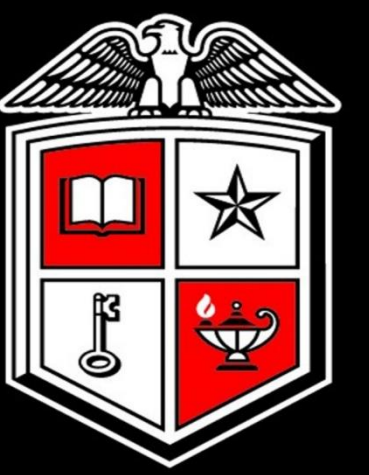


# MultiKey

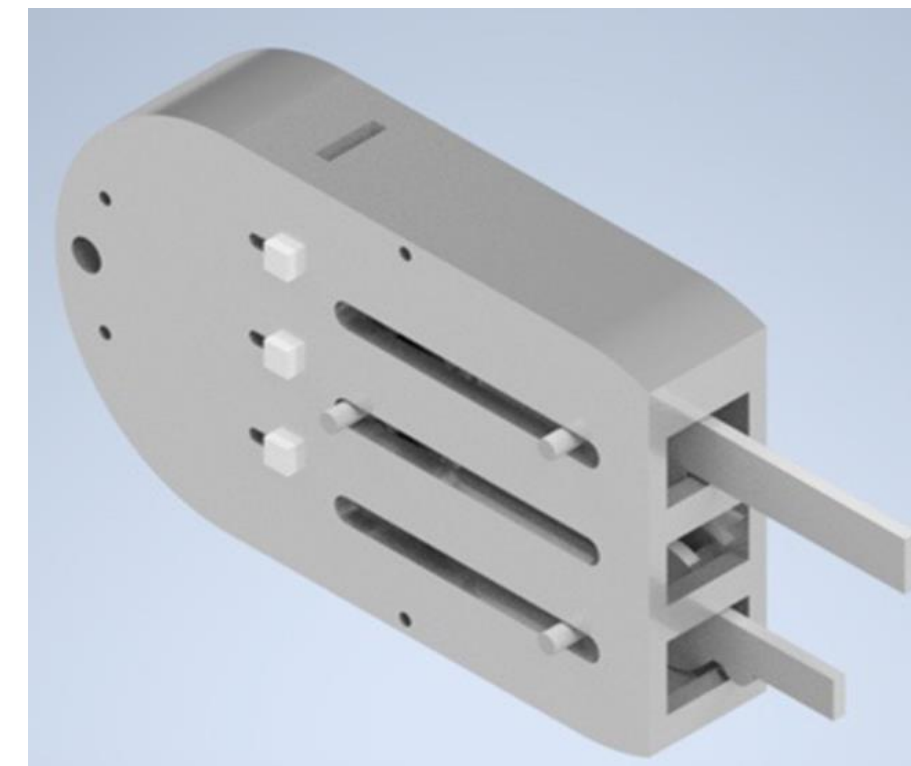
**Team Members: James Fergusson, Ian Funderburg, Meena Garcia, Logan Kay, Jose Leon**



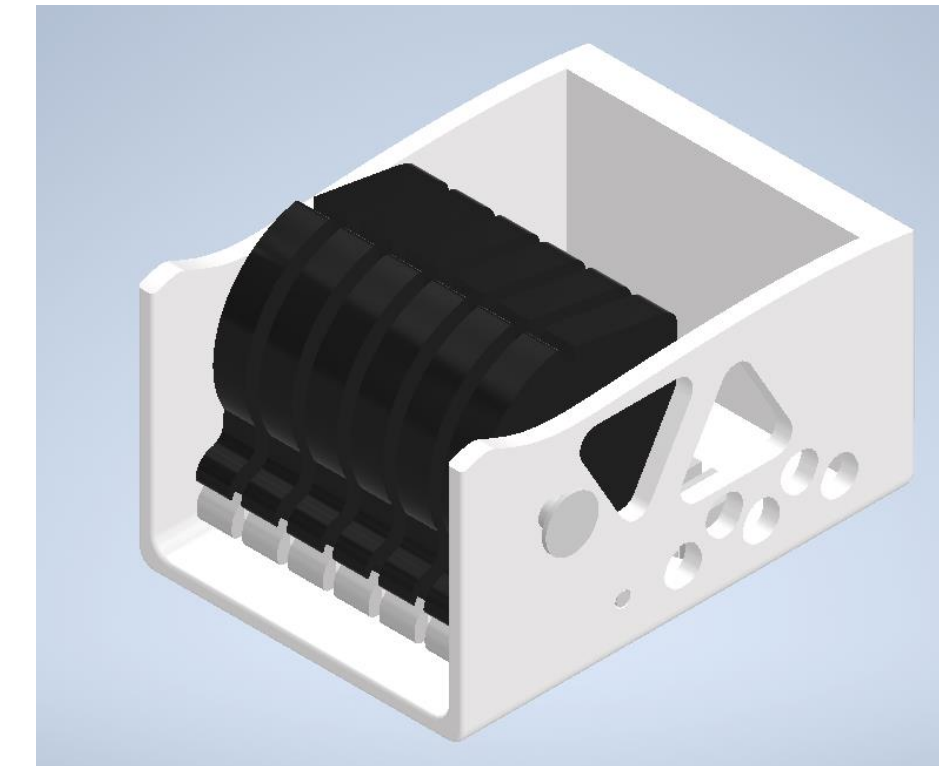
## Introduction:

Many people find themselves with many unused keys or are in a position where they need to manage several keys, or they want something more secure than a normal key ring. In a position where you need to organize many keys or clean up and organize unused keys the Multikey offers a compact and organizable storage solution or if in a position of wanting a more secure option than a normal key ring the Multikey offers a locking mechanism to keep your keys put away unless you want to use them.

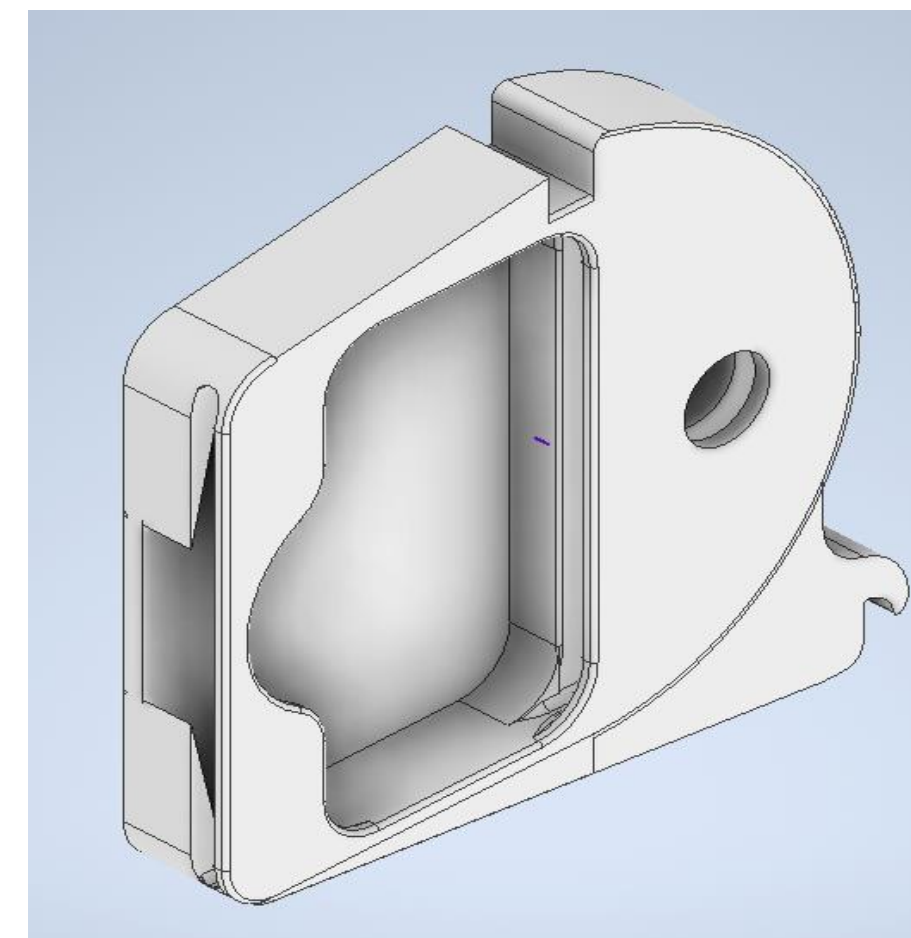
## Design:



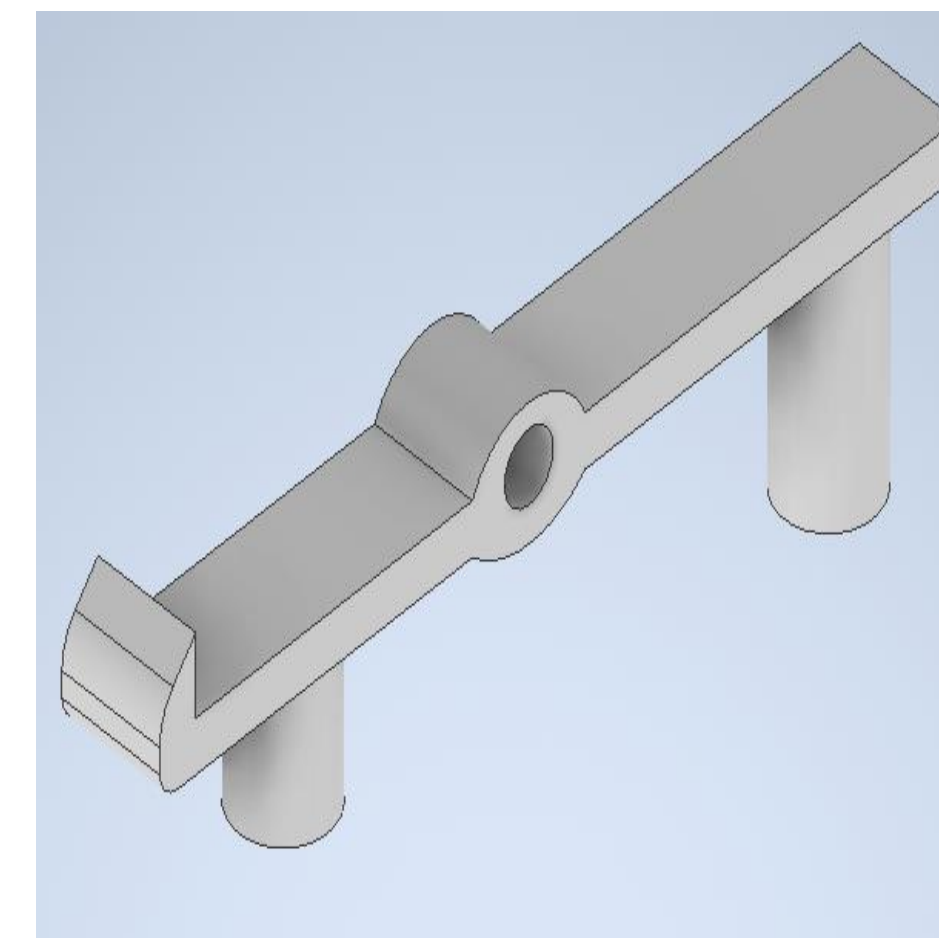
**Prototype**



**Final Design**



**Key Clamp**



**Rocker Bar**

## Potential Future Improvements:

- Flash Drive Clamp
- Flashlight
- RFID Clamp
- Bottle Opener

## Parts List

Part Description	Supplier	Part Number	Quantity	Price in % Per Unit	Total
Springs	The Spring Store	PC030-312-3000-SST-0160-CG-N-IN	15	\$2.80	\$42.00
Aluminum binding barrels and screws 1-1/4"	McMaster-Carr	93121A350	Box of 25	\$0.50	\$12.51
Washers	Amazon	9080595	Box of 100	\$0.04	\$3.99
Eleego standard resin (white)	Amazon	N/A	1 kg	\$23.99	\$23.99
Aluminum C-Channel	Buymetal.com	SKU C632.122.1 2.125T52	1ft	\$12.41	\$12.41
Stainless steel dowel for rocker pin	McMaster-Carr	98380A905	8	\$3.89	\$31.12
Aluminum binding barrels and screws 2-1/2"	McMaster-Carr	93121A370	Box of 25	\$0.75	\$18.69

## Manufacturing:

The Multikey manufacturing was made simple by being mostly 3d printed parts. To assemble the Multikey you need to add Springs to the rocker bars then after putting the dowel halfway through the body insert the rocker bars next close the end of the dowel to secure this part. Next add the clamps put the binding barrel halfway through the body through their designated hole add the clamps so that they hook with the rocker bars then screw in the other side of the binding barrel and the Multikey will be completed.

