

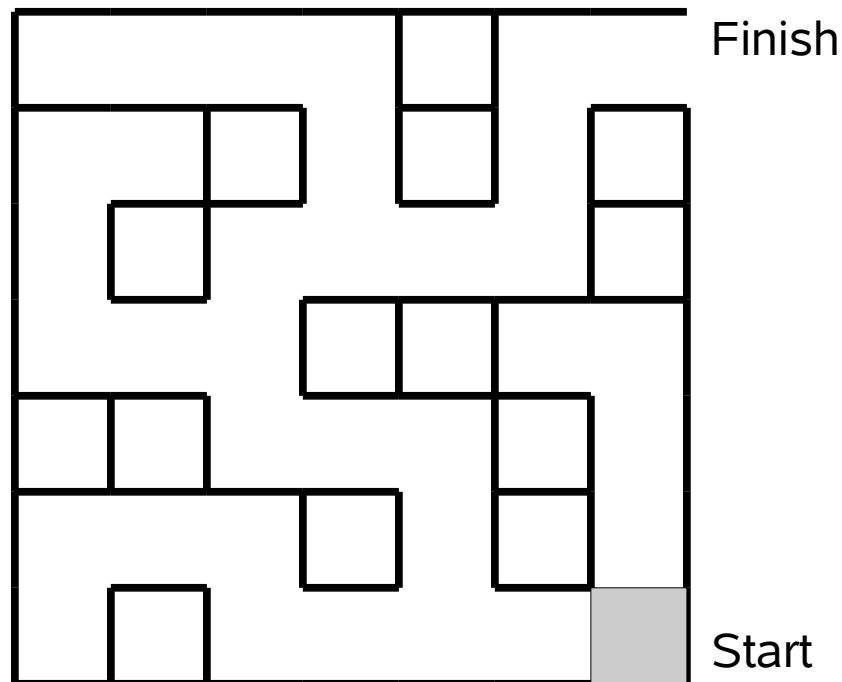
**Intro to Engineering
Spring 2007
ROBOLAB Project**

Your team will construct a *Robot* from the kits available from Dr. Lemley. The goal of this project is to construct a robot that will navigate through a maze in the shortest possible time. The maze will consist of black electrical tape on the floor and will be in a grid pattern of 7x7 one foot squares – see below. The robot will be timed through the maze. The robot with the shortest time through the course will win the contest.

You will need a **team leader** to set up times to work on the project and to assign tasks. So your first step will be to elect a team leader (you may want your team leader to be different than for the raft project) and to find a time to meet sometime soon. The first meeting should include making plans for the robot (what wheels to use, how big, etc.) and how to use ROBOLAB. ROBOLAB is graphical software that may be used to create programs that control your Lego Robot. Dr. Lemley will provide a complete kit for you to use. Computers with ROBOLAB are available in HOH 106. A few machines are available in *HOH 110 Senior Design Lab* – you may only use machines in this room if seniors are not using them. After the first meeting you should leave at least knowing the basics of programming the robot.

You will need to schedule subsequent meetings to finish your project. ENGR 1112 classes on April 3, 10, and 17 will be used to answer questions regarding your projects and allow your team's additional meetings. *You should not depend on class time to complete your project.*

The ROBOLAB contest is one of the major projects for the ENGR 1112 course. The competition for the Maze Contest is scheduled for April 24, 2007. In that meeting your teams will give a short presentation then conclude with a competition.



Drawing 1: Example maze for competition.

