

Abstract Submitted  
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**CASSY Robot** ANNA PITTMAN, ANN WRIGHT<sup>1</sup>, AARON RICE, CLAUDE SHYAKA, Hendrix College — The CASSY Robot project involved two square robots coded in RobotC. The goal was to code a robot to do a certain set of tasks autonomously. To begin with, our task was to code the robot so that it would roam a certain area, marked off by black tape. When the robot hit the black tape, it knew to back up and turn around. It was able to do this thanks to the light sensor that was attached to the bottom of the robot. Also, whenever the robot hit an obstacle, it knew to stop, back up, and turn around. This was primarily to prevent the robot from hurting itself if it hit an obstacle. This was accomplished by using touch sensors set up as bumpers. Once that was accomplished, we attached sonar sensors and created code so that one robot was able to find and track the other robot in a sort of intruder/police scenario. The overall goal of this project was to code the robot so that we can test it against a robot coded exactly the same, but using Layered Mode Selection Logic.

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