Structural Block Diagram

Remote Control

Atmega324P – Microprocessor used to control all of the hardware. Sends and receives signals from the X-Bee Pro wireless chips.

X-Bee Pro – Wireless chips, used to send and receive data between the other wireless chip on the robot car.

Voice Chip – Will receive commands via mic and will be able to store a command and then recognize that command and send the command to the microprocessor.

Joystick & Controls

LCD

LED Matrix

Robot Car

Atmega324P – Microprocessor used to control all of the hardware. Sends and receives signals from the X-Bee Pro wireless chips.

X-Bee Pro – Wireless chips, used to send and receive data between the other wireless chip on the remote control.

Motor Controller – Receives signals from the microprocessor that tell it how to control the motor speed and direction.

Sensors – Will be used for object detection and can determine if a new path is needed.

Random Peripherals – This will include random lights, or sounds that will be added to the car but won’t be too important.

Joystick & Controls – Will be used to control the robot car if voice operation is not being used.