PETscape Extras

Arduino Uno and Circuit board

Motor and Buzzer

PETscape: Automated Pet Door

The answer to your indoor pet’s needs!

Future Improvements

- Improved security with day-time sensor
- Manual use on/off switch
- Control over network via web interface

Josh Montgomery
Eastern Kentucky University
E-mail: joshua_montgomery30@eku.edu
How PETscape can benefit pet owners

Are you a pet owner that:
- Stays gone for long periods of time?
- Has a very busy schedule?
- Is looking for a better way to take your pet outside to the bathroom?

PETscape could be the answer to your problems!
- No more problems with manual pet doors
- Allows pet access inside/outside of home
- Fully automated

What is the PETscape?

The PETscape is an automated pet door that will enable pets to gain some freedom and take care of themselves if they need to go outside to the bathroom or access other parts of the home. This project uses an Arduino Uno microcontroller that controls two Parallax Pyroelectric Infrared (PIR) motion sensors to sense the presence of a pet, which then signals a motor to raise the door, allowing the pet access outside or inside. It will also feature a buzzer to indicate that the door is in use.

http://arduino.cc/en/Main/arduinoBoardUno

Assumptions

Some assumptions that must be considered are:
- For use:
  - Must be a small pet.
  - Door is 8” x 8”
  - Some training for pet to use automated door is required.
  - Make sure the pet is gaining access to safe environments.
- For constructing:
  - Basic knowledge and understanding of electronic and electricity circuits, microcontrollers, and programming languages, such as C/C++.

The Arduino is an open-source electronics platform that has easy-to-use hardware and software and can be used as a stand-alone device. Arduino’s open-source software component is similar to C++ and has a user friendly integrated development environment (IDE).