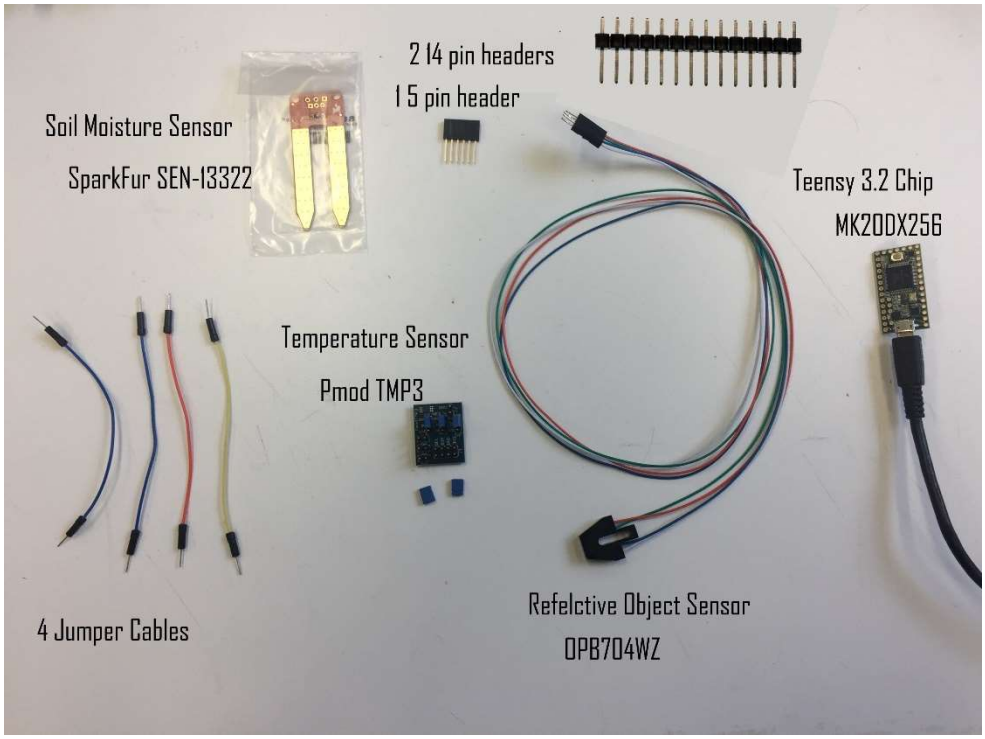
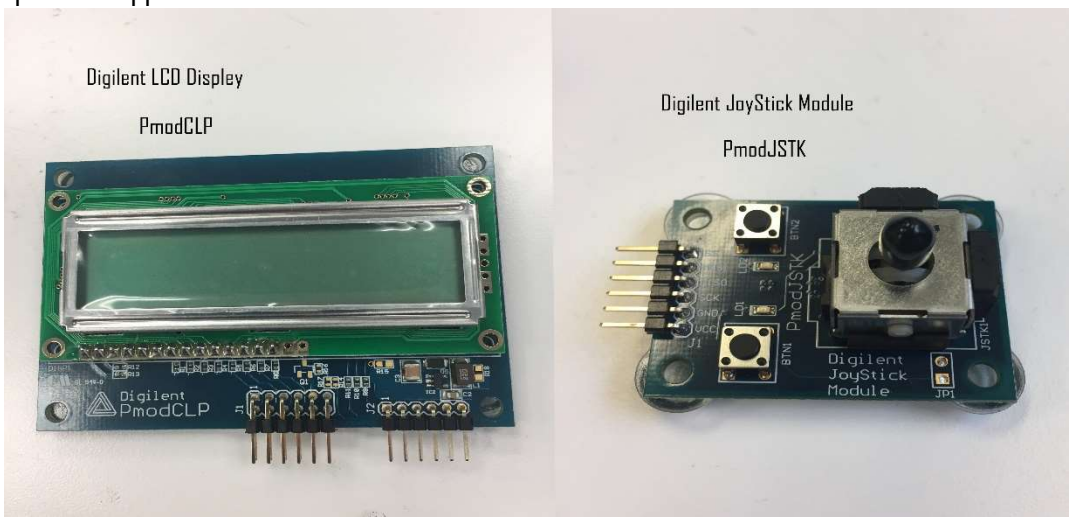
CyberThumb

2017 Hardware Hackathon
Instructable for CyberThumb
Team: Green Machine
Members: Matthew McGowan, Connor Wytko, James Chen, Jessica McGowan

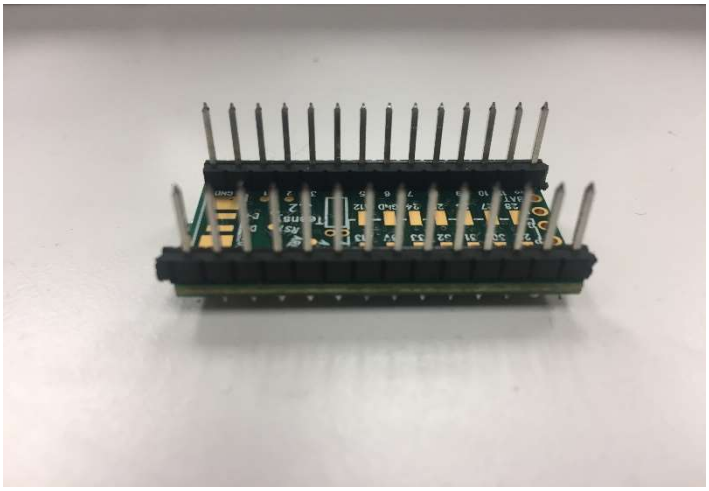
Step 1: Gather Supplies



Optional Supplies



Step 2: Solder 2 14 pin headers to Teensy Chip



Step 3: Create database of common houseplant care

Genus	Species	Light	Temp	Humidity	Water	Soil
Abutilon	hybridum	1	1	2	2	1
Acalypha	hispida	1	2	2	2	1
Achimenes	hybrids	2	2	2	1	7
Acorus	calamus	2,3	2	2	1	2
Acorus	gramineus	2,3	2	2	1	2
Adiantum	raddianum	2,3	2	1	1	6
Adromischus	cristatus	2,3	2	2	2	5
Adromischus	festivus	2,3	2	2	2	5
Aechmea	fasciata	2,3	2	2	2	3
Aechmea	miniata	2,3	2	2	2	3
Aechmea	'Royal	2,3	2	2	1	3
Aeschynanthus	marmoratus	2	2	2	1	7
Aeschynanthus	pulcher	2	2	2	1	7
Agave	Americana	1	2	3	3	5
Agave	victoriae-reginae	1	2	2	2	5
Aglaonema	modestum	3,4	2	2	2	2
Aglaonema	'Silver	3,4	2	2	2	2
Aglaonema	'Silver	3,4	2	2	2	2
Allamanda	cathartica	1	2	1,2	2	1
Alloplectus	nummularia	2,3	2	1,2	1	7
Aloe	aborescens	1	3	3	3	5
Aloe	barbadensis	1	3	3	3	5
Aloe	brevifolia	1	3	3	3	5
Ananas	comosus	1,2	2	2	1	3
Anthurium	clarinervium	2,3	2	1,2	1	2
Anthurium	hookeri	2,3	2	1,2	1	2
Anthurium	scherzeranum	2,3	2	1,2	1	6
Aphelandra	squarrosa	2	2	2	1	2

Step 4: Program various sensors after attaching to Teensy chip (using Arduino IDE)

CyberThumb Github Page

Step 5: Attach LED lights to each sensor and program to light up based on sensor output and houseplant data