



Cover page

Project title: Sorting Belt.

Academic Year: 2022

Group Members: 1- Mohammad Halaweh.

Department Name: Computer Engineering.

2- Haitham Saleh.

Project Type Software or Hardware (Choose one) → **Hardware**

Supervisor Name: Suleman abu kharmeh

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?
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- **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.**



Project's Abstract:

The project aims to distribute specific products to their specific containers. The project uses a belt that transport goods and place them in containers. these containers are filled with the specific products that match the requirements. The project will use a sort of like arm that will guide the goods to be filled in their specific containers. This can be achieved from sensors that will define the products on their specific type (in our case it is defined by colors) so that the arm will guide each type to its specific container.

The project will require the following tools:

Arduino Mega as a microcontroller

Color Sensor as a detection of the product's type

Conveyor Belt to transport the products to the container

Servo Motor (to act as the arm) to guide the products to their specific container.

We will present the products as two color cubes and the containers as two boxes so that cubes of one color will be filled in one box and cubes of the other color will be filled in the other box using the help of the arm to guide the product.

