CTEC601 2024 S2

Assignment 1 – Rube Goldberg Machine

# Name of the Machine

# Team Members

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Contribution description | Contribution weight | Signature |
| Ishanika Singh | Section 1, Design + Assets | 50% |  |
| Abby Sutton | Section 2 Design + Assets | 50% |  |
| Liliana Nicolo | Section 3 Design + Assets |  |  |

# Description

Roughly describe the machine:

* *What is its basic functionality (e.g., Coke Bottle Dispenser)?*

The goal of the machine is to get the duck and toaster into the bathtub so that they both explode.

* *Roughly, how many components/parts does it consist of?*

The entirety of the project consists of three main parts, the beginning, middle and end. We assigned each group member to a specific section, and we all worked on our own allocated sections, and brought the project together in the end. We wanted to also make use of the ground in the bathroom, and so the first section focuses on weaving the ball towards the ground level and exploring levels. The second section focuses on more complex shapes and focuses on being the bridge between the first and last section. The last section focuses on the goal, and transfers between objects (the bath bomb and the duck). The final section releases the duck into the bathtub and launches the toaster which results in an explosion – our desired result.

* *What is the average runtime?*
* *What sort of physically simulated “features” have you used, e.g., Ball Joint, Domino Effect, Levers, Motors,*

We have used a variety of physically simulated features; examples are listed below:

* Hinge Joint (for soap box)
* Domino Effect
* Levels

# Sketches/Screenshots

Insert some key sketches or screenshots of the machine (max. two pages)

# Changelog/Diary

## 22/07/2024

* Assessment introduced in class
* Allocate group members
* Brainstorm potential ideas, concepts and goals

## 29/07/2024

* Created first model of duck for machine
* Created GitHub for collaboration
* Created discord for communication.
* Discussed machine ideas

## 5/08/2024

* Planned and finalised our sink model, bathroom model, toaster model, bath bomb model, and comb model, ready for it to be exported into unity.

## 12/08/2024

* Planned and finalised our sink model, bathroom model, toaster model, bath bomb model, and comb model, ready for it to be exported into unity.

## 19/08/2024

* We tested out all of our sections together
* Organised scaling
* Completed all sections