RememberAll

Team 3
Boris, Jason, Kartik, Mike
Batteries → Device → Bluetooth → Processor → Laptop

LEDs → Laptop Bluetooth

Device:
- Sight
- Touch
- Tactile Sensor
- Processor
- Bluetooth Module
- Event Cache

Internet → Laptop software → Laptop
Test Cases

• Incorrect data transmission
  – This is important to ensure that our device does not corrupt the user’s schedule with garbage values
  – To test this case we will send wrong or incorrectly formatted data over Bluetooth and check that the device’s schedule is not corrupted.

• Dropped connection
  – It is important to make sure the device acts reasonably when the Bluetooth connection is dropped partway through transmission
  – We will test this by removing the computer’s Bluetooth dongle during a transmission

• Power up/down
  – It is important to make sure the device acts reasonably when the power is lost and then restored
  – This can be tested by disconnecting the power and then reconnecting it while the device is running.
Metrics

• Power consumption
  – This is important to ensure our device lasts long enough on a charge to be useful
  – We will monitor how much power is consumed over periods of time.
  – We may want to compare power consumption to how often we use Bluetooth to synchronize

• Bluetooth throughput vs distance between computer and device
  – This is important to determine how much time it will take our device to synchronize with a computer
  – To test this we will time the duration of synchronization at different distances
Initial Results