

**Project Type:** Guided

**Project Title:** Password-based door lock system using 8051/PIC microcontroller

**Group Members:**

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**Objective:**

Safety is the most crucial concern of human. We always try to keep our things between ourselves. For this reason, we still use various methods to lock our precious items like a locked diary. And when it comes to our daily life, we are more serious. In the modern age, there are so many ways to lock the door; one of them is password-based lock system—a system where you are the only one to know how to access it. It saves our daily life from the various malicious problem like a thief. This system will give us the security that we want. To make our life more secure, we are going to build the password-based door lock system. This system is easy to assemble and very easy to use in our daily life. Anyone can use it to secure themselves.

**Applications:**

The password-based lock system can install any door of any rooms. This system also can be integrated with the existing system. This electric combination lock system uses a five-digit password. The system collects five-digit user input and compares the user input with the preset password inside the program. If the password matches, access will be granted, and if not match the entry will be denied. The system can be used at residential places to ensure better safety. It can be used at organizations to ensure authorized access to highly secured places.

**Block Diagram:**

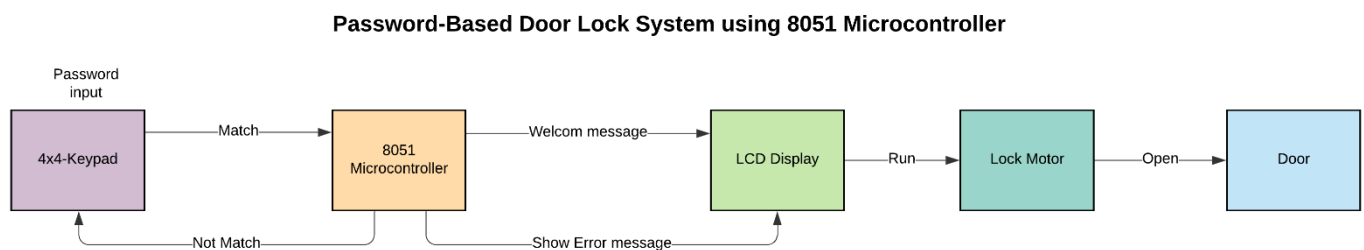


Fig: Password Based Door Lock System Block Diagram