Project Veotunn

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What is it?

Our current keyboards are based on a compromise between antiquated technology and industry comfort-zones. This compromise was made at the expense of innovation and accessibility for less-able users.

Project Veotunn is a step towards creating a new way of typing that is ergonomically-friendly and accessible to more users while leveraging advancements in typing technology.

Features

- A simple ring based layout, arranging letters by their use
- Using language analysis, Veotunn arranges letters in pairs most commonly found in the language
- Emoji Support
- Autocomplete suggestions learn from your last 500 words typed

Planning - User Stories

“As a limited-range user, I want to reduce button presses to reduce muscle fatigue.”

“As a one-handed user, I want to be able to reach all buttons without compromising my grip on the device.”

“As a traditional keyboard user, I want buttons I commonly use accessible so I can type as comfortably as possible.”

Planning - Database

Minimal Databases:

- Database of English Words: Used to maintain letter pairings and possible suggestions
- Database of User Words: Used to increase accuracy of the user's suggested words and account for words not in the Database

Technology Stack

- Java/Kotlin
- Currently no framework in the java phase
- Offline: No database usage
- Uses Abstract Window Toolkit and Swing

Demo

What I Learned

- Learned how to create a custom GUI
- Learned iterative analysis and template generation
- Having to create a dynamic GUI vs hard-coding the interface
- Having to apply coding towards statistical analysis

What’s Next

- Introducing Swype technology to reduce time between presses
- Introducing new languages
- Multiple Rings for increased typing speed.