



## Cover page

Project title: SmartConnect Logistics System

Academic Year: 2023/2024

Group Members: Rua Huwari

Department Name: Computer Engineering

Maysam Ja'far

Project Type Hardware

Supervisor Name: Dr. Abdallah Hasan Rashed

### Format:

- Single space, Times New Roman.
- 12 pt,
- Maximum 1 page.

### Abstract Body:

#### Items must be provided in the Abstract:

- Why do you think this project is important? Please explain the significance of this Project in brief.
- In your point of view what are the important aspects that should be covered in the project?
- Objective(s): In your view, please explain the main objectives of the project.
- Methodology: Give a brief outline of the application development process.
- Had this project been done before? Are there any similar applications available today?
- **Note:** Please deliver this abstract early to ensure that your Project has been approved by the department's projects committee. **Registration will not be done without this approval.**



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## Project's Abstract:

Delivering items and packages securely and conveniently has always been an issue that have never found a suitable solution. What the user wants to find is a system, that is both secure, and user-friendly. Time convenience should also be taken into consideration; what will happen if my package arrived when no one is at home to take it?

The "SmartConnect Logistics System" project presents an innovative and comprehensive solution for secure, automated, and user-friendly package management. Integrating cutting-edge technologies such as ultrasonic sensors, smart locks, RFID, barcode scanners, and an autonomous pick-and-place arm, our system aims to revolutionize the logistics industry.

Users begin by placing packages in the first smart cupboard, initiating a seamless process involving barcode scanning, RFID payment, and password authentication. The autonomous car, equipped with advanced sensors, efficiently transfers packages between smart lockers. A user-friendly mobile app facilitates package retrieval, with real-time updates and secure access control, using this app, the user can order the package to get delivered to a suitable delivery point, at a convenient time; thus solving the time convenience issue.

The system's resilience is bolstered by the implementation of advanced security measures, careful consideration of energy efficiency, and a scalable design. This project not only demonstrates the exceptional technical expertise in computer engineering but also places significant emphasis on enhancing user experience and promoting environmental consciousness.

The SmartConnect Logistics System sets a new standard for smart logistics systems, offering a reliable, secure, and efficient solution for modern package management.