Milestones

Table of Contents

Notes:

Reviewed peer reviews/feedback on November 16, 2024

Hardware milestones:

- Week 6:
  - [x] ~~PCB (Nov 4: 4pm)~~
    - [x] ~~Finalize schematic (Nov 3: EOD)~~
    - [x] ~~Place components on PCB (Nov 3: EOD)~~
    - [x] ~~Get PCB & Schematic signed off (Nov 4: 6pm)~~
    - [x] ~~Peer reviews of PCB (Nov 4: 5pm)~~
      - [x] ~~Two reviews of other teams~~
      - [x] ~~One review of our schem./PCB~~
    - [x] ~~Verify Final Parts list (Nov 4)~~
    - [x] ~~TA Evaluation form (Nov 4: 6pm)~~
    - [x] ~~Get our parts (TBD week 6?)~~
    - [x] ~~Assemble breadboard (TBD Week 6/7)~~
- Week 7:
  - [x] ~~Receive parts~~
    - [x] ~~Speakers~~
    - [x] ~~Buttons~~
  - [x] ~~Order any last parts (Nov. 13 Wed)~~
    - [x] ~~Remaining LCDs (4x) (+3x)~~
    - [x] ~~Spare Capacitors?~~
    - [x] ~~Correct Buttons to match footprint?~~
- Week 8:
  - [ ] Receive printed PCB (TBD)?
  - [ ] Receive the rest of parts
    - [ ] Capacitors
    - [ ] Resistors
    - [ ] 3x LCD
- Week 9:
  - [ ] Get PCB ??? (TBD)
    - [ ] Attach our parts to PCB(TBD)
- Week 10:

Firmware milestones:

- Week 7:
  - [ ] LCD - Giselle & Dustin & Melissa
    - [ ] R.T.F.M.
    - [ ] LVGL documentation (documentation for LCD)
      - [x] ~~Assign sections(Nov 10)~~
      - [ ] Giselle's Sections: (Before Nov 17 meeting)
        - [x] ~~Introduction~~
        - [ ] LVGL Basics
          - [ ] Annotate the Button C code in the “Basic Examples” Section
        - [ ] Driver Doc
        - [ ] Widgets
        - [ ] Base Widgets
          - [x] ~~Events~~
          - [x] ~~Layouts~~
          - [x] ~~Scrolling~~
        - [ ] Main Components (read last)
          - [ ] Display (lv_display)
            - Annotate lv_port_disp_template
          - [ ] Input Device (lv_indev)
          - [ ] File System (lv_fs_drv)
      - [ ] Melissa Sections: (Before Nov 17 meeting)
        - [x] ~~Introduction~~
        - [x] ~~LVGL Basics~~
          - [ ] Annotate the Hello World C code in the “Basic Examples” Section
        - [x] ~~Driver Doc~~
        - [ ] Widgets
        - [ ] Base Widgets
          - [ ] Positions
          - [ ] Layers
          - [ ] Style
        - [ ] Main Components (read last)
          - [ ] Display (lv_display)
            - Annotate lv_port_disp_template

        - [ ] Input Device (lv_indev)
    - [ ] Dustin Sections:
        - [x] ~~Introduction~~
        - [x] ~~LVGL Basics~~
        - [x] ~~Driver Doc~~
        - [ ] Main Components
            - [x] ~~Mostly done reading the key parts~~
            - [ ] File System (lv_fs_drv)
        - [ ] Add LVGL to Your Project
            - [ ] Left off at https://docs.lvgl.io/master/intro/add-lvgl-to-your-project/connecting_lvgl.html#connecting-lvgl-to-your-hardware
- [ ] Buttons
    - [x] ~~Make breadboard test assembly~~
- Week 8:
    - [ ] SD Card -Dustin & Giselle & Melissa
        - [x] ~~Establish the setup for the pins~~
        - [ ] Using pin 12 through 15 worked for the SPI/SDCard (ESP866 pins)
        - [ ] How to store data on SD card
        - [ ] Choose the file system organization
    - [ ] Amp/Speaker - Melissa & Dustin
        - [x] ~~Output sound file from SD card (Nov 18 EOD)~~
        - [ ] Make event driven player
            - [ ] When event occurs play sound
                - [ ] void play_sound(string filename){}
                - [ ] Make sure sound playback is asynchronous
    - [ ] Buttons
        - [ ] Write code for all (7) buttons Giselle
    - [ ] LVGL
        - [ ] Set up drivers
        - [ ] Configure LVGL
        - [ ] Initialize and run LVGL
        - [ ] Set up file system using lvgl
        - [ ] Look for useful examples/demos
- Week 9:
    - [ ] iOS App - Dustin

    - [ ] Create a ***very simple*** UI for onboarding.
    - [ ] Figure out how to communicate with the Arduino Bluetooth library.
- Week 10:

  Finishing on the road to being DONE

CAD milestones:

- Week 7:
  - ☑ ~~Brainstorm ideas of what we want our design to look like~~
- **WE CHOSE BMO**
- Week 8:
  - ☐ Take measurements of the components -Dustin (NOV 18)
  - ☐ CAD design of our enclosure (Nov 20) - Melissa
  - ☐ Print our enclosure (Nov 20)
- Week 9:
  - ☐ Assemble our device with the parts of our hardware(TBD)
  - ☐ Revise CAD Design, if needed (Nov 25)
- Week 10:

Website milestones:

- Week 6:
  - [x] ~~Turn in outline of website with problem definition, proposed idea, testable hypothesis, and milestones (Nov. 4)~~
- Week 7:
- Week 8:
  - [ ] Include the (Sunday, Nov 17)
    - [x] ~~general problem/problem description,~~
    - [x] ~~one type of flow chart or diagram-like visual aid~~
    - [ ] and team section (like a meet the team page)
      - [ ] Photoshoot (Nov 18)
        - During Class First thing 4pm
      - [ ] Name
        - Giselle Mendoza g1mendoza@ucsde.edu (pic sent)
        - Bio: I am a first-generation student pursuing a degree in Computer Engineering at the University of California, San Diego. I'm excited to continue growing and deepening my understanding of this field that I love.
        - Dustin Miller dum001@ucsd.edu (Pic sent)
        - Bio:
        - Melissa De La Cruz m7delacruz@ucsd.edu (pic chosen)
        - Bio:
      - [ ] Email:
      - [ ] Picture:
  - [ ] Add pictures and details of our process (Wed Nov 20)
    - [ ] Sketch of dimensions (by Melissa, located on github)
    - [ ] Initial CAD of device idea (from week ¾)
    - [ ] List questions and answers
    - [ ] Etc.
- Week 9:
- Week 10:
  - [ ] Final web 😆

- [ ] Make *aesthetic*

Poster milestones:

- Week 6:
  - ☑ ~~Template layout (google slide general boxed layout) (Nov. 4)~~
- Week 7:
- Week 8:
  - ☐ Problem and additional content (Nov. 17)
    - MCAD, ECAD, Sketches, Schematic
    - Prototype
      - ☑ ~~Diagrams and/or flow chart~~
      - ☑ ~~high quality annotated photograph~~
      - ☑ ~~technical detail~~
- Week 9:
  - ☐ Review Poster Requirements and update Milestones (Nov 23)
- Week 10:
  - ☐ Test Results (Dec 1)
    - connected to hypothesis,
    - preliminary results are okay for example with
    - high quality plot(s)
  - ☐ Final poster 😆

Video milestones:

- Week 6:
  - ☑ ~~Brainstormed ideas, identify (free) editing software (Nov. 4)~~
- Week 7:
  - ☑ ~~link to Karchers feedback~~
- Week 8:
  - ☑ ~~Create a storyboard/ outline of you video (Nov. 17)~~
    - ☑ ~~Specify the time stamps of vid~~
    - ☑ ~~Simply our specific routine to be shown~~
    - ☑ ~~More detail to vid breakdown on poster/website~~
- Week 9:
- Week 10:
  - ☐ Video demo (Dec. 3 tue)

Tutorial Milestones:

- Week 7: (Nov 13 EOD)
  - ☑ ~~Pick Topic: what we want to make a tutorial around~~
    - Speaker and SD Card (Amplifier, Speaker, SD card, SD Card Adapter
  - ☑ ~~Go to template~~
  - ☑ ~~Fork the repository~~
  - ☑ ~~Pull request~~
- Week 8:
  - ☑ ~~Build breadboard circuit of the speaker and SD card(Nov 16)~~
  - ☐ Find code for SD card set up(Nov 18)
  - ☐ Start editing(Nov 18)
  - ☐ Turn in on wednesday! (Nov 20th)

Testable Hypothesis Milestones:

- Week 7:
  - ☑ ~~Ideate possible testable hypotheses (Nov 13 During Class)~~
- Week 8:
  - ☐ Meet on Sunday (Nov 17) and create testable measurements outline
    - During week 8 we will keep trak manually of how on task/rountine we are
    - During week 9 or 10 we will remeasure with the device
- Week 9:
  - ☐
- Week 10:
  - ☐

Demo Day Mylestones: (*spelling not included)

- Week 7:
  - ☑ ~~Ideate possible demo idea (Nov 13 During Class)~~
- Week 8:
- Week 9:
  - ☐ Routine shorter
    - Reminders of tasks within class time
    - Show us marking it complete
    - This shows student keeping track of routine
    -