

# COL781 A4 Report

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## 1 Introduction

These are the results for the A4

## 2 Part 1

We made a central body connected to two small arm like structure further connected to arm like structures, demonstrating movement similar to swimming.

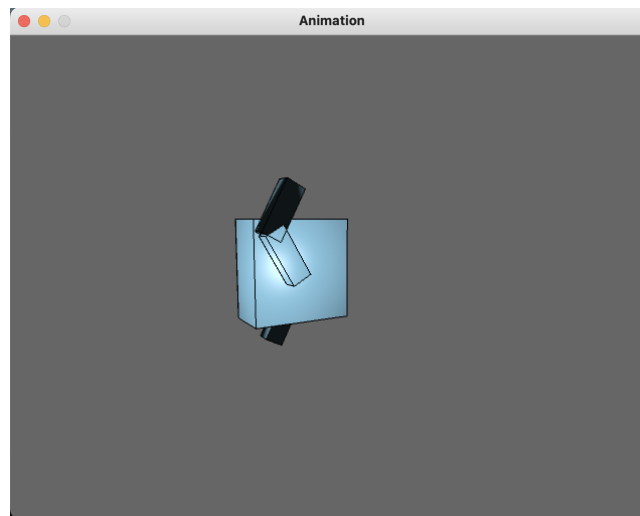


Figure 1: Keyframe

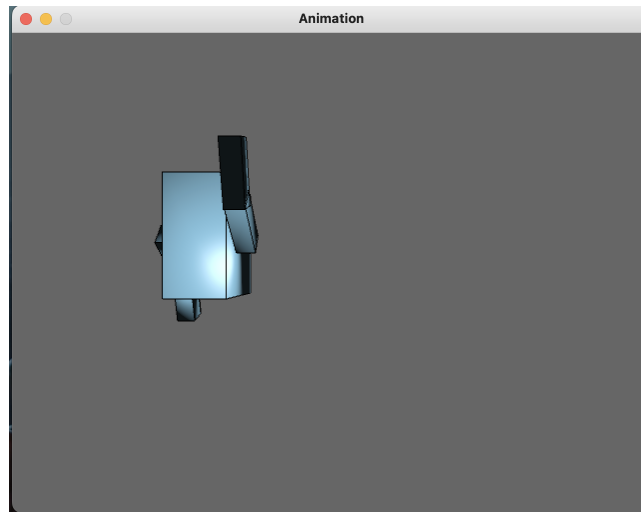


Figure 2: Keyframe

Here is the video link for the animation of the above PART1 Video.

### 3 Part 2

#### 3.1 Non-PBD loop implementation

This is the image for the NON PBD based cloth

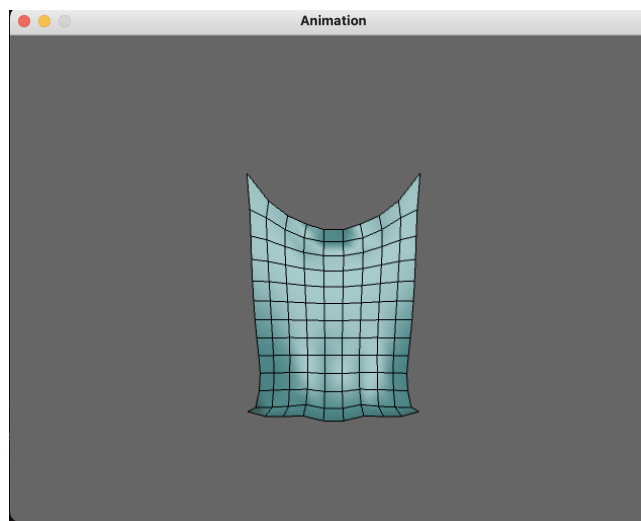


Figure 3: Elastic cloth

Here is the Non PBD implementation video file NON-PBD Cloth implementation

### 3.2 PBD loop implementation

For the optional part we decided to implement the PBD loop, this is an image of the same

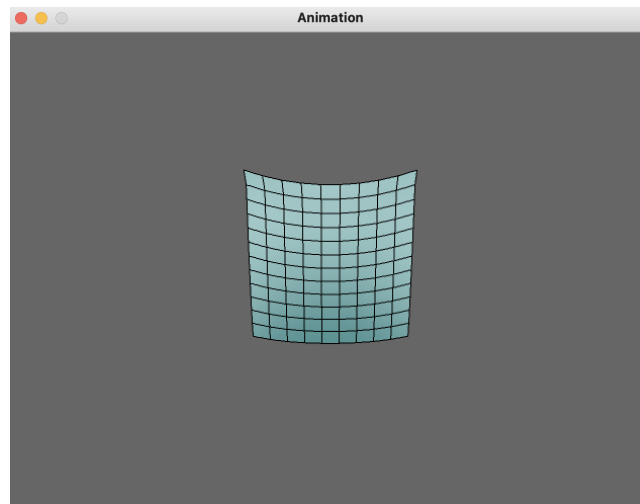


Figure 4: Cloth

here is the video for the same PBD cloth implementation

## 4 Part 3

This scene has a cloth piece falling on a green plane and one sphere coming from the back of the cloth and one from the front, the one in front tries to stretch the cloth but the friction and spring forces behave like a sling changing the direction of the second sphere.

Here is the link for the same : [Part 3 - Video](#)

Here's some images for the same

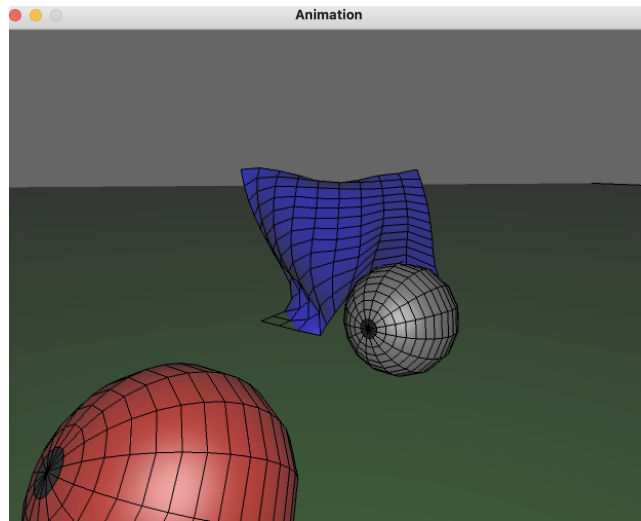


Figure 5: Collision

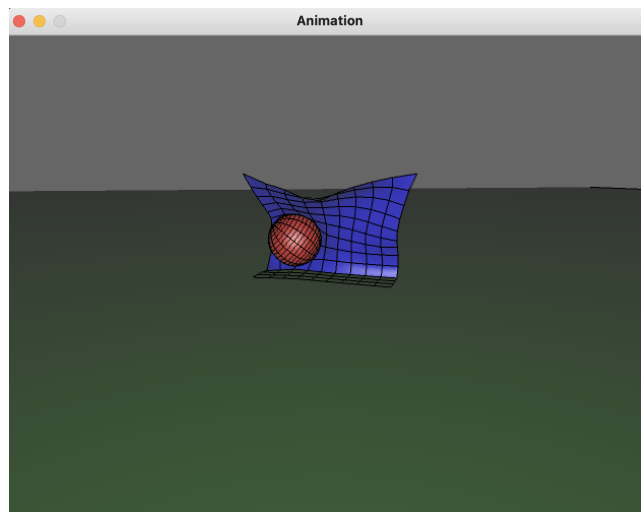


Figure 6: Collision