

WEEKLY REPORT and MEETING AGENDA

Report #: 3
Date: 10/12

Project Name: MIKey
Prepared by: MIKey Team

Agenda for the meeting

1. Individual accomplishments since last meeting
2. Part arrival and subsequent hardware plans
3. Non-technical updates/team sync (Critical Design Review report + presentation)
4. Overall plans for remainder of sprint 2
5. Issues/Roadblocks/Challenges

Overall accomplishments since last meeting

1. Ordered items have arrived. We have duplicates since both Abhishek's and Andrew's orders were delivered
2. Implementation of keystroke encoding
3. Keycap print
4. Research initiatives + findings

Tasks completed by each team member since last meeting

Task description	Assigned to	Complete?
Keystroke Encoding Implementation	Jackson	Yes
Keystroke Scanning	Max	Almost
Print Keycap	Andrew	Yes
Research Key Actuation	Andrew	Yes
Research GPIO decoding logic	Brittany	Yes

Plans for next period

1. Get started on USB encoding
2. Get started on GPIO decoding logic

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

Task description	Assigned to
USB Encoding	Brittany, Connie, and Jackson
GPIO Decoding	Brittany, Connie, and Jackson, Max
Testing Keycap Model	Andrew,

	Abhishek
Sort out purchased duplicates	Andrew, Abhishek

Project management status

1. All members have contributed to meetings and project
2. All members have contributed in technical and non-technical forms
3. Jira board remains up-to-date with GitHub integration
4. Team is continuing through sprint 2

Minutes from previous meeting

10/05 Weekly Meeting Minutes

Agenda Overview

Discussion of Software:

- needed auto-complete algorithm discussion after last meeting
- Jackson was able to implement the new algorithm, which is optimal for priority
- execution time is fast, but not constant time
- storing of keystrokes and encoding scheme
- creation of custom encoding method, MENA, and skeleton code for GPIO to MENA encoding transition

Discussion of Hardware:

- Andrew has modeled the keycap prototype for a larger-sized keycap
- model is hopefully consistent with switch stem
- display of finalized keyboard layout
- unfortunate delivery issues, will need to make some repurchases

Communication Update:

- Cindy Conte has responded to our email, and has shared our email with the Conte Foundation for potential participants
- Brittany also has a connection with a potential Parkinson's patient through her grandmother
- faculty member has experience with machine learning: Shuiwang G

Issues/Roadblocks:

- major hardware setbacks
- can workaround the setbacks by testing GPIO with a normal RPi that our members already own

Discussion of PICO:

- do we have full programmable control of the USB? Yes
- polling and interrupt workaround for storage (predictive algorithm run on regular RPi, everything else run on PICO)

Closing Thoughts:

- plans for next sprint (researching USB protocol, etc.)
- CDR due Oct 19th
- cancel current order, place new one
- good progress