

WEEKLY REPORT and MEETING AGENDA

Report #: 2
Date: 10/5

Project Name: MIKey
Prepared by: MIKey Team

Agenda for the meeting

1. Accomplishments since last meeting, including:
 - a. Discussion of various auto-complete candidate algorithms and the final decision on which algorithm to use
 - b. Overview of keycap design and modeling
 - c. Presentation of finalized keyboard layout
 - d. Explanation of custom encoding protocol, MENA
2. Non-technical updates/team sync
3. Plans for sprint 2
4. Issues/Roadblocks/Queries

Overall accomplishments since last meeting

1. Finished auto-complete candidate algorithm
2. Modeled keycap
3. Finalized keyboard layout
4. Developed custom encoding protocol

Tasks completed by each team member since last meeting

Task description	Assigned to	Complete?
getCandidates() Algorithm Design	Brittany, Connie, Jackson, and Max	Yes
getCandidates() Algorithm Implementation	Jackson	Yes
getCandidates() Informal Testing	Jackson	Yes
Keystroke Encoding Design	Brittany, Connie, Jackson, and Max	Yes
Keystroke Encoding Implementation	Jackson	Almost
Keycap Sizing Research	Andrew	Yes
Keycap Modeling 1.0	Andrew	Yes
Keyboard layout	Andrew	Yes

Plans for next period

1. Finish keystroke encoding implementation
2. Start skeleton code for driver program
3. Research USB protocol

4. Test the physical keys using the model and switches

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

Task description	Assigned to
Keystroke Encoding Implementation	Brittany, Connie, and Jackson
Driver Program Skeleton Code	Brittany, Connie, and Jackson
Research USB protocol	Brittany, Connie, Jackson, Abhishek
Implement Miniature Key Scanning Circuit	Max, Abhishek
Test Miniature Key Scanning Circuit	Max, Abhishek
Testing Keycap Model	Andrew, Abhishek
Research Key actuation	Andrew
Print Keycap	Andrew

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 wrapping up sprint 1, moving on to sprint 2

Minutes from previous meeting

1. Be more specific on agenda points, with big issues on top priority
2. Halfway thru sprint 1, some dependencies
3. Software:
 - a. Skeleton code for trie data structure & autocomplete (node class, constant time fetch for node)
 - b. Plans for priority queue on top 3 results
 - c. Dictionary with most used words
 - d. Trie validation? software tests
 - e. On track overall
4. Hardware:
 - a. More limited due to ordering of product parts
 - b. We've ordered key switches and pico
 - c. Plans to model keycap prototypes this week

- d. Still looking to finalize circuit design
 - e. 3d printing involved? Yes
 - f. Don't worry too much about PCB, but it will still be beneficial
- 5. Communications:
 - a. We'll be contacting Cindy Conte from the Conte Foundation to ask if she has any contacts w Parkinson's
- 6. Roadblocks:
 - a. Small roadblock on trie constructor
 - b. Off-chip flash constraint bc pico only has 2MB of flash
- 7. Storage of prototype in various building cabinets/lockers
- 8. Overall, everything looks good