

DESIGNING AND DEVELOPING BOTTLED MINERAL WATER PACKAGING SYSTEM

By

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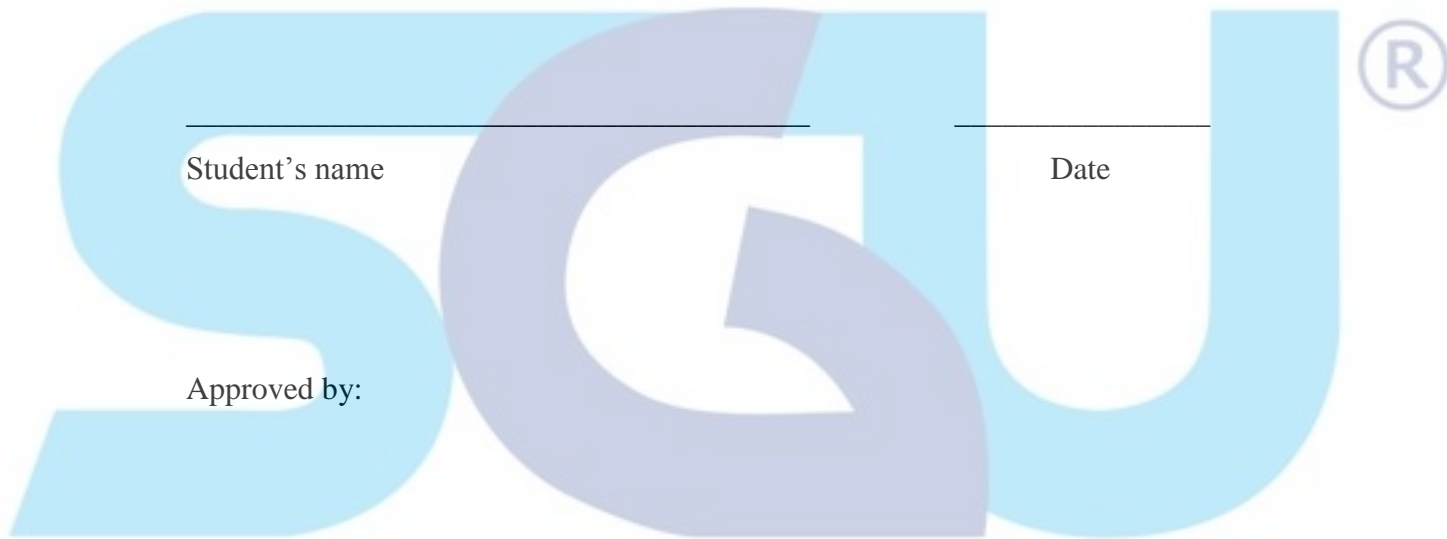
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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



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ABSTRACT**DESIGNING AND DEVELOPING BOTTLED MINERAL WATER PACKAGING
SYSTEM**

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This thesis project is about developing a packaging system for packing various sizes of bottled mineral water. The packaging system consists of several subsystems which are gripper, handling robot, and networking system with other station. The gripper should be able to grip three types of bottle's volumes. In order to accomplish the task, the gripper is designed to grip at the neck of bottles which has the same dimension for every bottle's volume. The gripper consists of a pneumatic cylinder and several aluminum links. The handling robot should be able to reach all the bottle's positions in packaging boxes. The handling robot which is built in this thesis application is a handling robot of gantry type. Handling robot's movement is generated by DC motors and controlled by PLC (Programmable Logic Controller). Networking system with other station represents the shared information between the stations' controller. The packaging system station establishes networking system with sealing system station. The networking system is accomplished by applying I/O shared network communication method. As a result of combining these subsystems, packaging system which has an ability to pack various sizes of bottled mineral water is developed.

DEDICATION

I dedicate this thesis to my family, friends, and lecturers for their support in creating this thesis.



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