

Part Name	Quantity	Cost	Role	Where to Obtain
Arduino UNO R3	1	\$23.99	Allow for implementation of components	ELEGOO UNO R3 Board ATmega328P ATMEGA16U2 with USB ... Game Lab
IMU Accelerometer + Gyroscope with 6 DOF	1	\$16.32	Sense the movement of aiming the bow and orientation of the direction the aiming arm will control the bow	https://www.amazon.ca/Accelerometer-Gyroscope-Inertial-Measurement-Sensors/dp/B08G8QF98F/ref=sr_1_6?crid=1ALSM5C0NA1ZC&keywords=6+DOF+accelerometer&qid=1666058476&qu=eyJxc2MiOiJlLjIwIiwicXNhIjojMC4wMCIslInFzcCI6IjAuMDAifQ%3D%3D&sprefix=6+doF+accelerometer%2Caps%2C85&sr=8-6
Flex Sensor	2	\$10.48/each	Detect the amount of tension in the string when drawing back the bow string. Two will be used to detect if the string is being pulled evenly from both ends	https://www.amazon.ca/Resistance-Type-Waterproof-Sensitive-Functions-Electronics/dp/B08QY3GJ5Y/ref=sr_1_6?keywords=flex+sensor+arduino&qid=1666111822&qu=eyJxc2MiOiJlLjIwIiwicXNhIjojMC44NiIsInFzcCI6IjAuQTIifQ%3D%3D&sr=8-6
Vibration Motor	1	\$16.99	Provides haptic feedback and immersion for drawing back the string	tatoko 20PCS 10mmx3mm Mini Vibration Motors DC 3V 12000rpm Flat Coin Button-Type Micro DC Vibrating Motor for Mobile Cell Phone Pager Tablet Household Appliances : Amazon.ca
Small Breadboard	1	\$7.90	Base to connect the other components	BB400 Solderless BreadBoard : Amazon.ca: Industrial & Scientific Game Lab
NPN Transistor	1	\$9.16	Allows the vibration motor to function properly	https://www.amazon.ca/50pcs-BC337-25-BC337-Bipolar-Transistors/dp/B0B9LGSX7L/ref=sr_1_5?crid=1CJSC7IBRN2VG&keywords=npn+transistor+%2BJT%29&qid=1666061174&sprefix=npn+transistor+bjt+%2Caps%2C78&sr=8-5 Game Lab
1k Ohm Resistor	4	\$13.99	Connect to the Vibration Motor and LED providing resistance to provide functionality	DEYUE 0 Ω to 1 Mega Ohm Resistors Assortment Kit of 1 Percent ... Game Lab
LED	1	\$7.89	Will light up for indication to the user	DAOKI 250-Pack (5 Colors x 50-Pack) 3mm LED Light Emitting ... Game Lab
Bow and Arrow	1	\$45.99	Will serve as the base model for the controller and allow the user to actually practice the motion of shooting a bow and arrow	Dostyle Outdoor Youth Recurve Bow and Arrow Set Children Junior ... https://sparkarrows.com/product/dostyle-bow-and-arrow-set-for-children-outdoor-youth-recurve-junior-archery-training-for-kid-teams-game-gift/
Compartment	1	0	Will hold all of the components within it to keep them safe from damage and out of sight of the user	Game Lab

