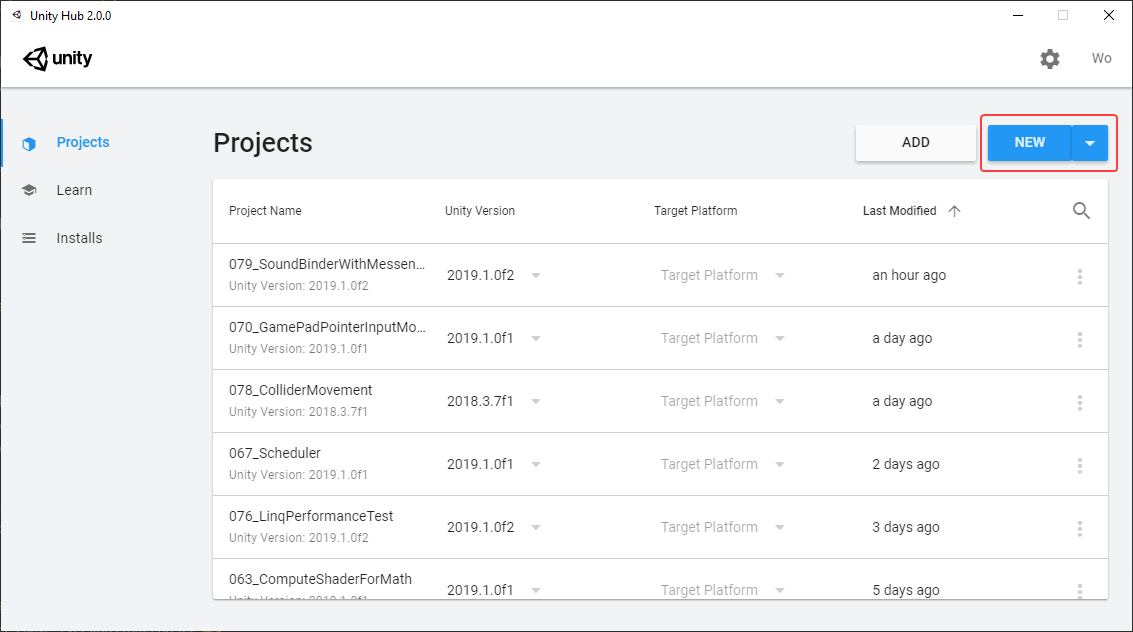
# Abstract

This is a walkthrough guide of delta robot simulation in Unity. This was done as a part of the Ping Pong Playing Robot project.

The main aim of this project was to set up a simulation environment in Unity for testing RL techniques. This environment consists of Delta robot, table, racket and ball.

# Installation

Unity Hub is a management tool/application used for managing all Unity projects and Unity installations.



In the projects tab you can create a new project and access/manage the previous ones.

The Learn tab allows you to navigate through various sources/tutorials available for Unity.

To install unity, in Installs tab you can select the desired version and add it. This is the best and recommended approach to install Unity.

The Unity version used in this project is 2020.3.11f1 LTS (Long Term Support).

# Importing robot in Unity

There are two main approaches for importing a robot in Unity.

## Importing the robot using URDF format and URDF importer plugin in Unity

This is the recommended approach if a URDF (Unified Robotics Definition Format) is available. Most of the complexities and challenges that was encountered in the second approach could be avoided if this method is followed.

The complete tutorial is available at:

<https://github.com/Unity-Technologies/Unity-Robotics-Hub/blob/main/tutorials/urdf_importer/urdf_tutorial.md>

## Importing the robot using OBJ/FBX/Blend formats

# Adding Joints and setting parameters