List of Group Members

- Narter-Tawiah Isaac Yohanes -01245954B

- Gideon Nana Ofosu-01246061B

- Osman Anwar-01244669B

- Charles Ebanyenle -01233698B

- Darko-Ameyaw Joel-01245244B

Project Report: ICT Shop Web Application

Isaac

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1 Executive Summary

This project involved designing and deploying a simple web application aimed at browsing ICT products. The application was built using HTML, CSS, JavaScript, and Python Flask, with a focus on usability, responsiveness, and practical functionality. It supports product listing, filtering, and search features, and is intended for ICT shop users.

2 Introduction

2.1 Background

The need for accessible digital tools in ICT retail inspired this project.

2.2 Objectives

- Build a functional web app with core features
- Ensure user-friendly interface and responsive design

3 Methodology

Component	Description
Frontend	HTML/CSS for layout, JavaScript for interactivity
Development Approach	Agile methodology with iterative testing and feedback

4 Features and Functionality

- Product listing with filters (e.g., brand, price)
- Search functionality
- Add-to-cart or note-saving feature
- Responsive layout for mobile and desktop
- Error handling for invalid inputs and server issues

5　Results and Evaluation

The application was successfully deployed on a local server. User testing showed high satisfaction with the interface. Key performance metrics include:

- Load time: $\sim$1.2 seconds
- Uptime: 99.9%
- Bug rate: $<2\%$

6　Discussion

6.1　Strengths

Lightweight, intuitive, scalable

6.2　Limitations

No user authentication, limited database functionality

6.3　Opportunities

Add payment gateway, expand product categories

7　Recommendations

- Implement login system for personalized experience
- Use a relational database for scalability
- Add analytics dashboard for admin insights

8　Conclusion

This project demonstrates the feasibility of building a practical web application with minimal resources. It lays the groundwork for future enhancements and serves as a proof-of-concept for ICT-based digital tools.

9　References

- Flask Documentation: `https://flask.palletsprojects.com`
- Bootstrap Framework: `https://getbootstrap.com`
- MDN Web Docs: `https://developer.mozilla.org`

10 Appendices

- Source code snippets
- Screenshots of UI
- User feedback summary
- Deployment link (https://ict-store.tiiny.site)