Product Design 02

Wooden Toy Design

Task 01

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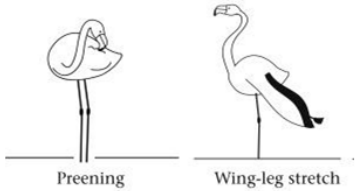
Design Brief

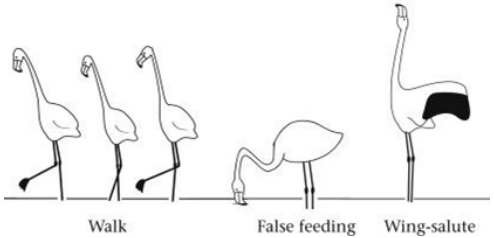
To design a wooden toy for children aged 9-15 months inspired from a selected animal, biomimicking its actions in order to provide the child with a playfull experience of the animal.

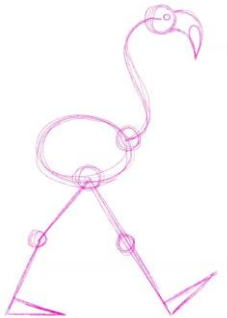
Design Criteria:

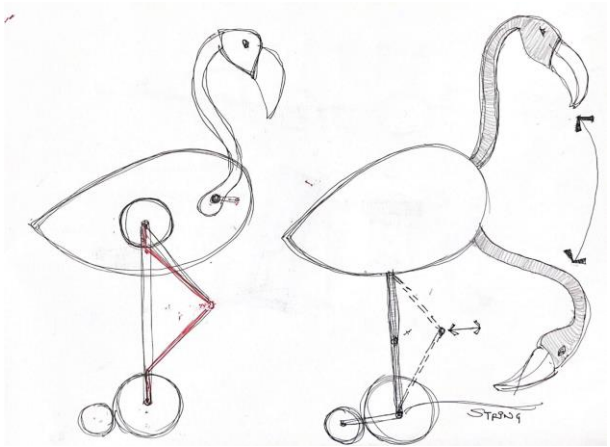
- Toy to be made in either in plywood/mdf/wood.
- Age group for toy to be considered is 9 to 15 months.
- Toy should be operated by either pulling or pushing.
- The colours and form used should be user friendly.
- Toy to be designed for indoor scenario.

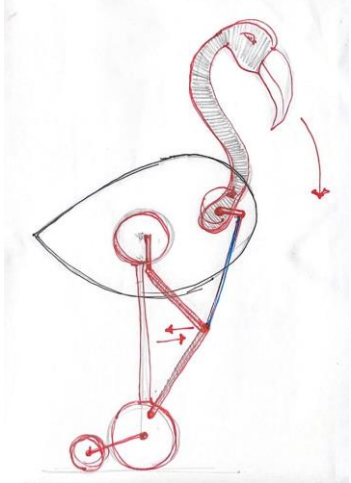
01: Flamingo



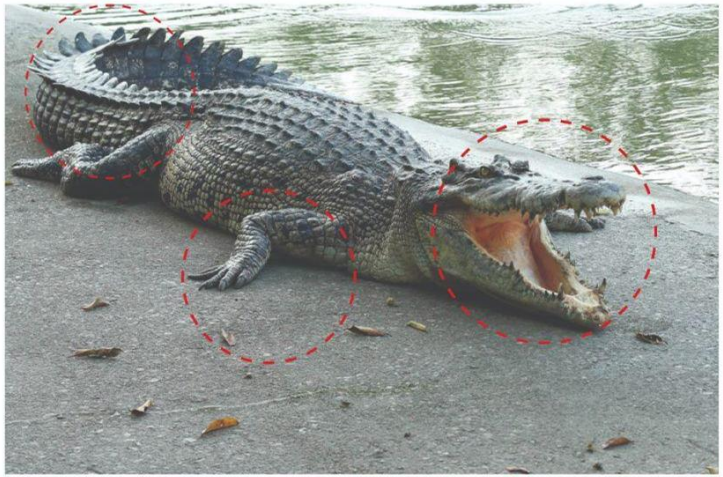


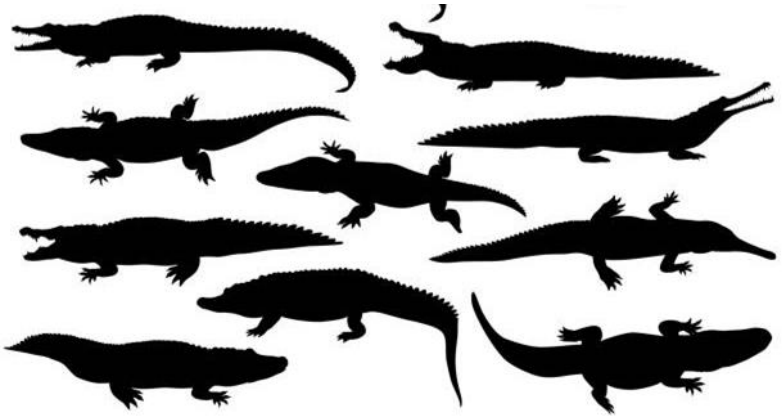


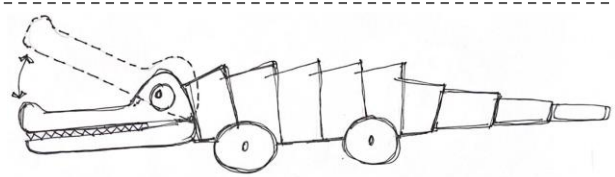


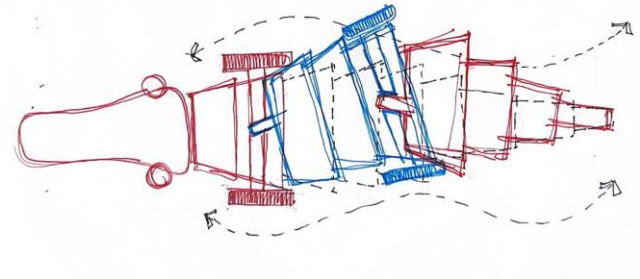


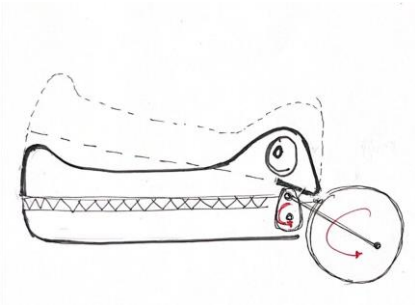
02: Crocodile



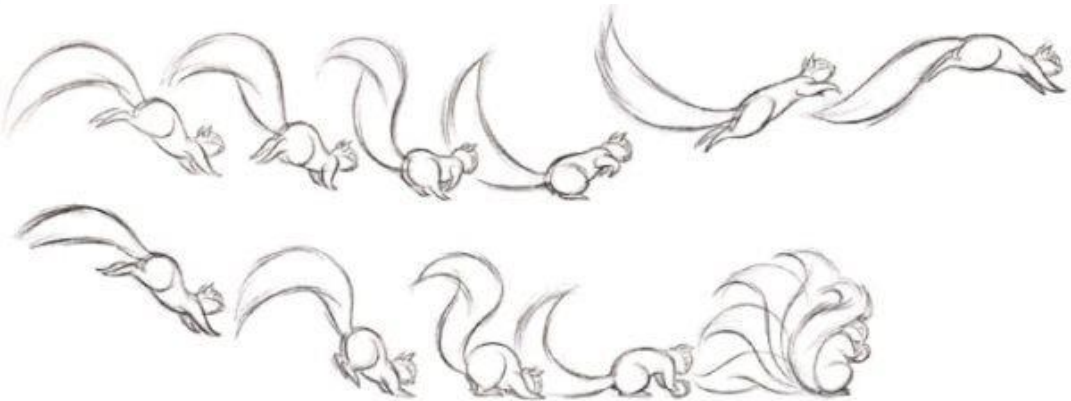




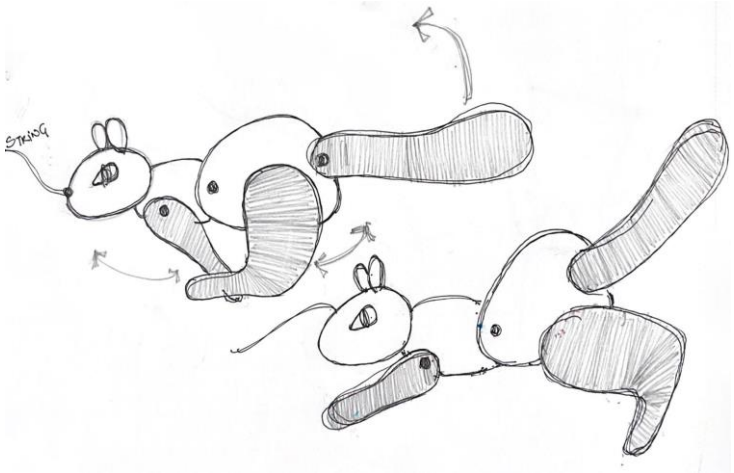


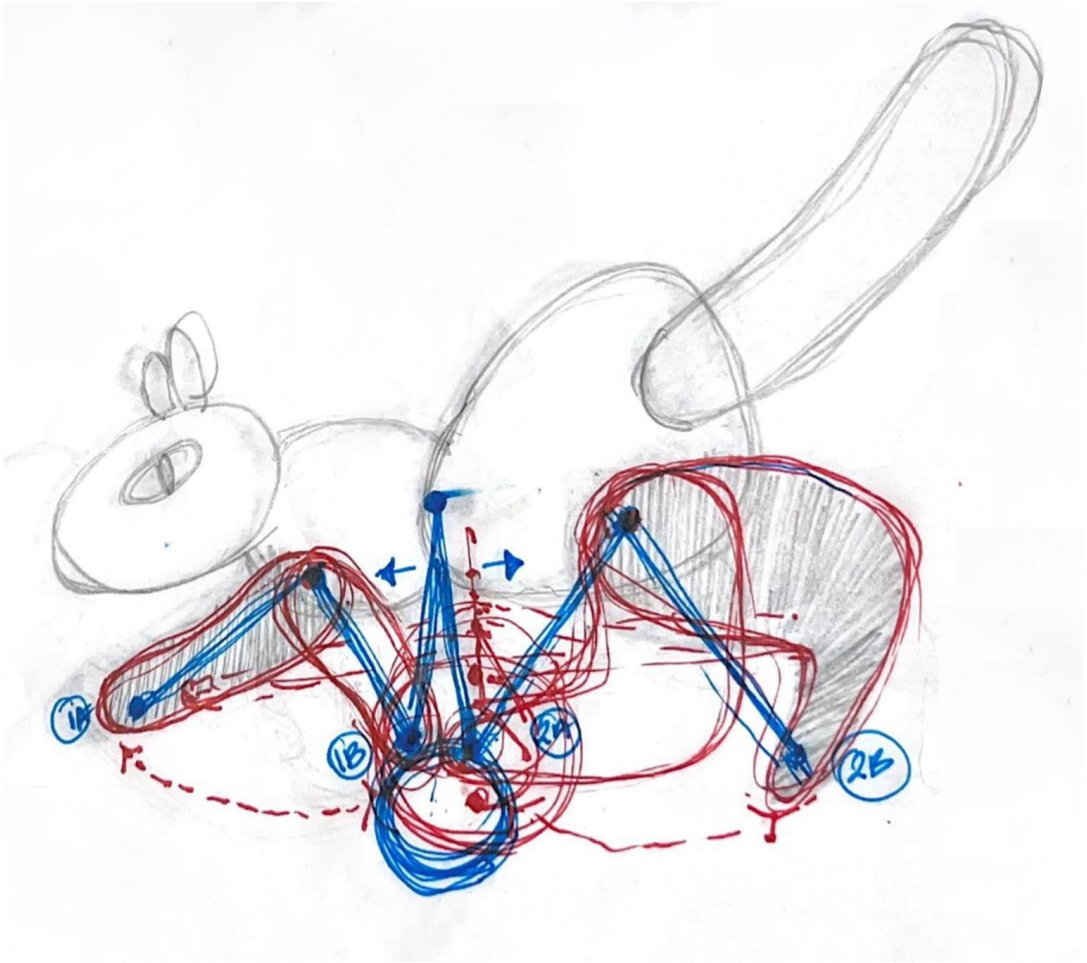


03: Squirrel

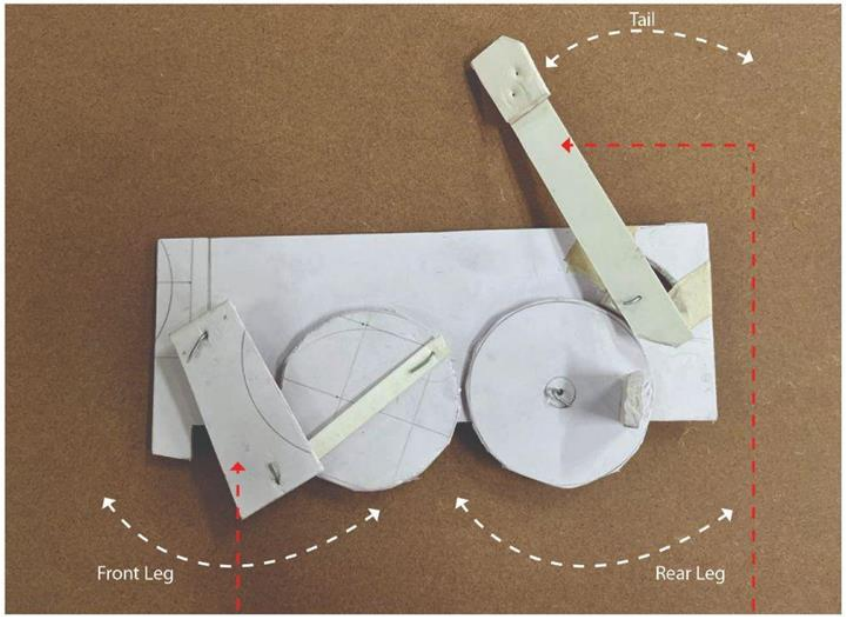


Squirrel 2d Concept Drawing:





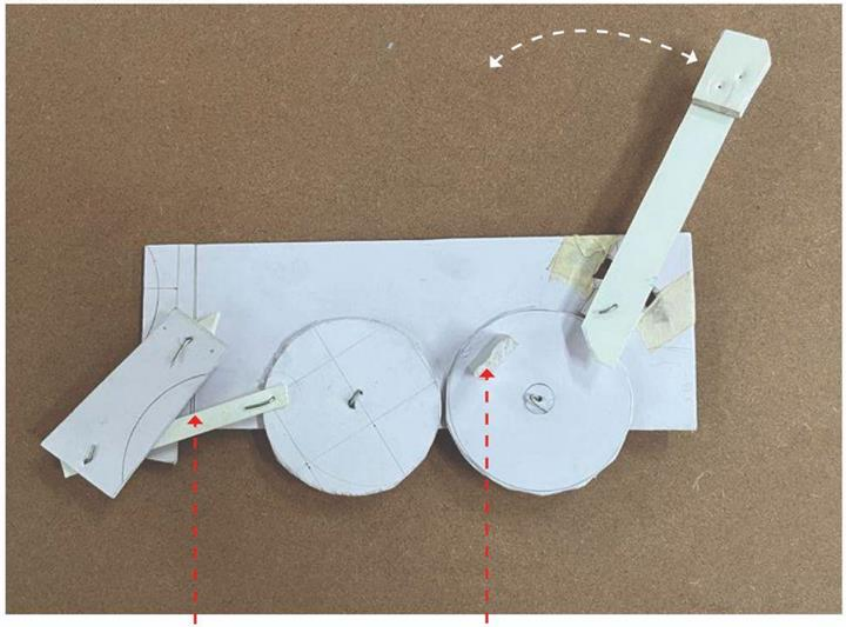
Dirty Prototype 01:



Front and the rear leg moves to and fro like a pendulum together in exactly opposite directions, as they are pivoted at opposite ends on their respective wheels.

Tail moves forward and backward within the given slot when the wheel hits the tail and gravity force gets its back

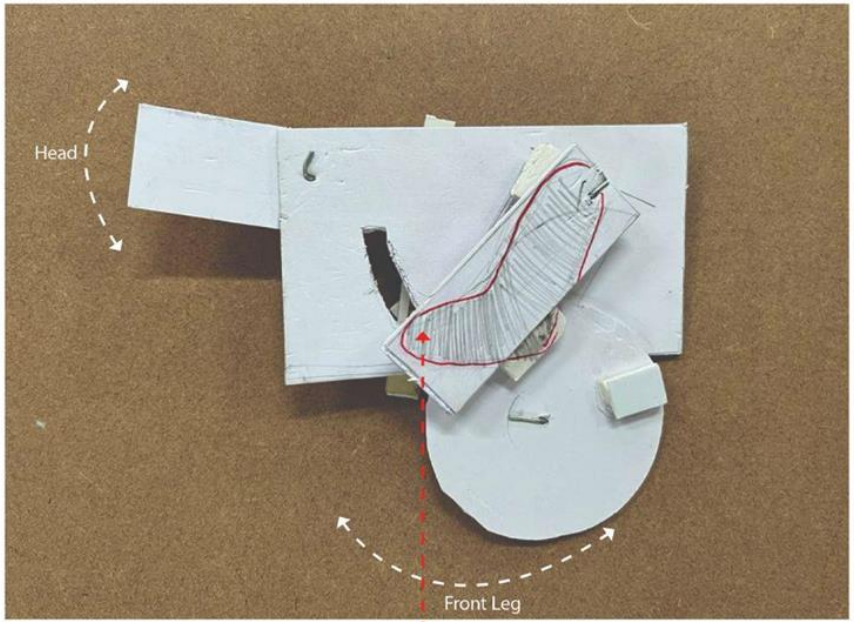
Problems Identified:



Visible lever, not possible to hide.

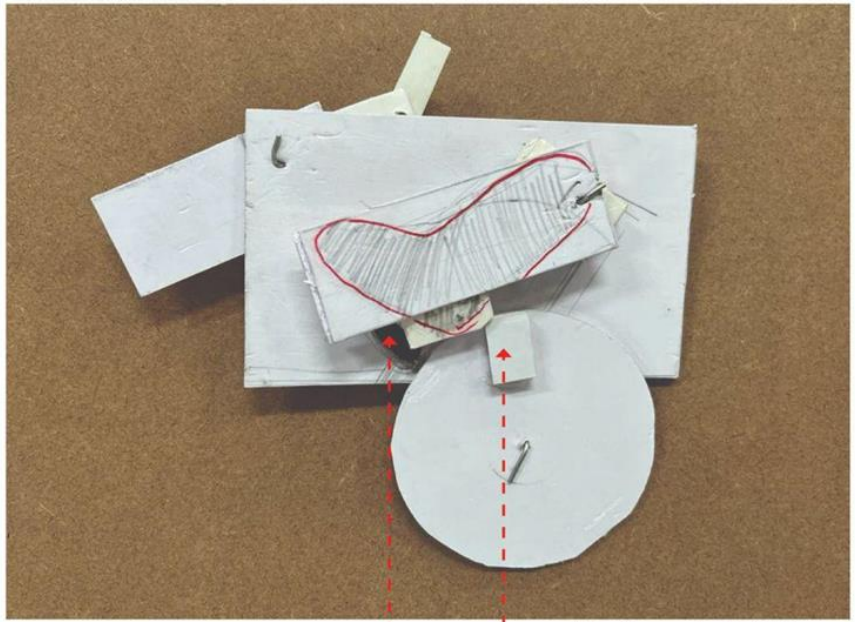
Extrusion on wheel to hit the tail not ideal mechanism.

Dirty Prototype 02: Attempt to avoid levers



Front and the rear leg moves to and fro like a pendulum together in exactly opposite directions, as extrusion on wheels hits them at opposite ends at the same time.

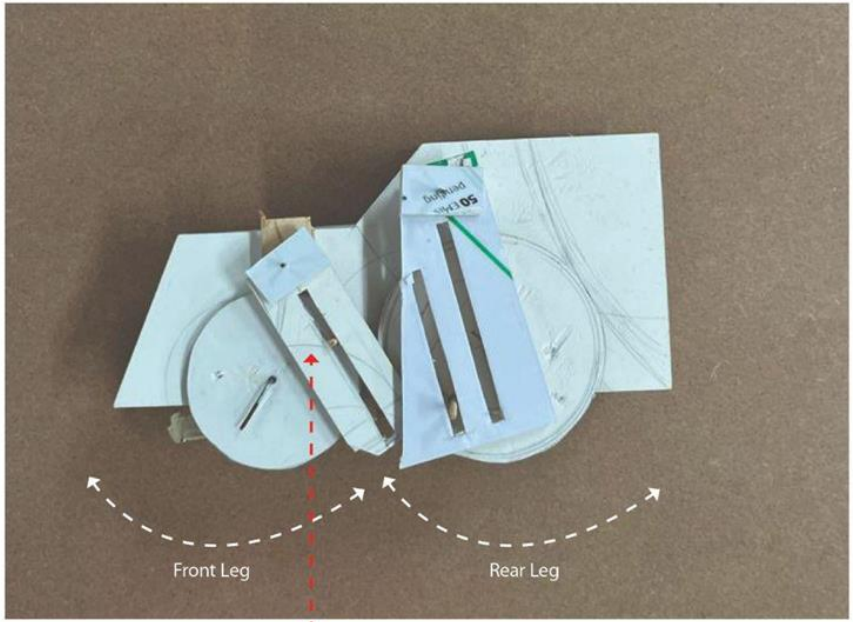
Problems Identified:



Extrusion on wheel to hit the tail not ideal mechanism.

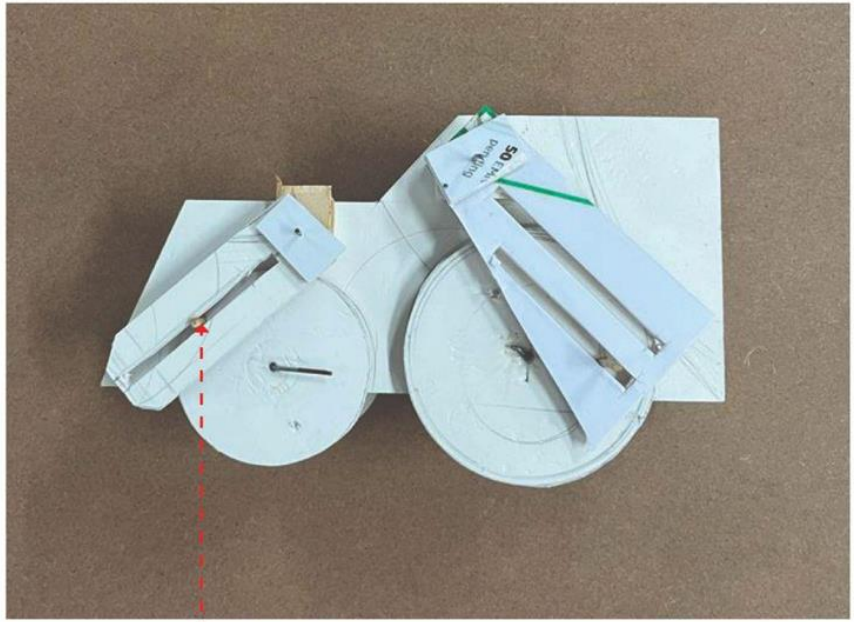
Slot makes it difficult for smooth movement

Dirty Prototype 03: Attempt to avoid extrusions on wheels



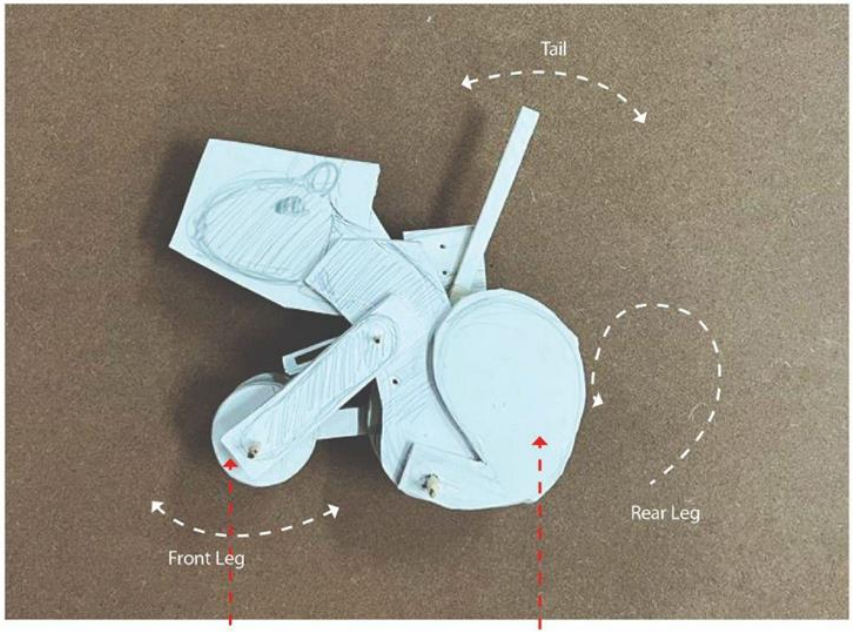
Front and the rear leg moves to and fro like a pendulum together in exactly opposite directions, as the wheels move in the slots provided on the legs.

Problems Identified:



Slot provided in the both the legs make it difficult for the co-ordination

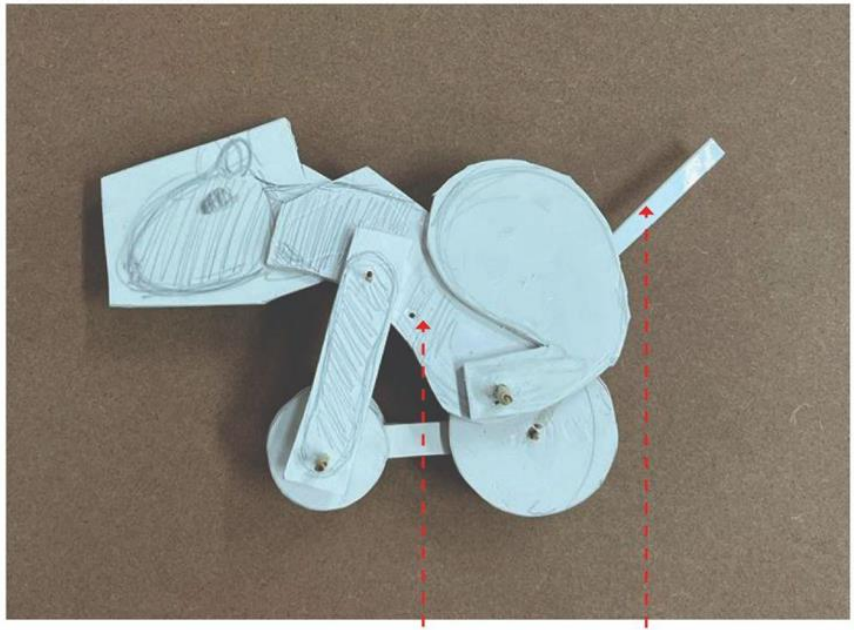
Dirty Prototype 04:



Front leg moves to and fro like a pendulum together in exactly opposite directions, as the wheels move in the slots provided on the legs.

Rear leg jumps(up and down) forward.

Problems Identified:

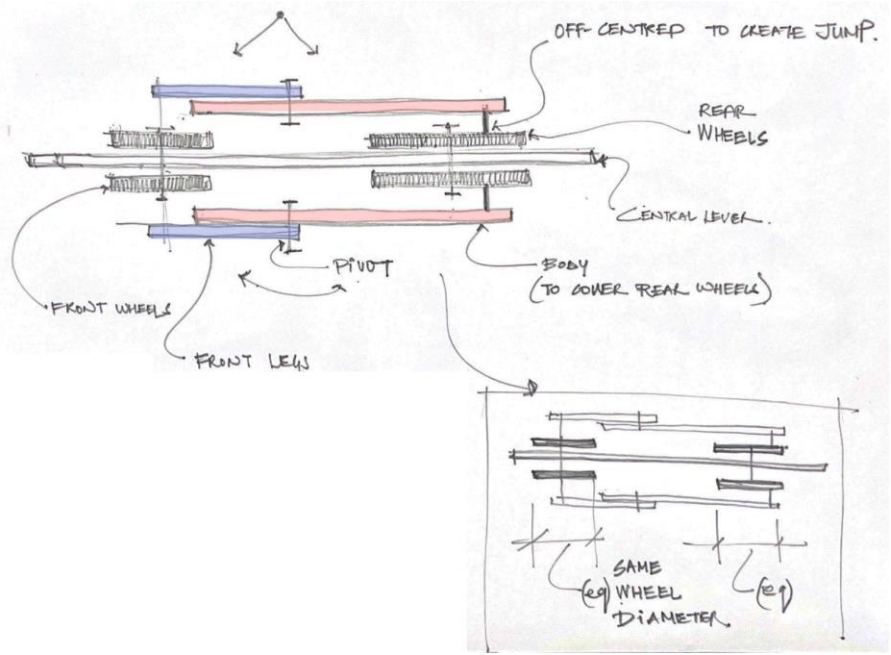


Body not jumping correctectly

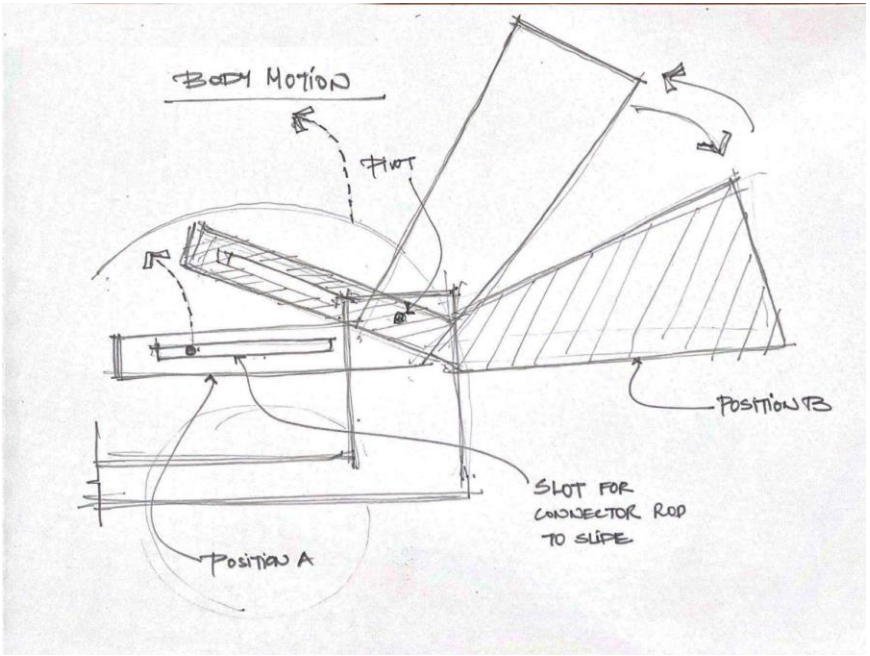
Tail movement less

Sketches

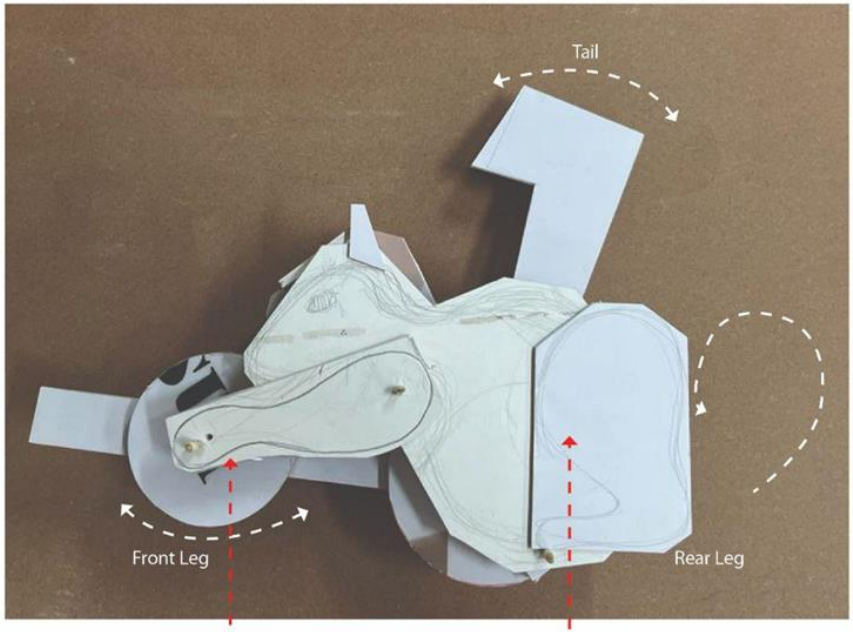
Body Motion Mechanism:



Tail Motion Mechanism:



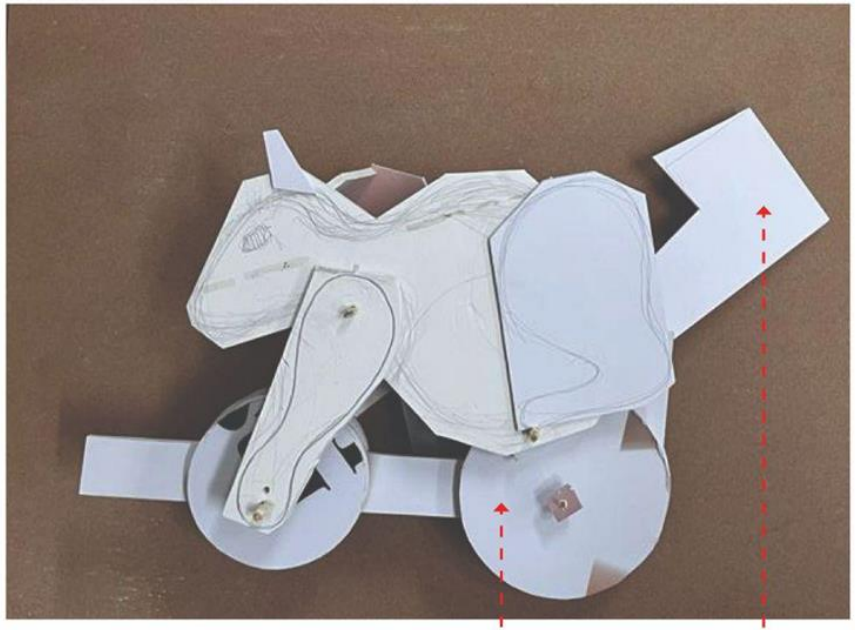
Dirty Prototype 05:



Front leg moves to and fro like a pendulum together in exactly opposite directions, as the wheels move in the slots provided on the legs.

Rear leg jumps(up and down) forward.

Problems Identified:



Rear wheel getting exposed a lot

Tail movement less