

# Assignment 2 & 3 - Fusion

## One-handed guitar game controller



# TinkerCAD



# Bill of Materials

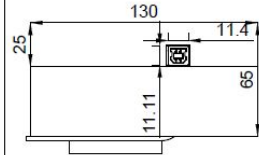
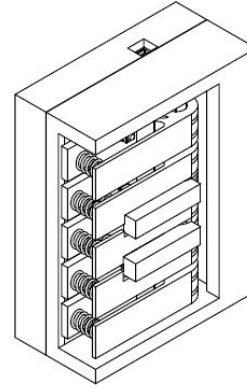
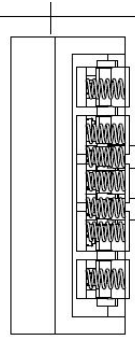
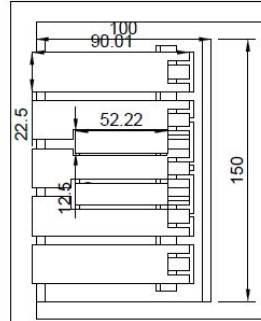
Name	Quantity	Component	Explanation	Obtain	Price Per	Total
U2	1	Arduino Uno	Base	<a href="https://www.amazon.ca/A">https://www.amazon.ca/A</a>	\$26.86	\$26.86
SGreen, Sy	7	Pushbutton	Buttons to	<a href="https://www.digikey.ca/en">https://www.digikey.ca/en</a>	\$0.18	\$1.80
R3, R4, R5,	7	10 kΩ Resistor	To Resist	<a href="http://store-usa.arduino.cc">http://store-usa.arduino.cc</a>	\$1.99	\$1.99
Wires	12	Wires	To connect	<a href="https://www.amazon.ca/E">https://www.amazon.ca/E</a>	\$14.99	\$14.99
Total						\$45.64

# Fusion

# Bill of Materials

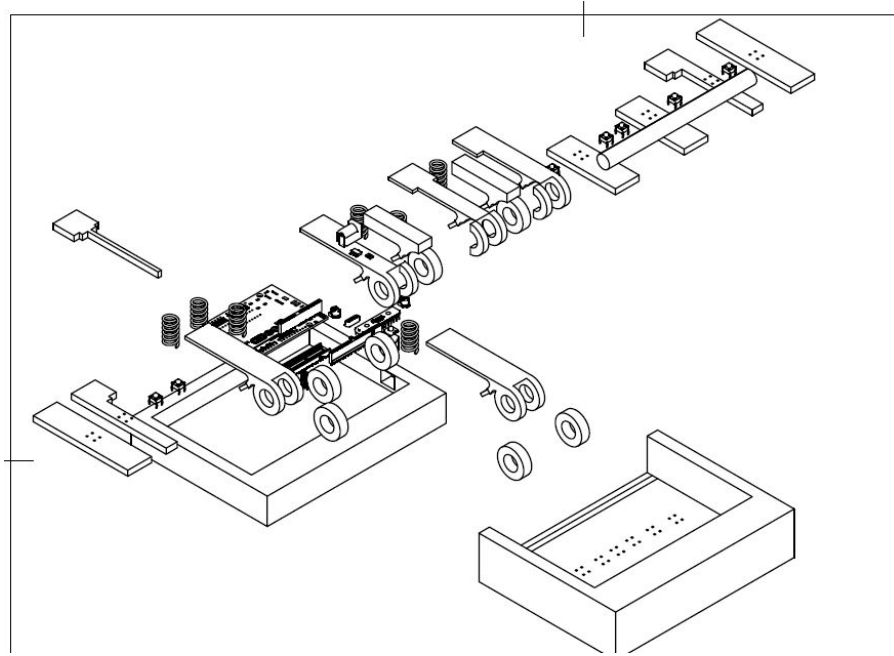
Name	Quantity	Component	Explain	Obtain	Price Per	Total
U2	1	Arduino Uno	Base	<a href="https://www.arduino.cc/">https://www.arduino.cc/</a>	\$26.86	\$26.86
Casing	1	Casing	To hold everything	3D printing		
Buttons	7	Pushbutton	Buttons to press, the col	<a href="https://www.aliexpress.com/">https://www.aliexpress.com/</a>	\$0.18	\$1.80
Keys	7	Keys	To Press	3D printing		
Springs	7	Springs	Keys functionality	Pens		
Total						\$0.00

# Parts



Course Name Industrial Design for Game Hardware			
Created by Maija Kinnunen and Kennedy Adams	Title One Handed Controller	Document status Assignment Submission	
		Rev.	Date of issue 3/18/2022
		Sheet	1/1

# Assembly & Exploded View





# Functionality

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Electronics place holders to indicate how these will be secured

Hot Glue

Cable management to avoid having loose cables

Hot Glue

Hinges or other approaches to enclose the components.

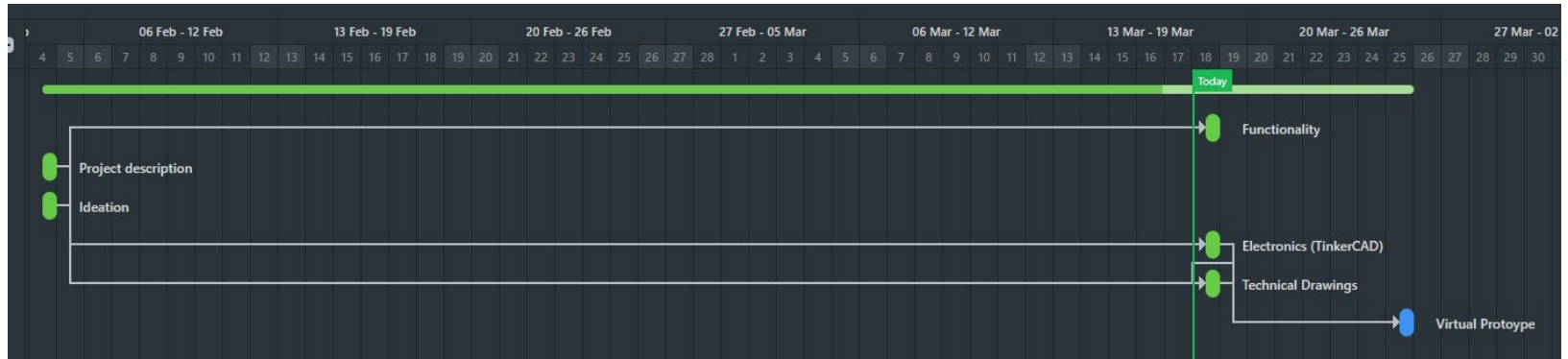
Hot Glue

Opening for USB cable connectivity

Buttons: we removed the d pad as we dont think it is necessary for the guitar hero. The first 2 keys are the Green and Red, A and B on a regular controller. The next 3 are the Yellow, Blue, and Orange buttons. The 2 Black keys are the start and exit buttons.

# Planning

# Gantt Chart



# Roles and Responsibilities

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Kennedy - TinkerCAD, Organization  
Maija - Fusion