

## WEEKLY REPORT and MEETING AGENDA

Report #: 4  
Date: 10/26

Project Name: MIKey  
Prepared by: MIKey Team

### **Agenda for the meeting**

1. Accomplishments since last meeting, including:  
New keycap model/print/test  
Raspberry Pi keyboard output over USB  
Prototype circuitry improvements  
Generating interrupts from key scanner  
Sending MENA scheme to R-Pi  
PCB schematic  
3-to-8 decoder conversion to 4-to-16 decoder  
IRB paperwork and submission
2. Plans for sprint 3
3. Non-technical updates/team sync
4. Issues/Roadblocks/Queries

### **Overall accomplishments since last meeting**

1. Modeled New Keycap
2. Used pi4 to write keys to laptop
3. Used software autocomplete to write words to laptop
4. Breadboard test of key matrix with Pico

### **Tasks completed by each team member since last meeting**

Task description	Assigned to	Complete?
Keycap new model / printing / testing	Andrew	Yes
Raspberry Pi keyboard output over USB	Jackson	Yes
Fixed bugs in prototype circuitry	Max	Yes
Generate interrupt from key scanner	Max	Yes
Send MENA code to Raspberry Pi	Max	Almost
Schematic design of PCB	Brittany	Almost
3-to-8 decoder converted to 4-to-16 decoder	Brittany	In Testing
IRB Paperwork	Brittany	Yes

### **Plans for next period**

1. Trigger interrupts for Pi4 from Pico
2. Design and order main PCB
3. Implement the LCDs

### **Task assignment per team member (to be completed before the next meeting)**

Task description	Assigned to
PCB Footprint for switches	Andrew
Design main PCB	Andrew, Brittany
LCD GPIO Output	Jackson, Abhishek
Send MENA code to Raspberry Pi	Jackson, Max
Processing of MENA code	Jackson, Max
Test footprint on all PCB components	Andrew, Brittany
Order PCB	Andrew, Brittany

### **Project management status**

1. We have begun team workdays outside of class to give us more chances to pair program and debug hardware issues together.
2. Floating in between sub-teams has worked well for our team.
3. Waiting on IRB approval to have prototype testing by the end of the semester, coordinating other options.

### **Minutes from previous meeting**

#### 10/12 Meeting Notes

1. Individual Accomplishments:
  - a. Brittany – GPIO encoding/decoding research
  - b. Max & Jackson – software keystroke encoding/scanning
  - c. Andrew – keycap printing (support and infill redesign, also some issues with key stem)
2. CDR:
  - a. Significant software demonstration (auto-complete)
  - b. Keycap and switch demonstration
  - c. Would be good to demo any working keys
3. Plans for remainder of Sprint 2:

- a. Reorganize Jira tasks for hardware setbacks
- b. Get started on USB encoding, GPIO decoding
- c. Prep for CDR