

Gathering Pertinent Information

• MUSICAL BOT

* Need statement:

A school in hubali wishes to set up a musical instruments room. To build craze among little kids, the school is looking for some robots that can play musical instruments and entertain the kids.

Musical instrument: Guitar

INTRODUCTION:

*A robot is a machine that executes are commands to complete are tasks in the given time. There are many different types of robots to perform different tasks.

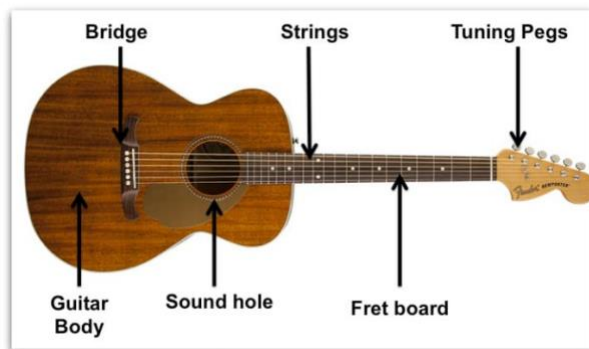
*The bot of ours used to play the guitar for entertaining.



GUITAR PLAYING BOT

The guitar is played by the bot to play the music for entertaining kids. By holding the pics of guitar by the pneumatic gripper or servo gripper the bot can plays the music.

DIFFERENT TYPES OF GUITARS


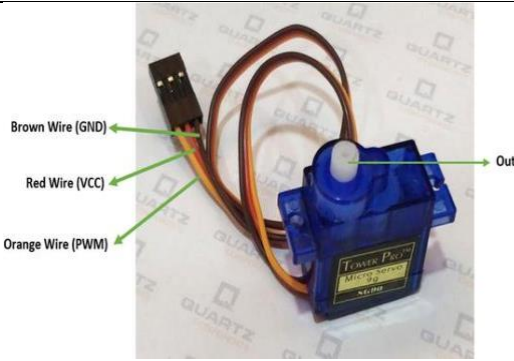

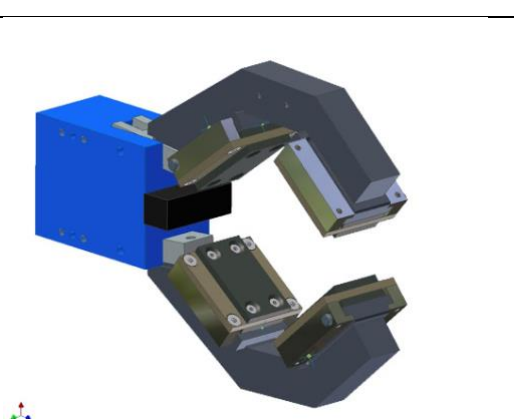


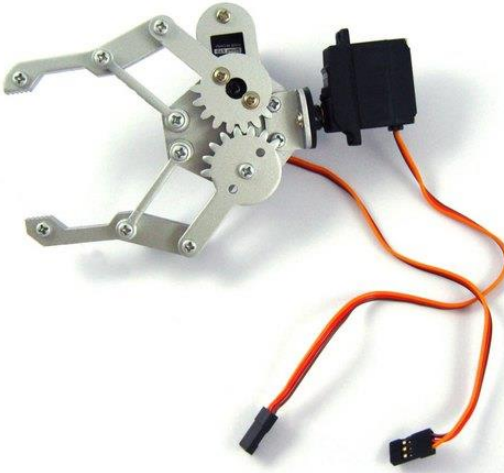

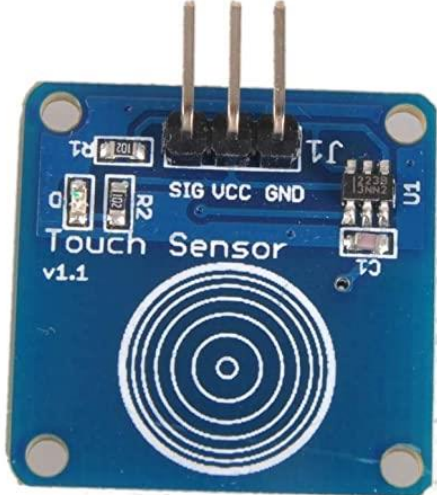
Reference: https://www.google.com/url?sa=i&url=https%3A%2F%2Fnationalguitaracademy.com%2Ftypes-of-guitar%2F&psig=AOvVaw2hNj82nVzBN_4iPB_Chdku&ust=1623081647081000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCPDD39Kwg_ECFQAAAAAdAAAAABAD




Reference: https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.pinterest.com%2Fpin%2F788974428454507798%2F&psig=AOvVaw2hNj82nVzBN_4iPB_Chdku&ust=1623081647081000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCPDD39Kwg_ECFQAAAAAdAAAAABAP

COMPONENTS AND SUBCOMPONENTS

S.N O	COMPONENT	IMAGES	REFERENCE
1	Dc motor		https://www.google.com/url?sa=i&url=https%3A%2F%2Fislproducts.com%2Fcomponent%2Fbrushless-dc-motors%2F&psig=AOvVaw1X2d-bWpqJ-Inq0dGB5rY0&ust=1623083235854000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCNCbhrW2g_ECFQAAAAAdAAAAABAD
2	Servo motor		https://www.google.com/url?sa=i&url=https%3A%2F%2Fquartzcomponents.com%2Fproducts%2Ftower-pro-sg90-servo-9-gms-mini-micro-servo-motor&psig=AOvVaw060auS4YFrI_itaEGW/Xpe&ust=1623083460882000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCLjSr623g_ECFQAAAAAdAAAAABAD
3	Stepper motor		https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.ato.com%2Fnema-17-stepper-motor-2-8v-1-33a-1-8-degree-2-phase-4-wires&psig=AOvVaw0MXk4OmZMqPLFugkL_phSZ&ust=1623083686567000&source=images&cd=vfe&ved=0CAIQjRxxqFwoTCPCX4Ie4g_ECFQAAAAAdAAAAABAN
4	Pneumatic gripper		https://www.google.com/url?sa=i&url=http%3A%2F%2Fwww.agi-automation.com%2F2015%2F03%2Fdesign-guidelines-for-pneumatic-gripper%2F&psig=AOvVaw1PGlrPH61gt7S18Cc89X2V&ust=1623084736339000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCJD78Py7g_ECFQAAAAAdAAAAABAD

5	Servo gripper		https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.indiamart.com%2Fproddetail%2Fservo-gripper-mini-motor-20928574830.html&psig=AOvVaw1uoXlyUVb-4MLtvollKhB8&ust=1623084978121000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCOjn9_G8g_ECFQAAAAAdAAAAABAP
6	Buzzer		https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.amazon.in%2FBuzzer-Small-Enclosed-Piezo-Electronic%2Fdp%2FB07P87BWVY&psig=AOvVaw0LpyramccAm_luaWZg5VUB&ust=1623085153910000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCIjQhNW9g_ECFQAAAAAdAAAAABAD
7	Touch sensor		https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.amazon.in%2FePro-Labs-TTP223-Capacitive-Arduino%2Fdp%2FB01F5BOL12&psig=AOvVaw0voGPSJyee4U7S6KqxLIQ_&ust=1623085360107000&source=images&cd=vfe&ved=0CAMQjB1qFwoTCliHzaa-g_ECFQAAAAAdAAAAABAD

8	Led indictor		https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.snapdeal.com%2Fproduct%2F8mm-12v-led-indicator-light%2F659754863285&psig=AOvVaw2gfoG394730q8FjOkje_sx&ust=1623085491006000&source=images&cd=vfe&ved=0CAMQJB1qFwoTCPIY8OO-g_ECFQAAAAAdAAAAABAD
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Musical bot reference:

<https://youtu.be/cXgB3llvPHI>