PROMETHEUS

Portfolio Report 2018 EIC

MAN GOT THE GIFT OF FIRE

YOU GET THE GIFT OF PRODUCTIVITY

- Jean Turban 2020 -

- Clara Walton 2020 -

- Shadman Khan 2020 -

- George Orellana 2020 -

- Vincent Imbimbo 2019 -

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INTRODUCTION

The idea of the Prometheus Keyboard first came to me freshman year spring semester when I was in the market for a new keyboard. After saving up money I began to search for a new keyboard that would be worth the money I saved. After scrolling through page and page of overpriced keyboards I quickly came to the realization that there was no point in upgrading my keyboard because nothing had changed from the one I already had. Disappointed I ended my search but then I had the idea of what I made my own keyboard with cool features.

After talking with my friends about it, things began to quickly pick up steam. One thing led to another and before we knew it our idea had blossomed into a concept with some research into it. Someone recommended we apply to Rev for the summer of 2017. We were able to participate in the Rev Hardware Accelerator for the summer and as a result brought our napkin idea to fully developed concept with market research behind as well as thoughtful design.

We continued working through the semester running into obstacles with 3D printing our prototype. However our software team picked up the slack and we will soon have our first software release to be able to turn any keyboard into the Prometheus keyboard. We plan to implement our hardware concept during the summer and release our product in the Fall of 2018.

MARKET RESEARCH

As part of the Rev Hardware Accelerator we were taught how to conduct un-bias market research to find conclusive evidence about whether or not there was a demand or need for our product. Here are the results

OVER **30 INTERVIEWS**

WITH **10 FIRMS**

IN **3 INDUSTRIES**

We found over the course of our customer interviews that many workers in the architecture and engineering industry have trouble switching between different CADing programs because they layouts are different, ie: tools in different places and don't take full advantage of hotkeys because "they take too long to learn" and change for each program.

In addition we discovered that many of our customers do not use our competitors products because there large size. Our users value desk space and do not want to sacrifice any for an external peripheral.

Some users also talked about certain features in CADing that we're annoying or difficult to accomplish such as rotating pieces to exact degrees.

PRODUCT DESIGN

GEN 1

Our current first model is the one to the left. It includes what we believe to be the minimum feature set needed to test our products viability. This model includes our software backend which allows for the entire keyboard to be customized. Read the features below to find out more.

Each key has an OLED keycap that reflects what current action is mapped to that key

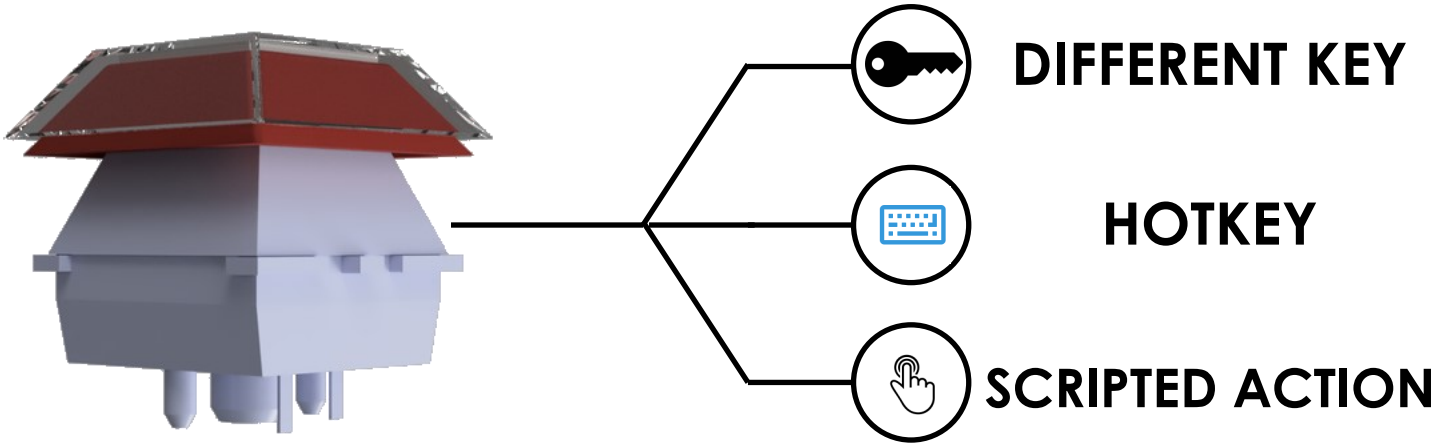
Each key is also remappable to a variety of different actions

The keyboard is entirely mechanical fitted with customizable mechanical keys

PRODUCT DESIGN

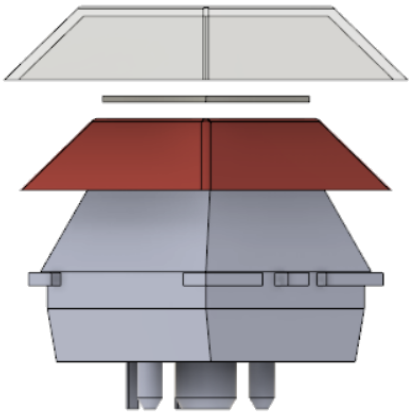
REMAPING KEYS

Each key on the keyboard can be remapped to a different key, a combination of keys to form a hotkey or a scripted computer action such as opening a browser, raising the volume, lowering brightness etc.



KEY BREAKDOWN

Each key has a built OLED as seen to the right, stacked upon the actual mechanical switch. The custom design of the OLED and screen protectors allows this key cap to be added to many compatible mechanical switches already on the market.



PRODUCT DESIGN

GEN 2

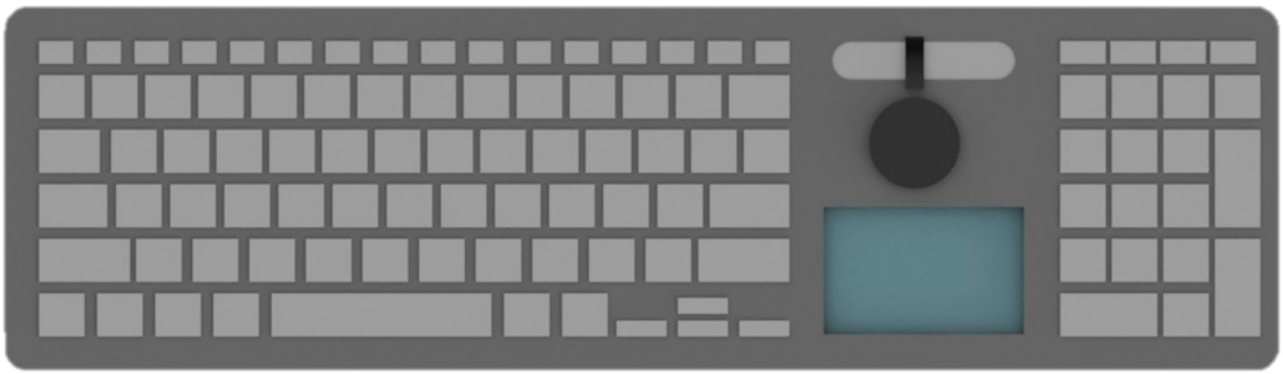
The planned second generation is a extension of our first generation. This keyboard includes the full mechanical top but also a fully functional touch screen bottom. In addition two new styles of buttons are included. Because of prototyping costs this model is currently being re-designed further.

Fully integrated touchscreen that snaps on and off the keyboard

Fully functional and customizable mechanical knob

Fully functional and customizable mechanical slider

PRODUCT DESIGN



COMPETITORS

Because the scope of our product covers so many different industries narrowing the list of direct competitors took a while. However we came to the conclusion that we should focus on competitors targeting the same markets we are, graphic designers and engineers.

With that in mind our most direct competitors are Wacom, Pallete, 3D Connexion and obviously a typical keyboard.

3Dconnexion

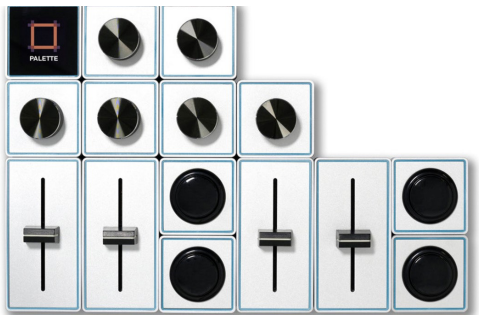
3D Connexions main target market is engineers who CAD daily and frequently. The extra peripheral is meant to be used with a mouse in your right hand and this product in your left. The keys on the product are assigned to frequently used hotkeys in the CADing software and the central knob gives users the ability to perform precise rotation and change view much quicker

COMPETITORS

wacom

The Wacom tablet is designed for artists and graphic designers who want to draw and carry over that attribute into the computer world. The tablet can accurately detect strokes and other pen qualities. While our first model does not include touchscreen features our 2nd model aims to fill this market need. The main drawback of this product is the fact that it is simply a touchpad, basically artists must be constantly staring at the screen to draw

PALETTE



The Pallete gear was made for graphic designers to give them new access to different buttons styles that make room for unique ways of working with design software's. The system is modular so it allows for ultra customizability. The system falls short because its huge size taking up much needed desk space.

TIMELINE

PROMETHEUS FOUNDED
May 2017

Rev Hardware Accelerator
Summer 2017

Fall Semester Development
Fall 2017

Beta Testing
Spring 2018

Preorder Gen 1
Fall 2018

PLTW Pilot Test
Fall 2018

Publicity Campaign
Spring 2019

Gen 2 Full Release
Fall 2019

TEAM BIO

Jean Turban | CEO | Mechanical Engineering 2020

Clara Walton | CFO | Chemical Engineering 2020

Shadman Khan | CTO | Computer Science 2020

TEAM BIO

| George Orellana |
| Hardware Lead |
| Mechanical Engineering 2020 |

| Vincent Imbimbo |
| Software Lead |
| Computer Science 2019 |

Thank you for reading for any questions feel free to email jt665@cornell.edu with any questions