Sandra Patricia Mejias Vega Department of Entertainment Technology

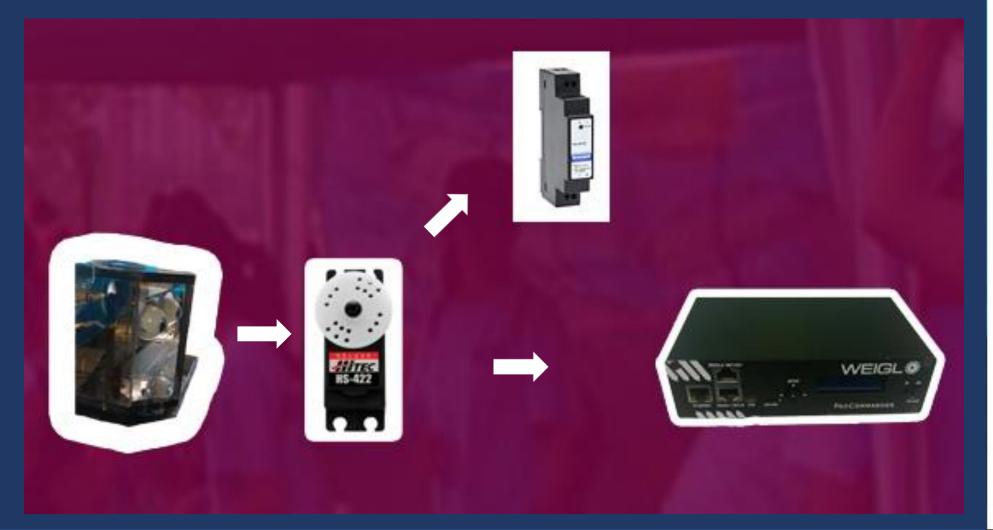


## **ELECTRONIC COMPONENT / CONNECTIONS**



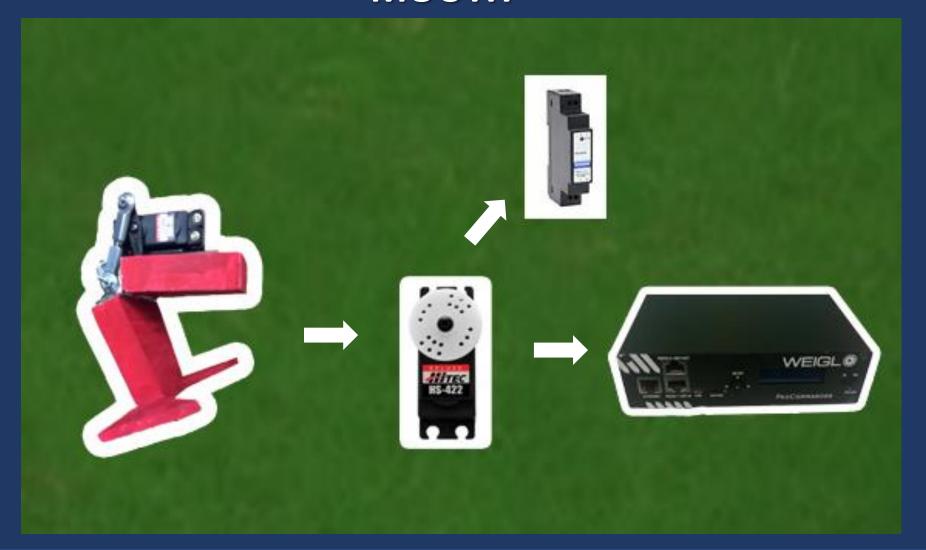
Mr. J Audio - Animatronic Robot

## **EYES**





# MOUTH



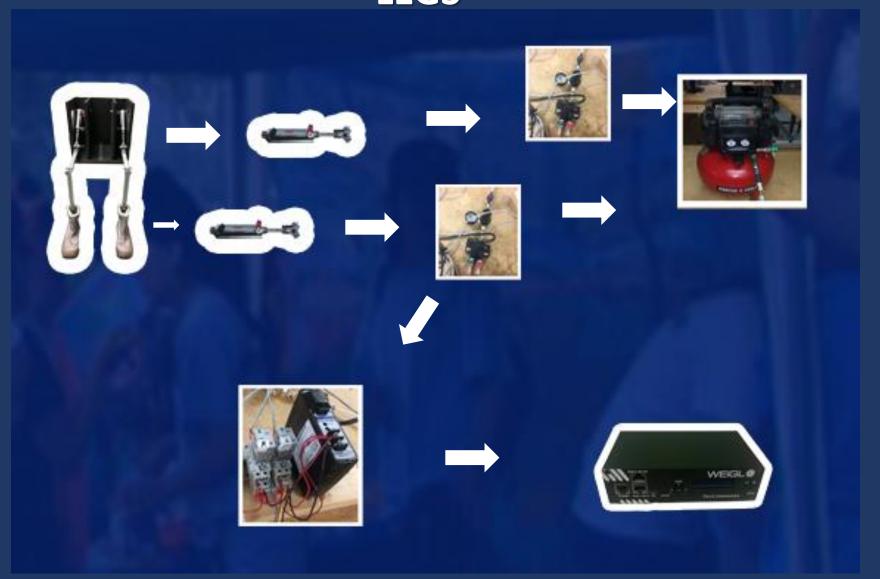






Mr. J Audio - Animatronic Robot

**LEGS** 





## **LED LIGHTS**





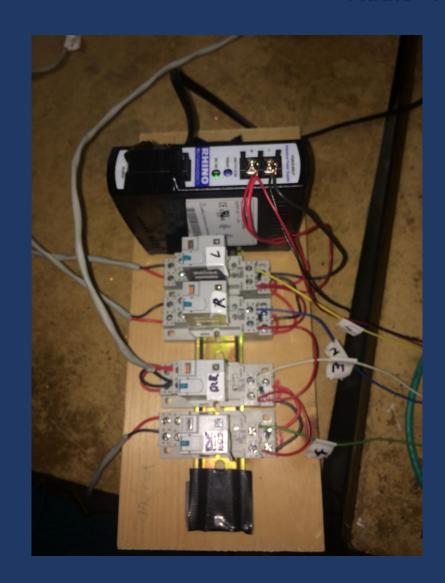
Mr. J Audio - Animatronic Robot

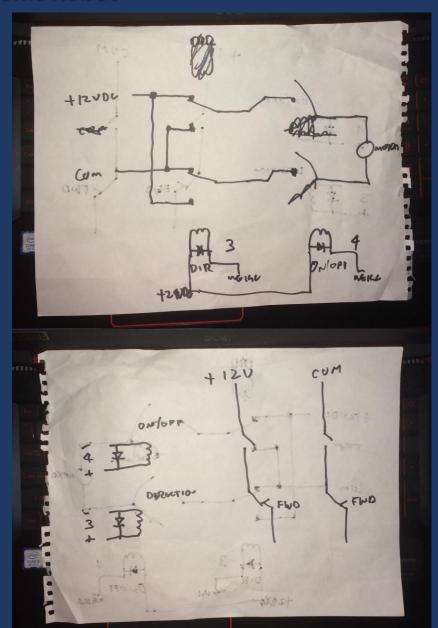
### **SPEAKERS**





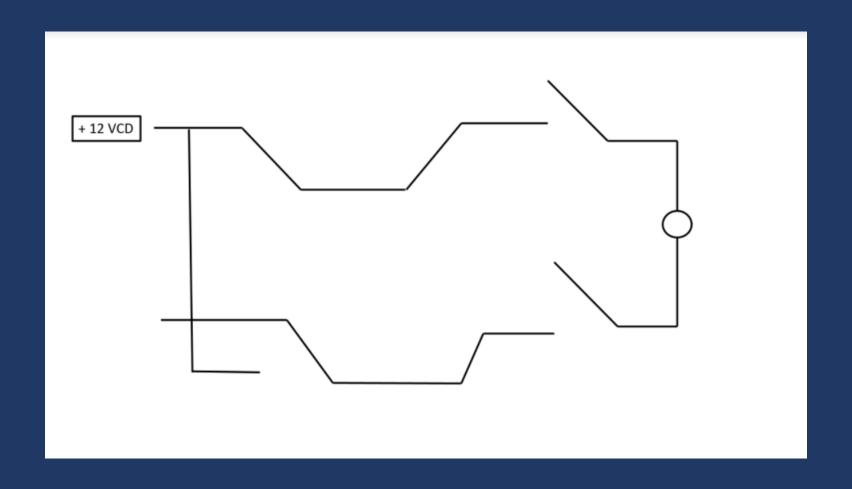
Mr. J Audio - Animatronic Robot





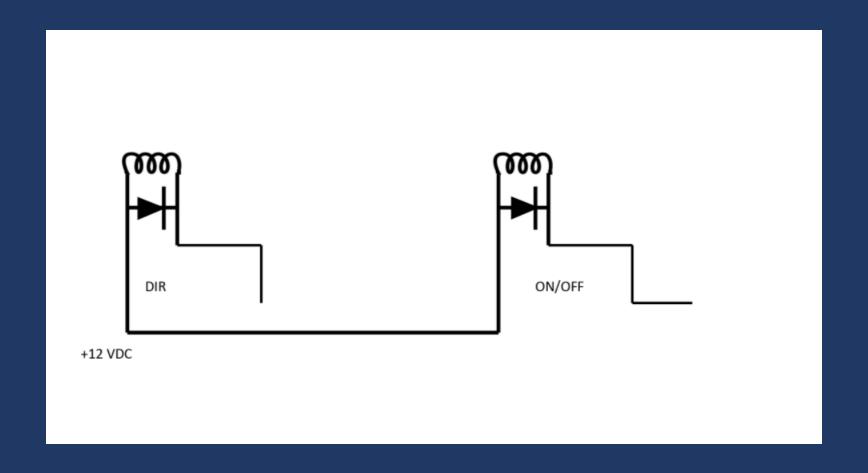


Mr. J Audio - Animatronic Robot



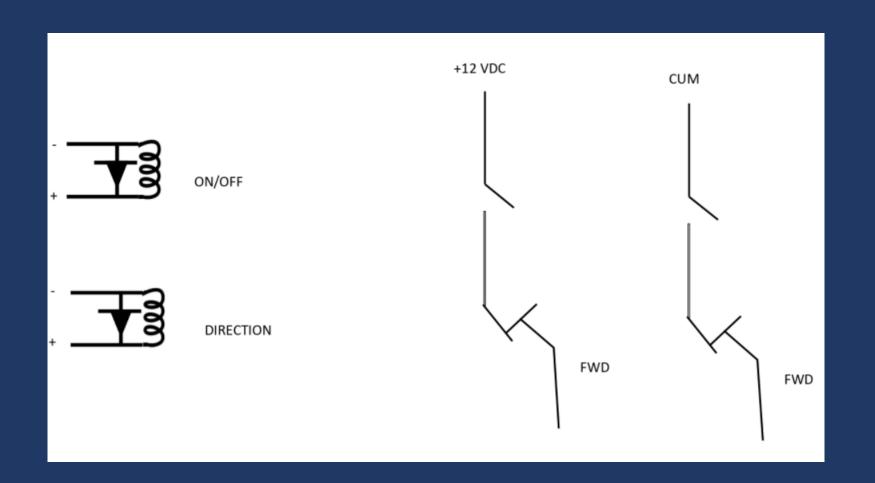


Mr. J Audio - Animatronic Robot



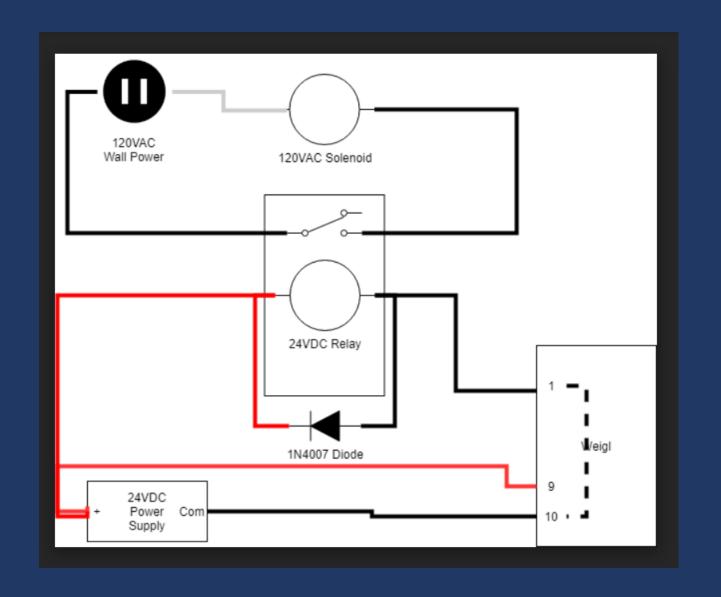


Mr. J Audio - Animatronic Robot



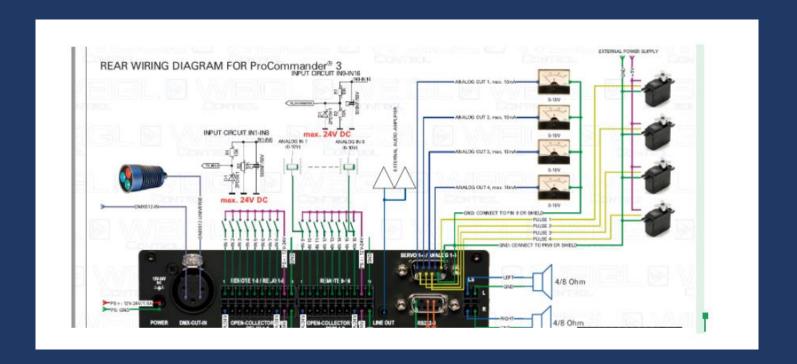


Mr. J Audio - Animatronic Robot





Mr. J Audio - Animatronic Robot





Mr. J Audio - Animatronic Robot

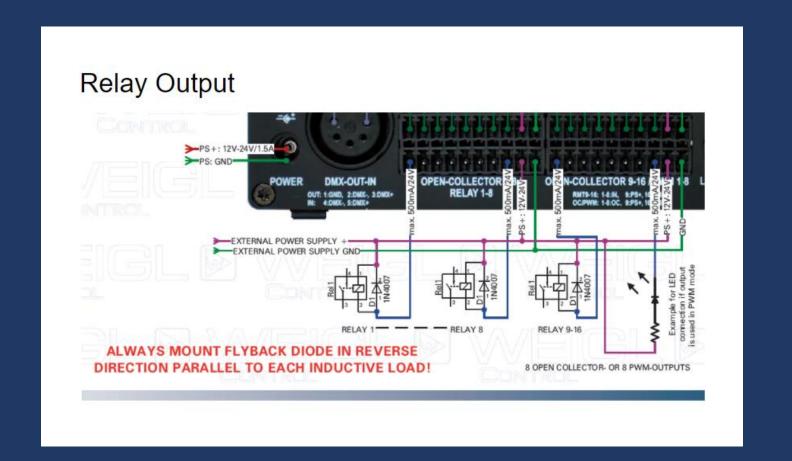
Servo Color	Connected To
Red	+5VDC
Black	5VDC Common AND Weigl Pin 9
Yellow	Weigl Pin 5-8 (5 is 1, 6 is 2, etc)



Mr. J Audio - Animatronic Robot

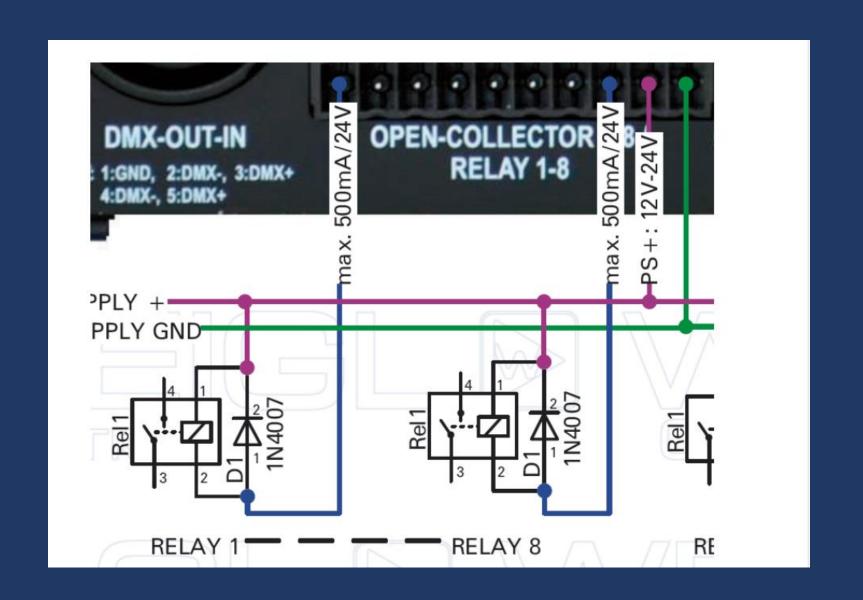








Mr. J Audio - Animatronic Robot





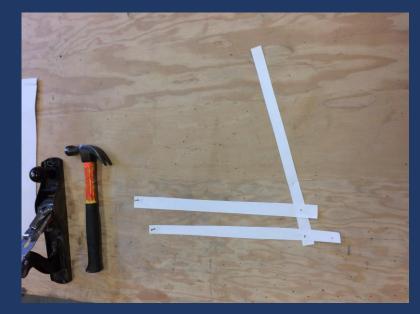
Mr. J Audio - Animatronic Robot

## **PROTOTYPES**



Mr. J Audio - Animatronic Robot



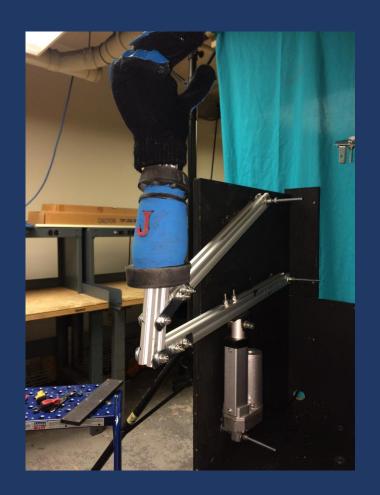






Mr. J Audio - Animatronic Robot







Mr. J Audio - Animatronic Robot





Mr. J Audio - Animatronic Robot

# **LEGS**





Mr. J Audio - Animatronic Robot









Mr. J Audio - Animatronic Robot

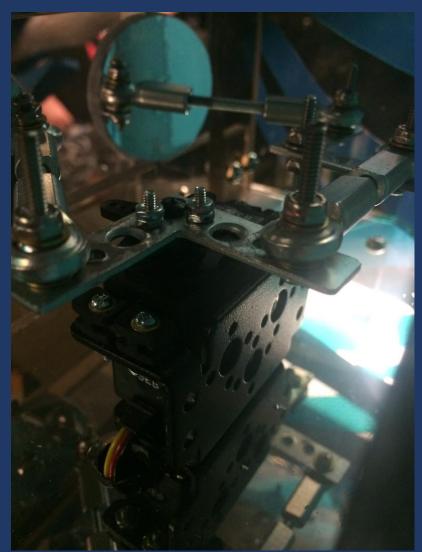






Mr. J Audio - Animatronic Robot

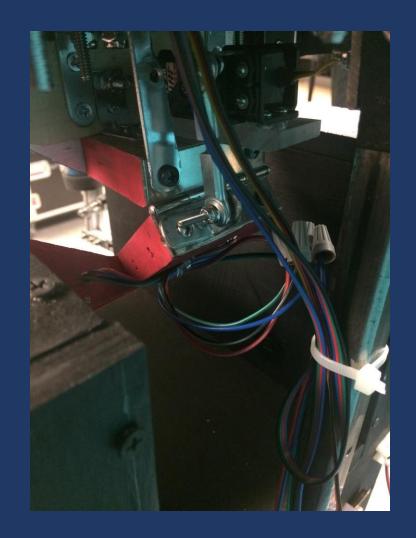






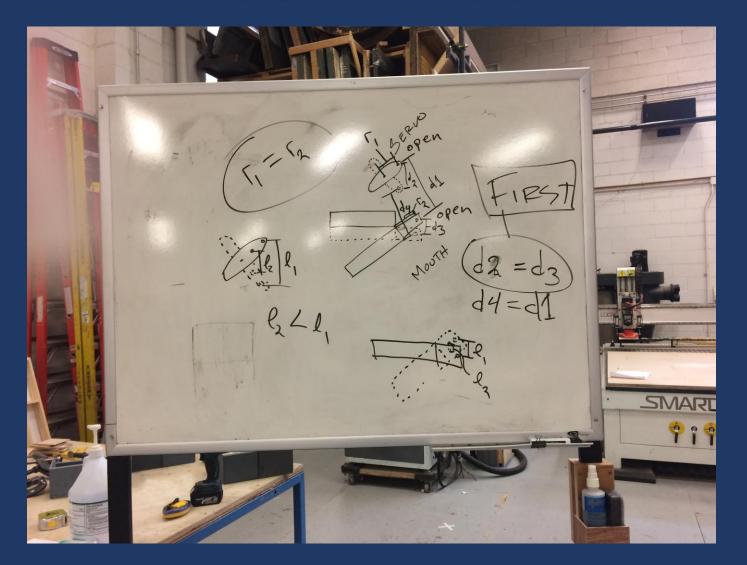
Mr. J Audio - Animatronic Robot





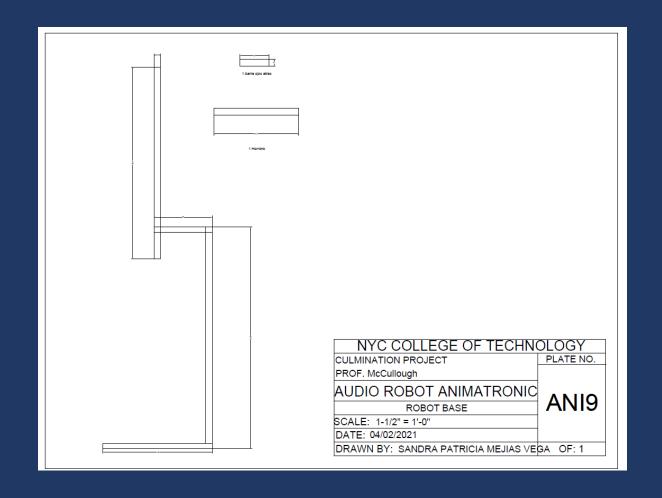


Mr. J Audio - Animatronic Robot



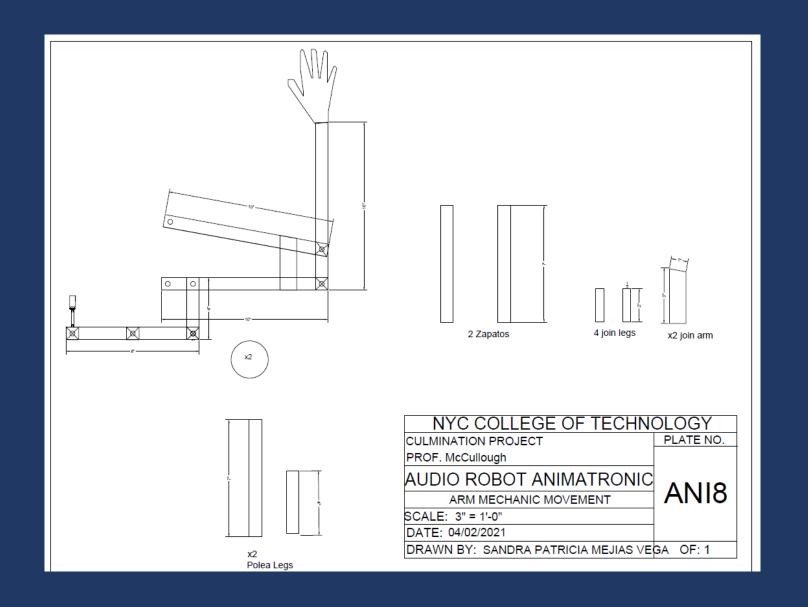


Mr. J Audio - Animatronic Robot



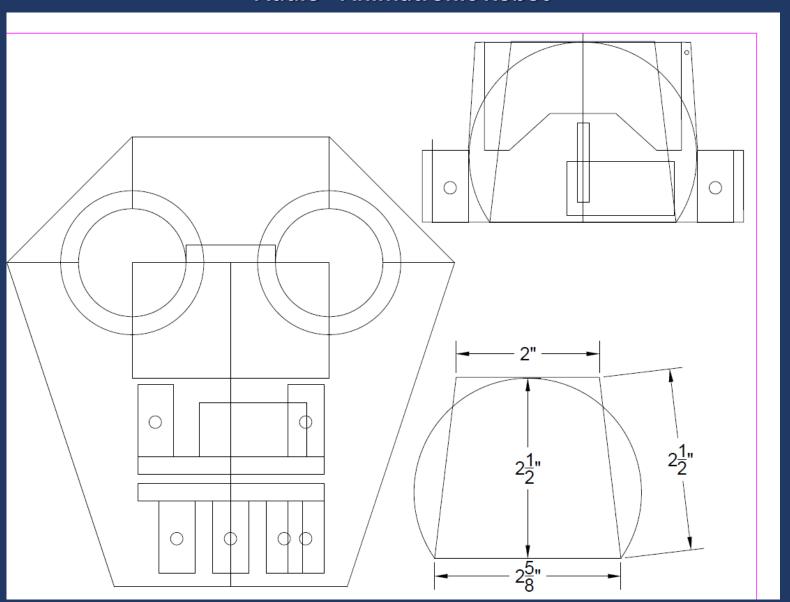


Mr. J Audio - Animatronic Robot



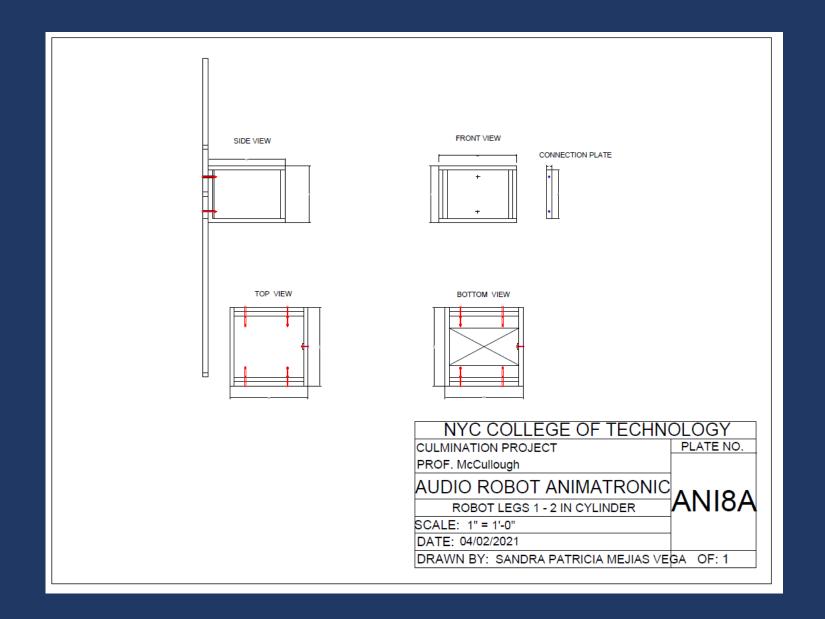


Mr. J Audio - Animatronic Robot



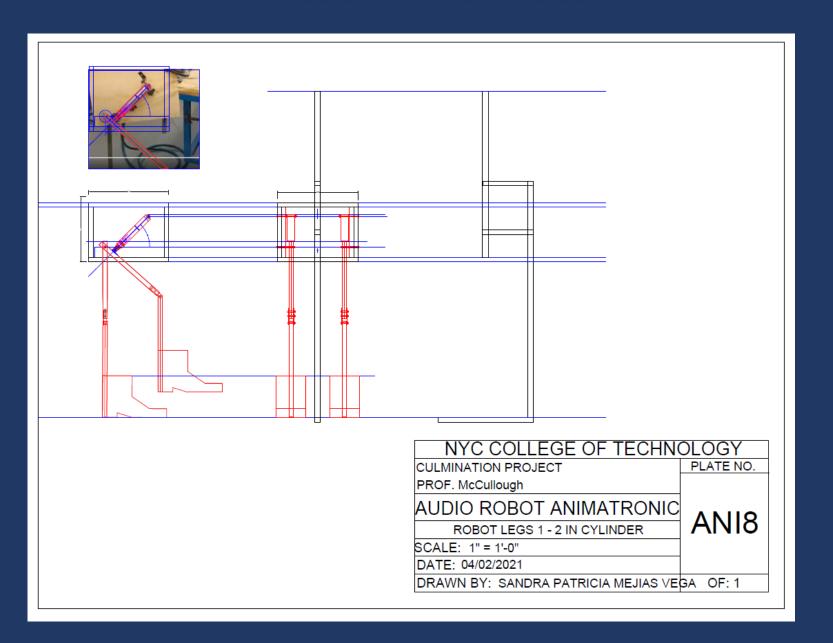


Mr. J Audio - Animatronic Robot





Mr. J Audio - Animatronic Robot





Mr. J Audio - Animatronic Robot

BUILDING ANIMATRONIC ROBOT	Jan	Feb F	eb Fe	b Feb	Feb	Feb F	eb M	far Ma	ar Ma	Mai	r Mar	Mar	Mar N	1ar M	far M	1ar M	ar Ma	r Mai	Mar	Mar	Mar I	Mar M	lar Ma	ar Ma	r Mai	Mar	Mar	Mar I	Mar M 25 2	ar Ma	r Ma	ar Ma	r Mar	Mar	Apr	Apr A	pr Ap	r Apr	Apr A	Apr Ap	r Apr	Apr A	Apr Ap	рг Арг	Apr
TASKS / 2021	21	22	23 2	4 25	26	27	28	1 2	3	4	5	6	7	8 5	9 1	10 1	1 12	13	14	15	16	17 1	8 19	20	21	22	23	24	25 2	6 27	28	3 29	30	31	1	2 :	3 4	5	6	7 8	9	10 1	11 12	2 13	14
Purchase of servos, sensor, 5DCV power supply, cables, and other electronic parts.																					1																								
Meeting with electronic professor	-		200		100		337	92.	925				200	- 45	100	100			200	33 - 52	92		.00		2			100			200	22	0				100	72	92.	20	200 200	200			
Meeting with Mechanical professor	18 S	18		3	8	18	28	8	8	8	9	000	š	18	18		S:	8	(9) (5)	8 8	8	3		10	000		Sept		8	100	8			- 8		1 13	18		8	8	8 8	98		1	
Finding the story behind the Robot			- 2													- 1 - 2			2	4 8					,																	- 2			
Get Weigl unit connected to computer using Weigl Configurator																																													
Get the servosand Solenoids device wired in prototype form	18.8		0					8	8												i i			3			77700		į.	- 8	8 8		8 8	- 8			38	8 3	8 8	- 1	8 9	- 8	- 3	- (A)	
Research about mechanical motion of robots	12.5		28	20	12 80		383	200						- 533	- 5 (			-0.5	28	28 33	35		8.	2	30				100	100	28	33	si s			- 5	78	5	333	30	28 347	28	8.4	-	
Robot desing and sketches with AUTOCAD drawings																					ũ																								$\Box$
Construction of the mechanical prototype for eyes, mouth and two legs	100		333		100		.00		57.												- 55		.50		3						500	22.	i i					22	0.00	- 2	200 200	222			
Contruction of the Robot Structure	18 8	18	3		18 3	- 18	38	- 8	8			- 8	- 10	10	18		S:	100	33	S 55	(2)	- 33		19	8		}		1	- 12	3								3 8	- 8	8 8	38		100	
Purchase of foam and other materials for the props																- 1 2				2 33											- 2														
To make a armor patterns for costumes from a manikin that the school has.								500				,							5,435																										
Construction of the props	1 8	300	8		18 3	- 33	8	8	8	Ž j	N 3	77500	1	3	38		8	Š		3 8	- 3															1 1/4	38	8	8 88		8 9	3	- 5	8	
Add electronic components to the animatronic robot, install speakers, light and sensor.	45. 1					- 6			-					- 14	- 4.	- 45					-										-	_					- 6-								
Program the show with sound and robot movements according to the sound.								0.	Č.																																				
Test animatronic robot and make a video	10. 10	145	335		100		330	92	307			201	200	1	100	100			3.4	330 307	100							100			355	177	0) 0			12.		17	900	- 2	200	335	20		
Final Presentation	10. 3		9		1 8		- 3	93	8			- 31	3	- 1 Š	3			¥.	8	2 2	- 93	- 3		3	3				8	- 18	9 3		8 8	- 8			3	9 = 3	2 9	3	8 38	8	3	8	

2 servo units 2 \$ 12.49 \$ 24 Electrical Actuator 1 \$ 38.55 \$ 38 Servo extension cables 1 \$ 9.99 \$ 5 \$ 36 Servo extension cables 1 \$ 9.99 \$ 5 \$ 36 Servo extension cables for Ethernet connection 1 \$ 10.59 \$ 10.59 \$ 10 Computer 1 \$ 762.11 \$	Mechanical, electronic custome materials Product	Quantity	Prio	e	Tot	tal
Wood   From the school   From the school   Steel   From the school   From the scho	Scene Shop available hours during this pandemic time.	_	Fron	n the scho	ol	
Steel	Tools that are in the scene shop like table saw, drill, etc.		Fron	n the scho	ol	
Bots Nuts Speakers Two air cylinders (two inches stroke) Two Valves for air cylinders One air compressor One air compressor DMX cable adapter from 3 pins to 5 pins DMX cable 5 pins Weigl unit From the school Weigl procomander Two 12 VDC power supply Four 24 VDC ice cube control relay. Four socket mount for relay. Four socket mount for relay. Four socket mount for relay. Servo extension cables Electricial Actuator Servo extension cables for Ethernet connection Computer Printer 1 5 762.11 5 762 ELED strip - 12 VDC Decorder 1 5 13.99 5 12 ELED strip - 12 VDC Decorder 1 5 20.97 5 20 Electronic cables for Ethernet connection 1 5 10.99 5 13 Solder wire 1 5 20.00 5 20 Eyes ball Eyes mechanism 1 5 15.29 8 12 Eyes mechanism 1 5 15.29 8 13 Eyes mechanism 1 5 15.29 8 15 Eyes mechanism 1	Wood		Fron	n the scho	ol	
Nuts   Speakers   From the school   Two air cylinders (two inches stroke)   From the school   Two air cylinders (two inches stroke)   From the school   Chapter (two inches stroke)   From the school   Chapter (two inches stroke)   From the school   Chapter (two inches stroke)   Chapter (two inches stroke)   Chapter (two inches stroke)   From the school   Chapter (two inches stroke)   Chapter	Steel		Fron	n the scho	ol	
Speakers	Bolts					
Two air cylinders (two inches stroke)         From the school           Two Valves for air cylinders         From the school           One air compressor         From the school           DMX cable adapter from 3 pins to 5 pins         From the school           DMX cable 5 pins         From the school           Weigl unit         From the school           Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four socket mount for relay.         From the school           Four socket mount for relay.         From the school           FOLD power supply         1         \$ 30.00         \$ 30.00           2 servo units         2         \$ 12.49         \$ 24           Electrical Actuator         1         \$ 38.95         \$ 38           Servo extension cables         1         \$ 9.99         \$ 9.99         \$ 9.99           Electronic cables for Ethernet connection         1         \$ 10.59         \$ 10           Computer         1         \$ 762.11         \$ 762           Printer         1         \$ 762.11         \$ 762           Electronic cables for Ethernet connection         1         \$ 13.99         \$ 15           Computer         1         \$ 762.11 </td <td>Nuts</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Nuts					
Two Valves for air cylinders         From the school           One air compressor         From the school           DMX cable adapter from 3 pins to 5 pins         From the school           DMX cable 5 pins         From the school           Weigl unit         From the school           Weigl unit         From the school           Weigl procomander         From the school           Four 24 VDC ice cube control relay.         From the school           Four 24 VDC ice cube control relay.         From the school           FOUR power supply         1         \$ 30.00         \$ 30.0	Speakers		Fron	n the scho	ol	
One air compressor         From the school           DMX cable adapter from 3 pins to 5 pins         From the school           DMX cable 5 pins         From the school           Weigl unit         From the school           Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four 24 VDC ice cube control relay.         From the school           Four socket mount for relay.         From the school           5VDC power supply         1         \$ 30.00 \$ 30           2 servo units         2         \$ 12.49 \$ 24           Electrical Actuator         1         \$ 38.95 \$ 38           Servo extension cables         1         \$ 9.99 \$ \$ 15           Electronic cables for Ethernet connection         1         \$ 10.59 \$ \$ 10           Computer         1         \$ 762.11 \$ 762           Printer         1         \$ 762.11 \$ 762           IED strip - 12 VDC         1         \$ 13.99 \$ 13           Decorder         1         \$ 19.99 \$ 15           Welding soldering iron         1         \$ 20.77 \$ 20           Acrylic glue         1         \$ 20.00 \$ 20           Eyes ball         1         \$ 20.00 \$ 20           Eyes mechanism         1	Two air cylinders (two inches stroke)		Fron	n the scho	ol	
DMX cable adapter from 3 pins to 5 pins         From the school           DMX cable 5 pins         From the school           Weigl unit         From the school           Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four 24 VDC ice cube control relay.         From the school           Four socket mount for relay.         From the school           SVDC power supply         1         \$ 30.00         \$ 30           2 servo units         2         \$ 12.49         \$ 24           Electrical Actuator         1         \$ 38.95         \$ 38           Servo extension cables         1         \$ 9.99         \$ 10           Electronic cables for Ethernet connection         1         \$ 10.59         \$ 10           Computer         1         \$ 762.11         \$ 762           Frinter         1         \$ 762.11         \$ 762           LED strip - 12 VDC         1         \$ 13.99         \$ 15           Decorder         1         \$ 19.99         \$ 15           Welding soldering iron         1         \$ 20.97         \$ 20           Welding soldering iron         1         \$ 20.97         \$ 20           Hot glue gun         1<	Two Valves for air cylinders		Fron	n the scho	ol	
DMX cable 5 pins         From the school           Weigl unit         From the school           Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four 24 VDC ice cube control relay.         From the school           Four socket mount for relay.         From the school           SVDC power supply         1         \$ 30.00 \$	One air compressor		Fror	n the scho	ol	
Weigl unit         From the school           Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four 24 VDC ice cube control relay.         From the school           Four socket mount for relay.         From the school           SVDC power supply         1         \$ 30.00         \$ 30.00           Seventension cuble         5         5.01         \$ 10.00           Selegatin         1         \$ 10.09         \$ 10.00	DMX cable adapter from 3 pins to 5 pins		Fror	n the scho	ol	
Weigl procomander         From the school           Two 12 VDC power supply         From the school           Four 24 VDC ice cube control relay.         From the school           Four socket mount for reley.         From the school           5VDC power supply         1         \$ 30.00 \$ 30           2 servo units         2         \$ 12.49 \$ 24           Electrical Actuator         1         \$ 38.95 \$ 38           Servo extension cables         1         \$ 9.99 \$ \$ 10           Electronic cables for Ethernet connection         1         \$ 10.59 \$ \$ 10           Computer         1         \$ 762.11 \$ 762           Printer         1         \$ 762.11 \$ 762           IED strip - 12 VDC         1         \$ 13.99 \$ \$ 15           Decorder         1         \$ 19.99 \$ \$ 15           Welding soldering iron         1         \$ 20.97 \$ \$ 20           Welding soldering iron         1         \$ 20.97 \$ \$ 20           4 pin extension cable for LED strips         1         \$ 20.40 \$ 20           Botgle gun         1         \$ 3.00 \$ \$ 20           Acrylic glue         1         \$ 20.00 \$ 20           Eyes ball         1         \$ 20.00 \$ 20           Eyes mechanism         1         \$ 152.98 \$ 152	DM X cable 5 pins		Fron	n the scho	ol	
Two 12 VDC power supply Four 24 VDC ice cube control relay. Four socket mount for relay.  From the school From	Weigl unit		Fron	n the scho	ol	
Four 24VDC ice cube control relay. Four socket mount for relay. Four socket mount for relay. Four socket mount for relay.  \$\frac{1}{2}\$ From the school for	Weigl procomander		Fron	n the scho	ol	
From the school system of the	Two 12 VDC power supply		Fror	n the scho	ol	
5VDC power supply         1         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 30.00         \$ 24         \$ 2	Four 24 VDC ice cube control relay.					
2 servo units 2 5 12.49 5 24 Electrical Actuator 1 5 38.95 5 38 Servo extension cables 1 5 9.99 5 38 Electronic cables for Ethernet connection 1 5 10.59 5 10 Computer 1 5 762.11 5 762 Computer 1 5 54.43 5 54 Electronic cables for Ethernet connection 1 5 10.59 5 10 Computer 1 5 54.43 5 54 Electronic cables for Ethernet connection 1 5 10.59 5 10 Computer 1 5 54.43 5 54 Electronic cable for Ethernet connection 1 5 10.59 5 10 Electronic cable for Ethernet 1 5 54.43 5 54 Electronic cable for Ethernet 1 5 10.59 5 10 Electronic cable for Ethernet 1 5 10.59 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.40 5 10 Electronic cable for Ethernet 1 5 10.00 5 10	Four socket mount for relay.		Fror	n the scho	ol	
Electrical Actuator 1 S 38.95 S 38 Servo extension cables 1 S 9.99 S S Electronic cables for Ethernet connection 1 S 10.59 S 10 Computer 1 S 762.11 S 762 Printer 1 S 54.43 S 54 ELD strip - 12 VDC 1 S 13.99 S 13 Decorder 1 S 19.99 S 13 Decorder 1 S 19.99 S 13 Decorder 1 S 19.99 S 15 Solder wire 1 S 20.97 S 20 Hot glue 1 S 20.97 S 20 Hot glue 1 S 20.00 S 20 Eyes ball 1 S 20.00 S 20 Eyes ball 1 S 20.00 S 20 Eyes mechanism 1 S 152.98 S 152 10mm EVA Foam 2mm, 5mm, 10mm 4 S 9.99 S 25 Soldser wire 1 S 20.00 S 20 Eyes ball 5 S 20.00 S 20 Eyes ball 6 S 20.00 S 20 Eyes ball 7 S 20.00 S 20 Eyes ball 8 S 20.00 S 20 Eyes ball 9 S 20 Soldser wire 1 S 20.00 S 20 Eyes ball 2 S 20.00 S 20 Eyes ball 2 S 20.00 S 20 Eyes ball 3 S 20.00 S 20 Eyes ball 5 S 20.00 S 20 Eyes ball 6 S 20.00 S 20 Eyes ball 7 S 20.00 S 20 Eyes ball 8 S 20.00 S 20 Eyes ball 9 S 2						30
Servo extension cables		_				24
Electronic cables for Ethernet connection		_				38
Computer		_				9
Printer         1         \$ 54.43         \$ 54		_				
LED strip - 12 VDC       1       \$ 13.99 \$ 13         Decorder       1       \$ 19.99 \$ 15         Welding soldering iron       1       \$ 20.97 \$ 20         4 pin extension cable for LED strips       1       \$ 9.97 \$ 20         Solder wire       1       \$ 20.40 \$ 20         Hot glue gun       1       \$ 3.00 \$ 3         Acrylic glue       1       \$ 20.00 \$ 20         Eyes ball       1       \$ 20.00 \$ 20         Eyes mechanism       1       \$ 152.98 \$ 152         10mm EVA Foamfor Shield and Sor       2       \$ 14.99 \$ 25         10w Density Eva Foam 2mm, 5mm, 10mm       4       \$ 9.99 \$ 35         High Density Eva Foam for prop making       1       \$ 7.99 \$ 7.99 \$ 3         Scissors       1       \$ 2.00 \$ 20         Box Cutter       1       \$ 1.00 \$ 3         Dremel       1       \$ 2.137 \$ 21         Sand paper       1       \$ 1.00 \$ 3         Sewing Machine       1       \$ 1.99 \$ 15         Airbrush       1       \$ 1.99 \$ 15         Safety Glass       1       \$ 2.00 \$ 2         Acrylic paints       5       \$ 0.89 \$ 4         Flexi Filler       1       \$ 1.300 \$ 13         Cont	•	_				
Decorder						
Welding soldering iron         1         \$ 20.97 \$ 20           4 pin extension cable for LED strips         1         \$ 9.97 \$ 5           Solder wire         1         \$ 20.40 \$ 20           Hot glue gun         1         \$ 3.00 \$ 20           Acrylic glue         1         \$ 20.00 \$ 20           Eyes ball         1         \$ 20.00 \$ 20           Eyes mechanism         1         \$ 152.98 \$ 152           10mm EVA Foamfor Shield and Sor         2         \$ 14.99 \$ 25           10mm EVA Foam 2mm, 5mm, 10mm         4         \$ 9.99 \$ 3           High Density Eva Foam for prop making         1         \$ 7.99 \$ 7           Scissors         1         \$ 2.00 \$ 2           Box Cutter         1         \$ 1.00 \$ 2           Dremel         1         \$ 2.137 \$ 2           Sand paper         1         \$ 1.00 \$ 1           Sewing Machine         1         \$ 15.99 \$ 5           Airbrush         1         \$ 1.59 \$ 1           Safety Glass         1         \$ 2.00 \$ 2           Acrylic paints         5         \$ 0.89 \$ 4           Flexi Filler         1         \$ 4.99 \$ 4           Contact Cement glue         1         \$ 13.00 \$ 13 <td< td=""><td>•</td><td>_</td><td></td><td></td><td></td><td></td></td<>	•	_				
4 pin extension cable for LED strips  1		_				
Solder wire         1         \$ 20.40		_				
Hot glue gun 1 \$ 3.00 \$ 3.00 \$ 2.00 \$		_				_
Acrylic glue       1       \$       20.00       \$       20         Eyes ball       1       \$       20.00       \$       20         Eyes mechanism       1       \$       152.98       \$       152.98       \$       152.98       \$       152.98       \$       152.98       \$       152.98       \$       152.98       \$       152.99       \$       20       \$       20       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$        128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00       \$       128.00 <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
Eyes ball         1         \$         20.00         \$         20           Eyes mechanism         1         \$         152.98         \$         152.98         \$         152.98         \$         152.98         \$         152.98         \$         152.90         \$         1	5 5					
Eyes mechanism         1         5         152.98         5         152           10mm EVA Foamfor Shield and Sor         2         5         14.99         5         25           Low Density Eva Foam 2mm, 5mm, 10mm         4         5         9.99         5         35           High Density Eva Foam for prop making         1         5         7.09         5         2           Scissors         1         5         2.00         5         2           Box Cutter         1         5         1.00         5         1           Dremel         1         5         21.37         5         2         2           Sand paper         1         5         1.00         5         1         5         1.00         5         1           Serving Machine         1         5         15.99         5         5         5         1         5         15.99         5         5         5           Airbrush         1         5         15.99         5         1         5         20.0         5         2         2         2         2         2         2         3         2         3         4         4         3 <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
10mm EVA Foamfor Shield and Sor     2     \$ 14.99     \$ 25       Low Density Eva Foam Zmm, 5mm, 10mm     4     \$ 9.99     \$ 35       High Density Eva Foam for prop making     1     \$ 7.99     \$ 7       Scissors     1     \$ 20.00     \$ 1       Box Cutter     1     \$ 1.00     \$ 1       Dremel     1     \$ 21.37     \$ 21       Sand paper     1     \$ 1.00     \$ 1       Sewing Machine     1     \$ 15.99     \$ 5       Airbrush     1     \$ 15.99     \$ 15       Safety Glass     1     \$ 2.00     \$ 2       Acrylic paints     5     \$ 0.89     \$ 4       Flexi Filler     1     \$ 4.99     \$ 4       Contact Cement glue     1     \$ 13.00     \$ 13       Primer paint - Plasti Dip     1     \$ 4.95     \$ 4	•	_				
Low Density Eva Foam 2mm, 5mm, 10mm       4       \$ 9.99       \$ 35         High Density Eva Foam for prop making       1       \$ 7.99       \$ 7         Scissors       1       \$ 2.00       \$ 2         Box Cutter       1       \$ 1.00       \$ 2         Dremel       1       \$ 1.00       \$ 1         Sand paper       1       \$ 1.00       \$ 1         Sewing Machine       1       \$ 5.99       \$ 5         Airbrush       1       \$ 15.99       \$ 15         Safety Glass       1       \$ 2.00       \$ 2         Acrylic paints       5       \$ 0.89       \$ 4         Flexi Filler       1       \$ 4.99       \$ 4         Contact Cement glue       1       \$ 13.00       \$ 13         Primer paint - Plasti Dip       1       4.95       \$ 4	•	_				
High Density Eva Foam for prop making       1       S       7.99       S       7         Scissors       1       S       2.00       S       2         Box Cutter       1       S       1.00       S       1         Dremel       1       S       2.137       S       2.13         Sand paper       1       S       1.00       S       1         Sewing Machine       1       S       5.99       S       5         Airbrush       1       S       15.99       S       15         Safety Glass       1       S       2.00       S       2         Acrylic paints       5       S       0.89       S       4         Flexi Filler       1       S       4.99       S       4         Contact Cement glue       1       S       13.00       S       13         Primer paint - Plasti Dip       1       S       4.99       S       4		_				
Scissors         1         \$         2.00         \$         2.20         \$         2.20         \$         2.20         \$         2.20         \$         2.20         \$         2.21         <						
Box Cutter         1         \$         1.00         \$         1.00         \$         1.00         \$         1.00         \$         2.137         \$         2.21         2.21         3.77         \$         2.21         3.77         \$         2.21         3.77         \$         2.21         3.77         \$         2.21         3.77         \$         2.21         3.77         \$         2.22         3.77         \$         1.22         3.22						
Dremel         1         \$         21.37         \$         2.13         \$		_				
Sand paper         1         \$         1.00         \$         1.25         5.99         \$         5.99         \$         5.99         \$         5.99         \$         5.99         \$         5.99         \$         5.99         \$         5.99         \$         5.20 <td></td> <td>_</td> <td></td> <td></td> <td>-</td> <td></td>		_			-	
Sewing Machine         1         \$ 5.99 \$ 5         \$ 5.99 \$ 5         \$ 5.99 \$ 5         \$ 5.99 \$ 5         \$ 5.99 \$ 5         \$ 5.99 \$ 5         \$ 5.90 \$ 7         \$ 15.99 \$ 5         \$ 15.99 \$ 5         \$ 15.99 \$ 5         \$ 15.99 \$ 5         \$ 15.90 \$ 5         \$ 15.90 \$ 5         \$ 15.90 \$ 5         \$ 2.0		_			_	
Airbrush     1     \$     15.99     \$     15       Safety Glass     1     \$     2.00     \$     2       Acrylic paints     5     \$     0.89     \$     4       Flexi Filler     1     \$     4.99     \$     4       Contact Cement glue     1     \$     13.00     \$     13       Primer paint - Plasti Dip     1     \$     4.95     \$     4	• •	_			_	_
Safety Glass         1         \$         2.00         \$         2           Acrylic paints         5         \$         0.89         \$         4           Flex Filler         1         \$         4.99         \$         4           Contact Cement glue         1         \$         13.00         \$         13           Primer paint - Plasti Dip         1         \$         4.95         \$         4	-	_				
Acrylic paints         5         \$ 0.89         \$ 4           Flexi Filler         1         \$ 4.99         \$ 4           Contact Cement glue         1         \$ 13.00         \$ 13           Primer paint - Plasti Dip         1         \$ 4.95         \$ 4		_				
Flexi Filler         1         \$ 4.99         \$ 4           Contact Cement glue         1         \$ 13.00         \$ 13           Primer paint - Plasti Dip         1         \$ 4.95         \$ 4	•	_				
Contact Cement glue         1         \$ 13.00         \$ 13           Primer paint - Plasti Dip         1         \$ 4.95         \$ 4	• •	_				
Primer paint - Plasti Dip 1 \$ 4.95 \$ 4		_				
	_					4





Sandra Patricia Mejias Vega Department of Entertainment Technology

#### **Project Description**

Mr. J is an Audio –
Animatronic Robot This
is a soldier that is an
interactive game for kids
where kids will follow the
robot movements

#### **Deliverables:**

- •Sound Animatronic Robot Soldier – Video of the show.
- •Documentation of connecting sensors to the Weigl unit.
- •Test program demonstrating Weigl video.
- Production Calendar
- Budget
- •Drawings of building the mechanical structure.
- Photos during the construction of the animatronic robot.
- OpenLab Portfolio.

#### Methods

Story. To build the animatronic robot. I selected the story that is a song by Bear Hug Band named: Armor of God. So. The animatronic robot will follow this music game. I build a steel structure that is the head and body of the robot. I designed the mechanical movements of the robot. It has five mechanical areas that allow the movement of eyes (left and right direction), mouth, one arm (up and down direction), and two legs (Up and down direction) of the animatronic robot.



#### **Working Areas**

Mechanical area. I researched mechanical movements. I made sketches of the robot and mechanical movements.

Electronic area. To connect servos, electrical actuator, two air cylinder, speakers, to the Weigl unit.

Lighting area. To connect LED lights with a decorder and connect it to the Weigl unit.

Props area. Design the robot costumes with EVA foam and fabrics.

#### Budget

The Entertainment
Technology Department
provided Weigl unit and
software, wood, steel,
tools, power supply, etc.

\$1,367.02 for servos, electrical actuator, computer, printer, costume, etc.

#### **Acknowledgements**

- City Tech Entertainment Technology Department
- Technical Advisor / mechanical area: Professor John McCullough
- Electronics area.
   Professor John
   Huntington
- Scene Shop. Professor Rudy Guerrero
- CLT crew team

Mr. J Audio - Animatronic Robot



Mr. J Audio - Animatronic Robot

