

CSE – 316

Microprocessors, Microcontrollers, and Embedded Systems Sessional

Title: The Wonder Hand

Group Members:

- A.H.M. Osama Haque – 1805002
- MD. Rownak Sahanawaz – 1805018
- Abdus Samee – 1805021

Motivation

- ❖ Build a project that helps us learn the ins and outs of how microcontroller works with various sensors
- ❖ Something that has a positive effect on the real world.
- ❖ Be useful to a section of people who are helpless in carrying out their work and need help.
- ❖ Our project titled “The Wonder Hand” does such a job which may also be applicable in real-world situations.

Description

- ❖ **“The Wonder Hand”** is a system to control household devices like, light, fan, alarm etc. via hand gestures for disabled and bedridden people.
- ❖ It is basically a glove worn in the hand of the patient. A microcontroller is embedded on the glove which in turn controls which device to turn on/off and transmits the state to another microcontroller.
- ❖ The second microcontroller then acts upon the direction it receives and operates on the devices.
- ❖ Specific gestures are given by the patient after wearing the wonder glove. Our microcontrollers work based upon those hand gestures.

Microcontrollers & Sensors

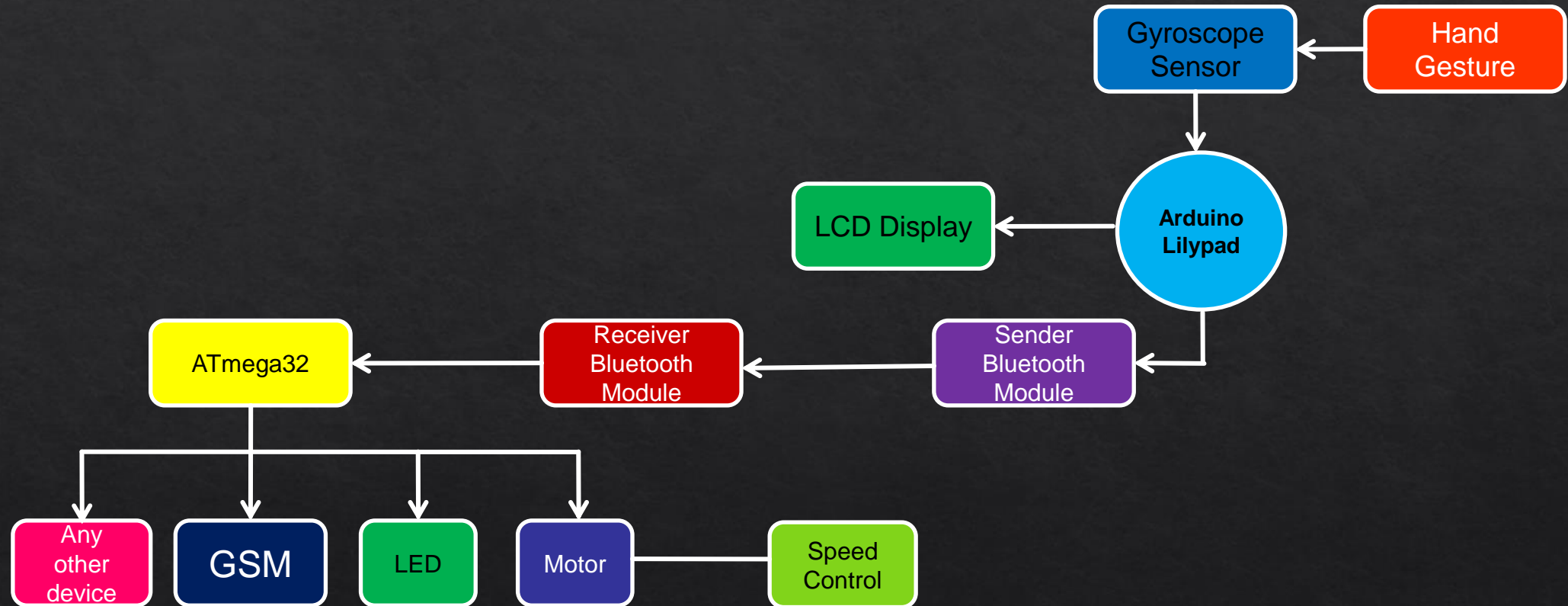
Sensors:

- ◊ Bluetooth Module
- ◊ Gyroscope Sensor
- ◊ GSM Module

Microcontrollers:

- ◊ Arduino Lilypad
- ◊ ATMega32

Simple Workflow



THANK YOU