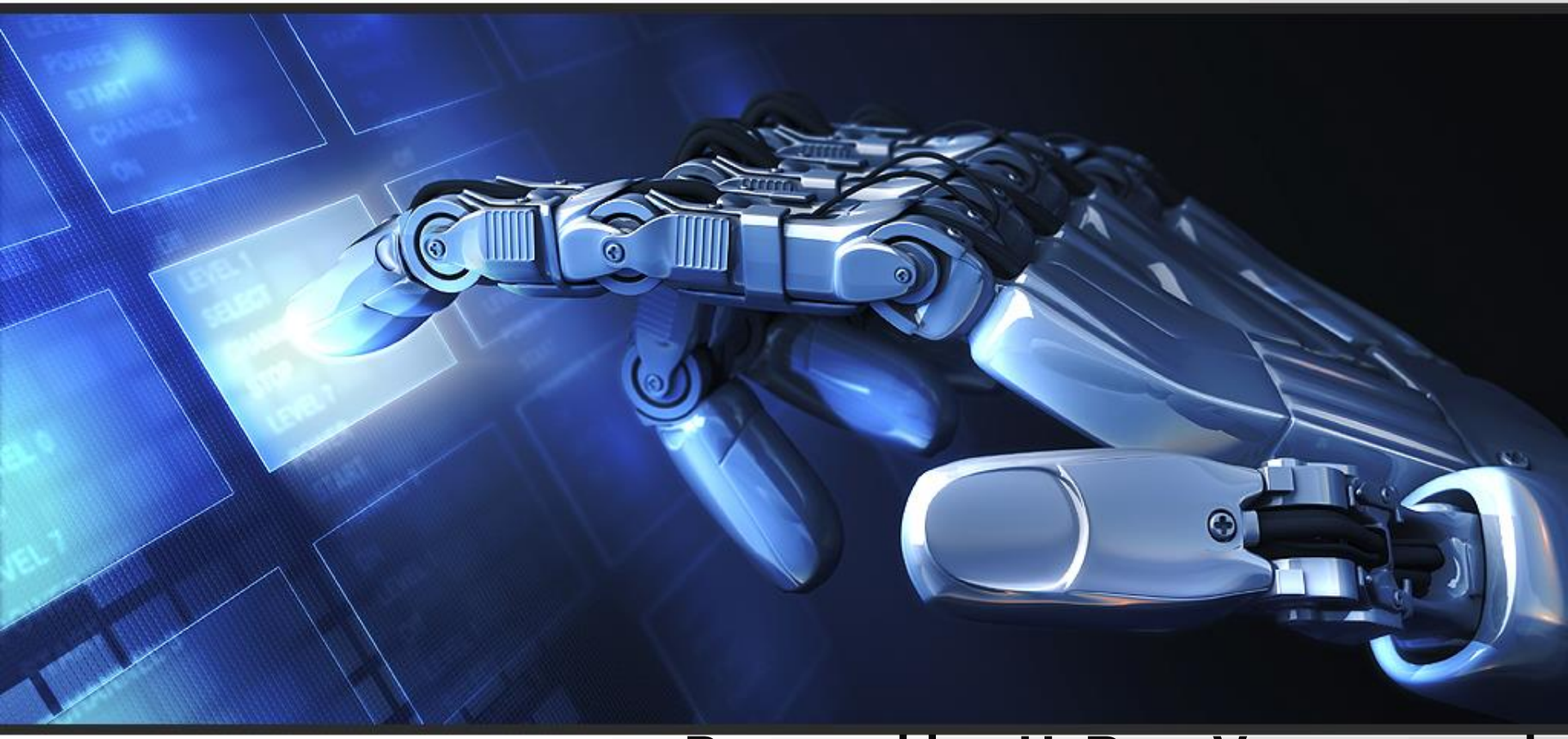
ROC STAGE 4: MOTION PLANNING

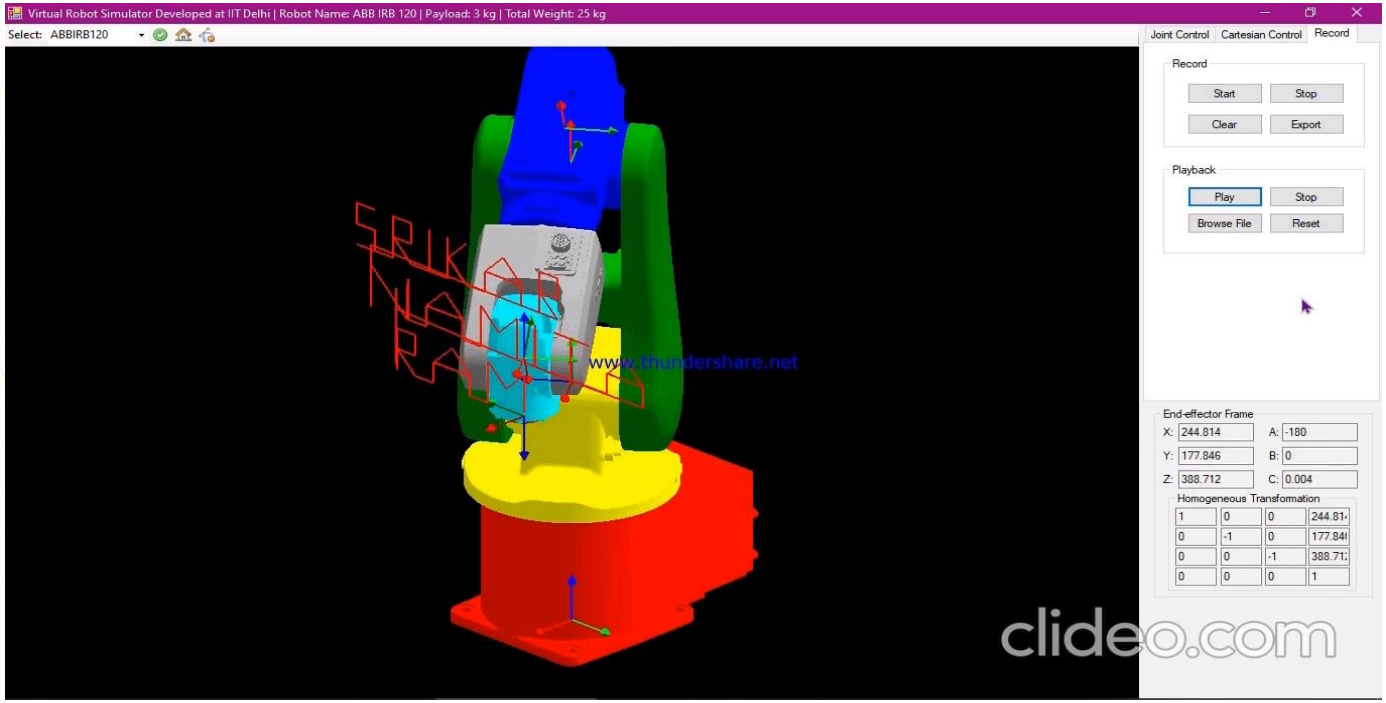


Prepared by: H. Ram Veeramaneni,
Aniruddha Sarjerao Kshirsagar,
Namita Rakshit, Srikar S.

Introduction

- RoboAnalyzer is a 3D model based software that can be used to teach and learn the Robotics concepts. It is an evolving product developed in Mechatronics Lab, Department of Mechanical Engineering at IIT Delhi, New Delhi, India.
- Virtual Robot Module (VRM), which is a part of RoboAnalyzer software, is available as a COM Server. Using this one can have interactions between VRM and other software applications such as MATLAB, MS Excel, etc., which have a COM interface.
- By using RoboAnalyzer software we can draw our names and make shapes by using different virtual robot.

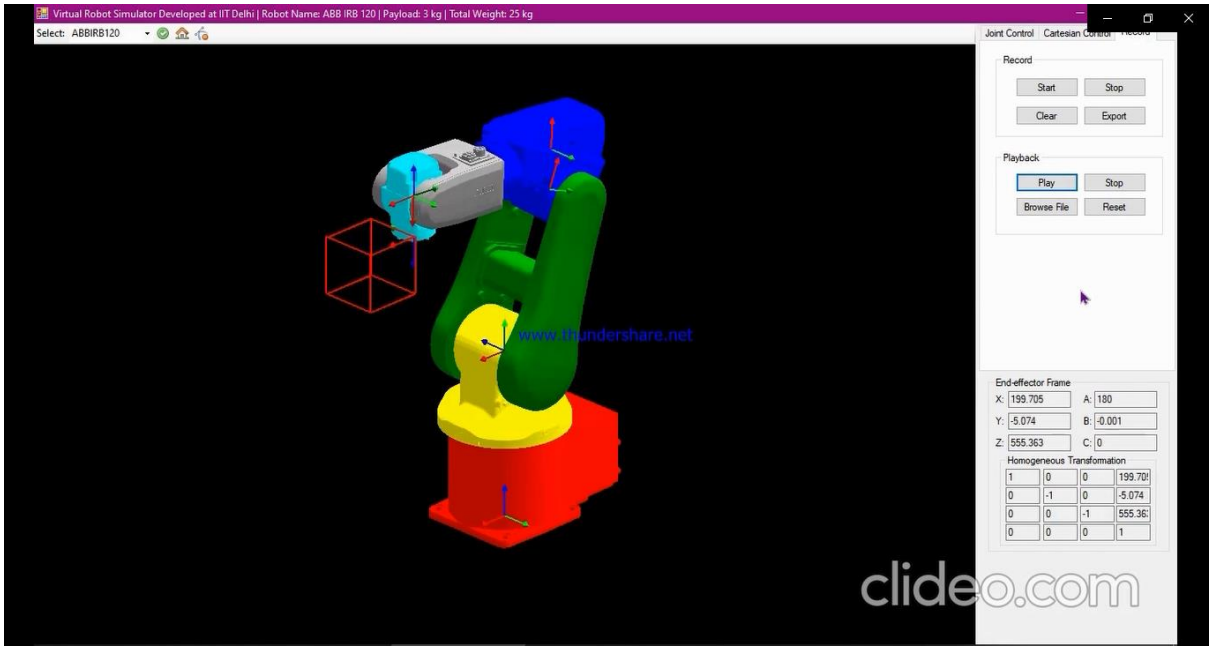
TASK 1: USE VRM TO WRITE NAMES



The makeover of the names can be done by using joint axis ,the RoboAnalyzer virtual robot contains 6 joints and that joint moves along the given axis .

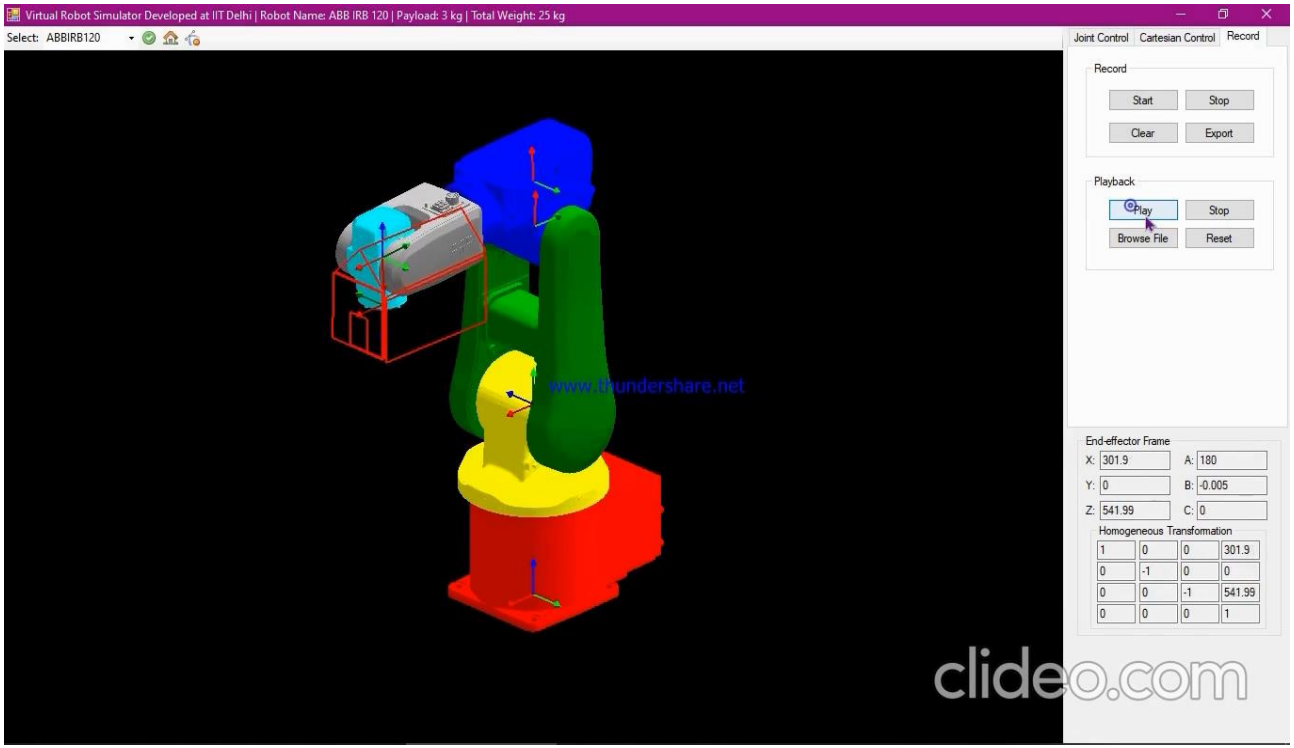
1.First we have to fix the axis length
2.Fixing x, y, z axis to 100 units
3.By playing the virtual robot
4.We can get the given shapes and names

TASK 2: USE VRM TO DRAW SHAPES



- The task can be done by using a shape that is made by the robot.
- For our team we have used cube as a shape.
- By using that shape we can construct house by using that 6 joint manipulator which makes the home model..

TASK 3: USE VRM TO DRAW ANY ARTISTIC ACTION



So, we finally conclude we are able to achieve our desired artistic shape that is a house using VRM of RoboAnalyzer Software.


THANK YOU!