DESIGN, DEVELOPMENT, AND FABRICATION OF AVC (AUTOMATED VACUUM CLEANER)

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This project is a vacuum cleaner which it can operate by itself, it also known as automated vacuum cleaner. It is much like a floor cleaning robot. This can be done by combine a robot and a vacuum.

The concept of this project is to build a vacuum cleaning that it will know where to clean. It will find its own path for cleaning. It will bypass any hurdle that it faces including liquid, falling from higher ground and knocking around. To sense these factors the vacuum need IR sensors to detect the surrounding and it will be control by PIC controller. The vacuum is sits on the chassis and a long rectangular tube will extend through the chassis to act as a vacuum inlet as show in Figure 3.1.