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# Team Apple Proposal Presentation



# Michael Leong - Hardware

Junior in Electrical Engineering - Electrophysics

396 Project

Interested in Renewable Energy and learning new hardware skills



# Tyrin-Neal Besas - Hardware

Junior in Electrical Engineering - Electrophysics

Interested in hardware design, renewable energy, and Arduino



# Tryston Fagarang - Hardware

Junior in Electrical Engineering - Electrophysics

Interested in hardware design, renewable energy, and programming



# Other Members

Demosthenes Villa

Junior in Electrical Engineering - Electrophysics

Brianne Yamada

Mechanical Engineering - Housing Specialist



# Motivation for Weatherbox

Collect meteorological data on rooftops across UHM

Help find optimal places for renewable energy source installments

Make Hawai'i a more sustainable place to live in



# Overview of Apple

First stable platform of the weatherbox lineage

Use breakout sensor boards

Collect weather sensor data and transmit it to a database



# Project Goals

Find a better and more efficient housing design for the weatherbox

Find other ways to mount the weatherbox on the roof

Build 4-5 fully functional weatherboxes by Spring Break





# Approach to completing these goals

Complete and send PCB to be printed

Create a housing design to be 3D printed to fit our PCB

Create different mounting techniques and tools

Collaborate and talk with other weatherbox teams

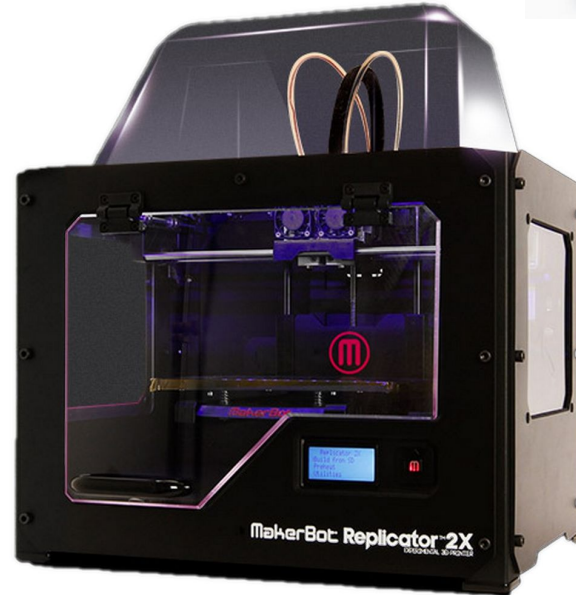
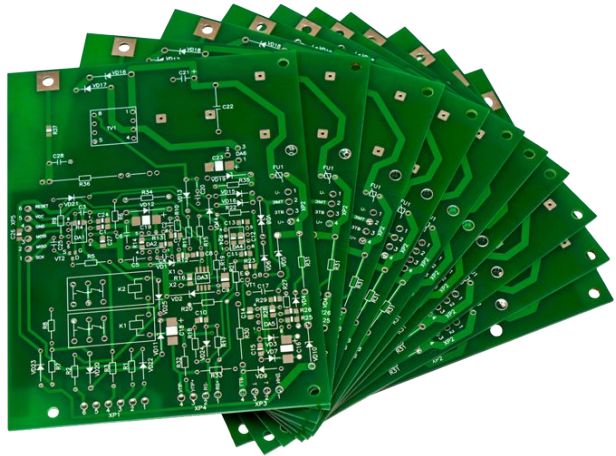


# Potential Problems

Not enough parts because components not working

Not getting the PCB in on time

Not able to 3D print housing on time



# Learning Expectations

Learn hardware design tools such as using Eagle

How weather conditions affect power saving and consumption



# Schedule



Week	1	2	3	4	5	6	7	8	Spring Break	9	10	11	12	13	14	15	
Date	1/25/2016	2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016	4/18/2016	4/25/2016	5/2/2016	5/9/2016	
<b>Presentations</b>									Deploy Weather-box es								
Proposal																	
PDR																	
CDR																	
Final																	
<b>Apple</b>																	
Design Layout																	
Housing																	
Board Fabrication																	
Board Testing/Debugging																	
Duplicate/Clone/Copy																	
<b>Reports</b>																	
Final Report																	

# Progress

Ordered more parts

Completed schematic with updated sensors and charging chip

Working on board layout

Working on 3D housing design

Researching new mounting designs



# Questions

