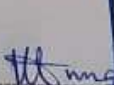
I declare that all the information provided is true



Signed by trainee

18/07/25

Date



Signed by field supervisor

Date



Figure 7 shows screenshot of record of progress day 5



Day 6 - Saturday, 19<sup>th</sup>/July 2025(online)

Activity: DOM events and final mini project

Key concepts covered:

- Learned about 'click', 'submit', 'keyup' events.
- Adding input validations and live feedback using event listeners.
- Incorporated JavaScript in the personal profile webpage

Lesson Learned:

Event handling makes webpages dynamic and user-friendly.

Real-time feedback improves user experience.

Challenges:

- Attaching multiple event listeners to form elements.
- Handling preventDefault() on forms.

Recommendations:

- Refer to MDN docs for various DOM methods.
- Test event handlers incrementally while building features.

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Student Signature: \_\_\_\_\_



19/09/2025

Date

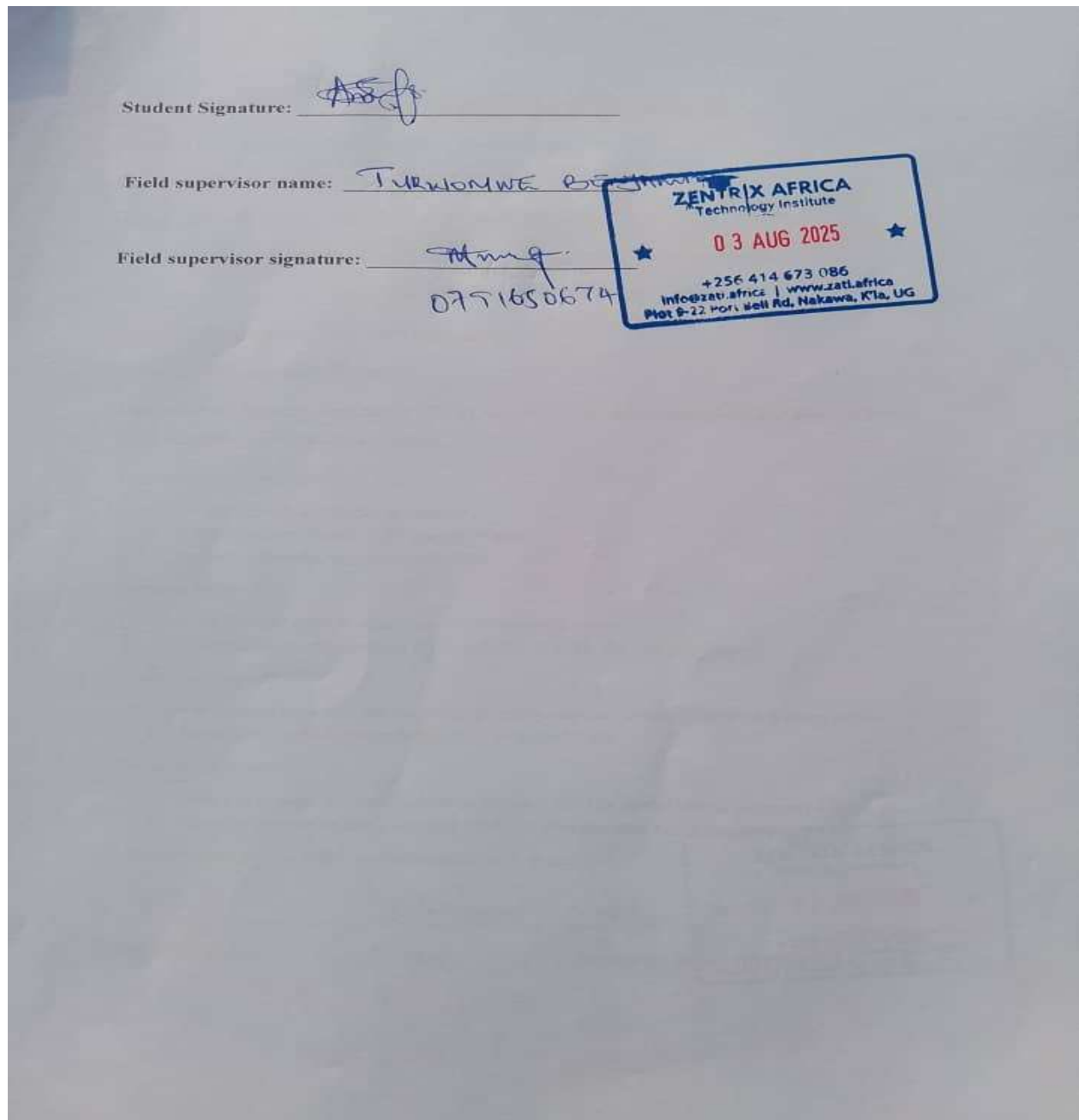
Field supervisor name: \_\_\_\_\_

TURKONWE BENJAMIN

Field supervisor signature: \_\_\_\_\_



Figure 8 shows screenshot of record of progress day 6



*Figure 9 shows screenshot of final page of weekly report with the signature and name of the field supervisor*

Below is the link to the repository of internship week 3

<https://github.com/muhweziasaph/Internship-week-3.git>