

BLUETOOTH ACCELEROMETER STREAMER

Gina Sprint

MIS 426 Project

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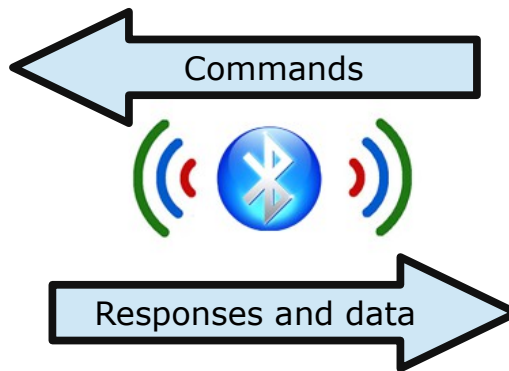
Commands/responses

- Communication between phone and sensor
- Example: Toggle LED command
 - Sends command code "6" to the sensor
 - Sensor responds with code "255"

Client



Server



Data

- Sent from sensor to phone
- 1 data packet sent per second (1Hz)
- Example: Bytes to values
 - "0 0 0 0 253 0 0 64 224"

Type	Timestamp		Accel X Value		Accel Y Value		Accel Z Value	
0	0	0	0	253	0	0	64	22
data	0.0		1.72		0.0		11.61	

Accelerometer Sensor

(<http://www.shimmersensing.com/>)

- Measures acceleration in three axis
- Acceleration due to gravity (~ 9.8 m/s/s)
- Variety of applications:
 - Tracking physical activity
 - Example: Pedometers
 - Fall detection systems
 - Motion capture
 - 3D orientation
 - Navigation systems

