
Keyboard Posture Optimizer

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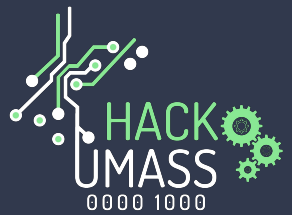
Representing



There are a lot of platforms that teach you how to type fast.

However, many of them don’t check how you’re typing.

And with a lack of feedback on hand positions, you may fall back to old habits even as you type faster.


Keypo

# How did we get to this idea?

# What makes up Keypo?

- Leap Motion
- Processing
- Java
- Physical Material
  - Paper
  - Plastic Bag

# The process

## Leap Motion

Hand/finger position data is sent to the program via Leap Motion for Processing library

## Acceleration Tracking

Tracking differences between position vectors and velocity vectors at different times using sliding window approach.

## Pinpointing Finger

Determine finger with largest acceleration after making adjustments for noise.

## Mapping to touch typing

Once it's decided which finger is in motion, the current character and characters the finger should type are compared.

## Feedback to user

As the user types in letters, they can see which letters they take the longest to type, and positive feedback for correct typing.

# Future Work

- More accurate finger tracking
  - Track specific key positions.
- Finger position
- More action support (shift+key, multiple keys pressed at once, etc.)
- Support for progressive difficulty/training.

# Thank you for listening!