Cover page

Project title: ……Automated assembly line……. Academic Year: 2023……

Group Members: ……1. Baraa bashar khalaf…. Department Name: computer engineering.

……2.Yasser saife……..

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Project Type Hardware

Supervisor Name:Dr. Anas Tomaa……

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:

Automation in manufacturing is very important nowadays, almost all factories use robots because robots can perform the work three to five people, depending on the task, in addition it saving the cost and increase the accuracy which mean minimal waste, and it can remove workers from dangerous tasks, and it leads to increasing in productivity.

Hence the idea, to design an Automated assembly line. The system can assemble two parts to make one object, the two parts will be already manufactured and ready to enter the system using production line for each one, then the system will detect that each part arrive in the lines and this will be synchronies with a five axis robotic arm that will take the two parts after checked it and assemble it together and the final object will leave the system as one part final result object.

We will start our development process by printing the robotic arm using 3d printer, then we will connect the arm parts with servo motors and test the arm, then we will design the production lines using stepper motors to control the speed of the lines, then we will find a mechanism to check the parts and put them together to make the final product.

There are similar applications and systems using in the factories but in our computer engineering department it's the first time.