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Project Progress Report

The project we decided to work on is to implement a home security system using a raspberry pi. Our group already had a raspberry pi to start our work with, but we did not have some of the sensors we planned to use. So our first step was to gather all the supplies needed for the project. We were able to gather a pi cam, a LIDAR, ultrasonic and light sensors. We even have a touch screen display we can use with the raspberry pi. Once we got all the materials we set up weekly meeting times. During these meeting we managed to set up some of the hardware. The raspberry pi we have did not have an operating system, so in order to use it, we had to flash an Ubuntu ISO to a SD card. Once the pi was set up to a monitor, we tried to implement the pi cam feature. We ran a few lines of code and were able to take and store pictures from the pi cam. We plan to use this feature when one of the sensors possibly detects a person. It will take a picture of the person and store it in the file system. We also tried to get the touch display to work. As of now it is able to transfer the connection to the display, but the image is not displayed properly. We also decided to split up the work. The code for one sensor is done by one person. We set up a GitHub repository to accomplish this task. Each of us are in the early stages of coding process for the sensors. Our final goal is to use the sensors to detect a person. The pi cam will then take a picture of the room and display it on the portable display.