Team Bumblebee

PROPOSAL PRESENTATION

Spring 2017
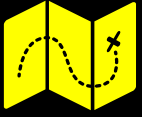
Team Bumblebee Introductions

Isaiah Aribal
- ⊙ Co-lead
- ⊙ Senior-396

Kayla Amano
- ⊙ Co-lead
- ⊙ Junior-396

Presentation Overview

- ⊙ Motivation/Approach
- ⊙ Project Goals
- ⊙ Gantt Chart
- ⊙ Predicted Problems
- ⊙ Team Progress

Motivation/ Approach

The Bumblebee Weatherbox is the second generation communications module designed to relay meteorological data collected by the other weatherboxes. Its purpose is to increase the effective range of the weatherboxes.
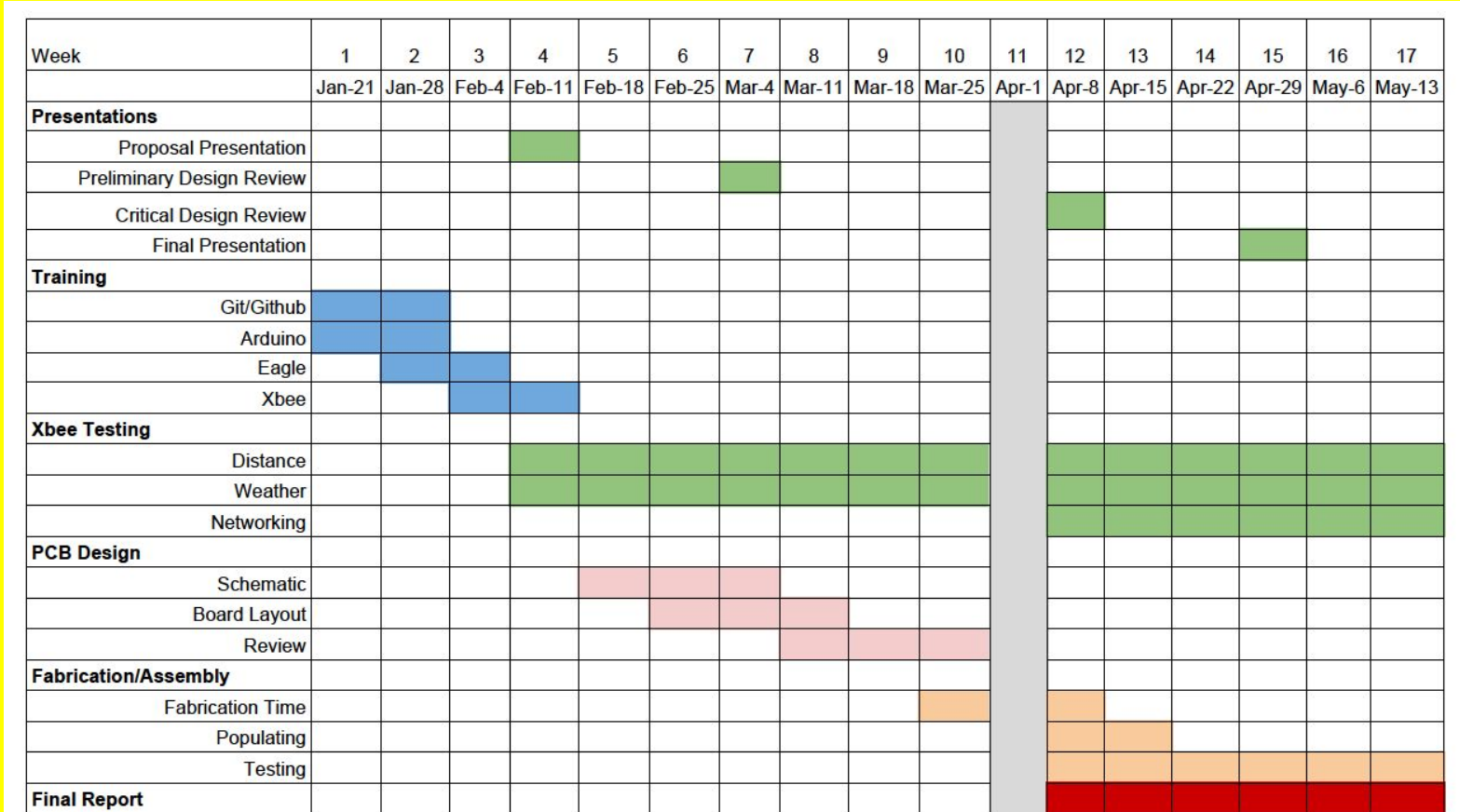
Project Goals

- ⊙ Reimagine Ant to be compatible with Cranberry
- ⊙ Design and fabricate a circuit board
- ⊙ Do Xbee field tests
- ⊙ Connect different xbees from different boxes in the network

Gantt Chart

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Jan-21	Jan-28	Feb-4	Feb-11	Feb-18	Feb-25	Mar-4	Mar-11	Mar-18	Mar-25	Apr-1	Apr-8	Apr-15	Apr-22	Apr-29	May-6	May-13
Presentations																	
Proposal Presentation				■													
Preliminary Design Review							■										
Critical Design Review												■					
Final Presentation															■		
Training																	
Git/Github	■	■															
Arduino	■	■															
Eagle		■	■														
Xbee			■	■													
Xbee Testing																	
Distance				■	■	■	■	■	■	■		■	■	■	■	■	■
Weather				■	■	■	■	■	■	■		■	■	■	■	■	■
Networking												■	■	■	■	■	■
PCB Design																	
Schematic					■	■	■										
Board Layout						■	■	■									
Review								■	■	■							
Fabrication/Assembly																	
Fabrication Time										■		■					
Populating												■	■				
Testing												■	■	■	■	■	■
Final Report												■	■	■	■	■	■

Predicted Problems

⊙ Time Management
⊙ Learning Curve
⊙ Connecting everything on the network

Learning Expectations

- Work well as a group
- Become proficient with EAGLE and other softwares
- Get a good understanding of connecting Xbees in a network

Team Progress

⊙ Completed tutorials
- Github
- Arduino
- Eagle

QUESTIONS?