# KIDS PRODUCTS FOR PLAY ENVIRONMENT :

**BIOMIMETIC APPROACH** 

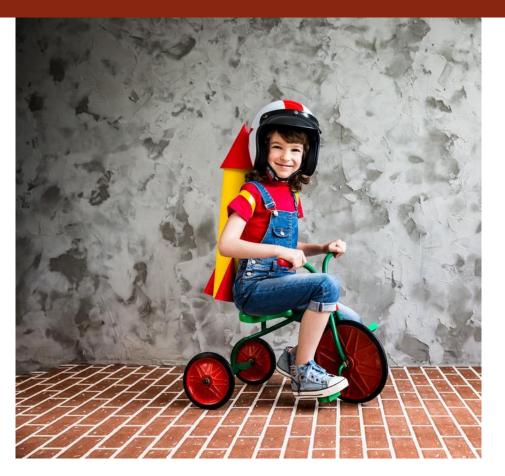
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**IDC, IIT BOMBAY** 

#### Design Statement

- To design an innovative playful ride on equipment for children of age group 6 – 12 years of age to be used outdoors.
- The solution should encourage physical and creative development in children while promoting a cohesive play environment.



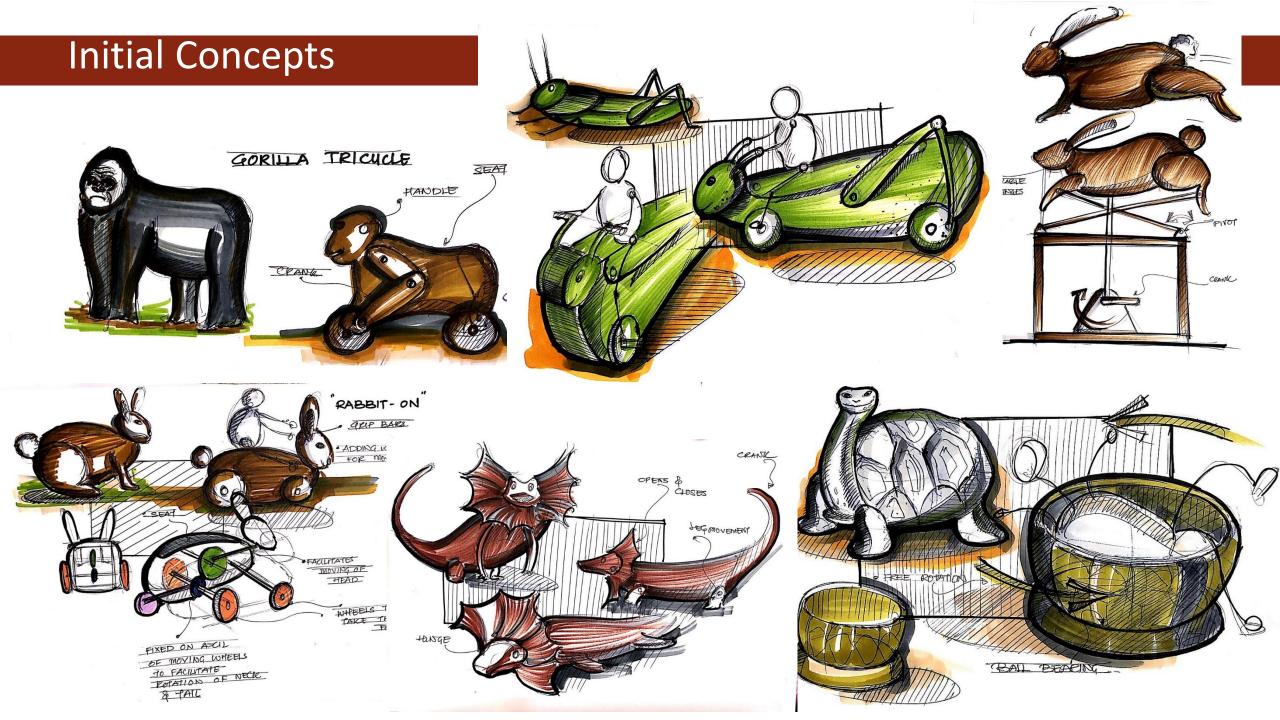
#### **Design Considerations**

#### May Have's

- Cohesive play environment
- Dynamism inducing the Thrill factor
- Dynamic components
- Intellectual development with equipment
- Encouragement of Imagination

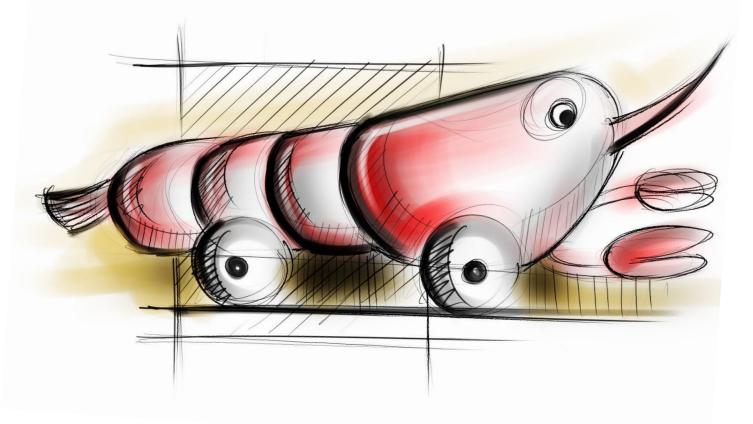
#### Must Have's

- Equipment fostering confidence in parents
- Flexibility of use / freedom of exploration
- Window for exploration
- Interactive feedback system
- Fall friendly Equipment
- The equipment should not allow over-crowding



# Final idea

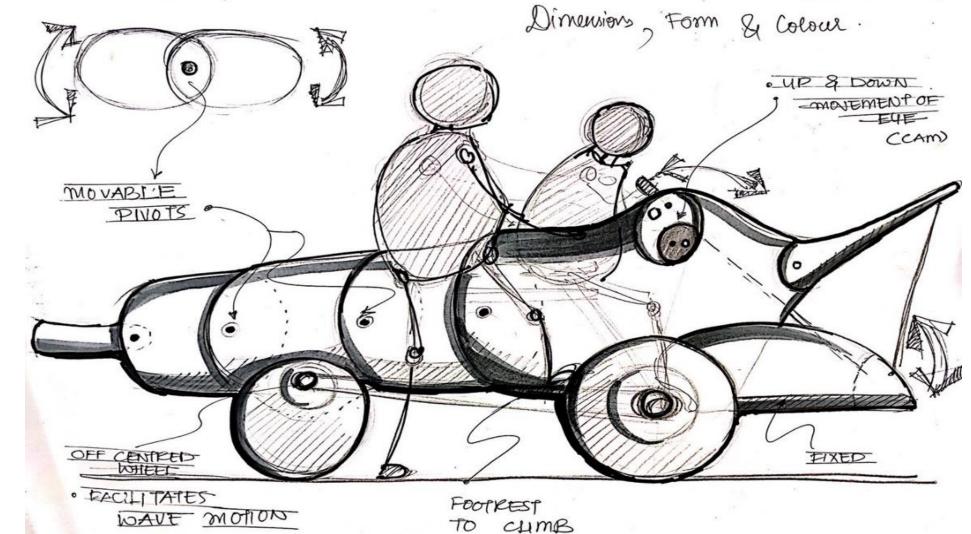
• Taking Lobster as inspiration to develop a ride on to playfully promote physical activity in children.





### Conceptualization

- Developing the idea into a concept.
- Mechanism to provide for the wavy motion of the tail powered by pedalling of the child.
- Exercise for the legs.
- Movement of claws by to and fro motion of gripping bars held by the child.
- Exercise for the arms.



## Dirty Prototype

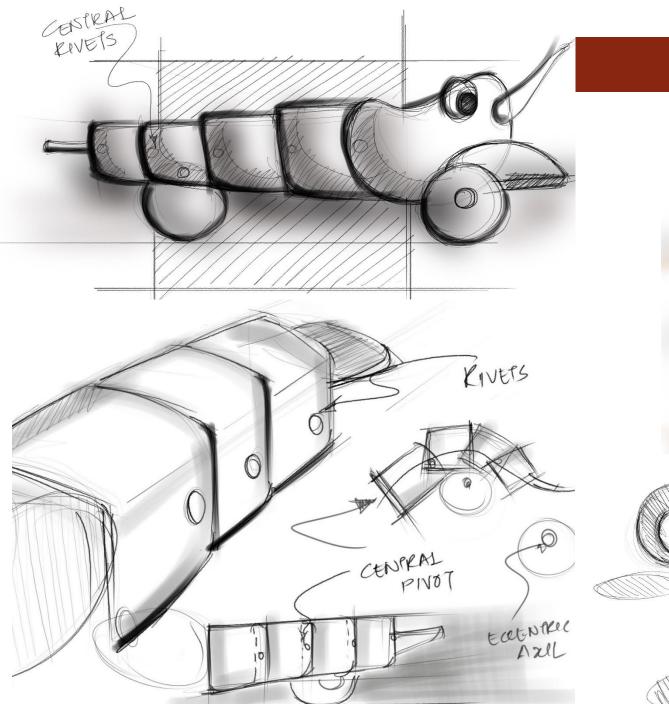


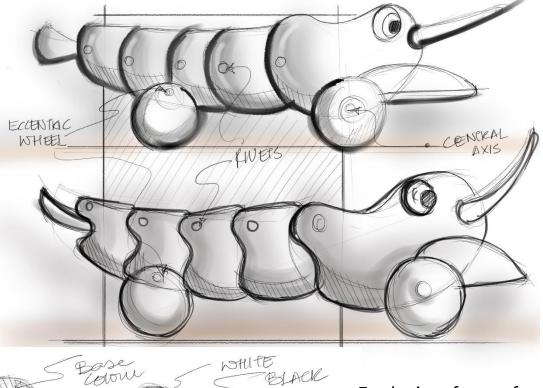




- Quick model to understand the working of the mechanism.
- Helps understand scale and proportions.

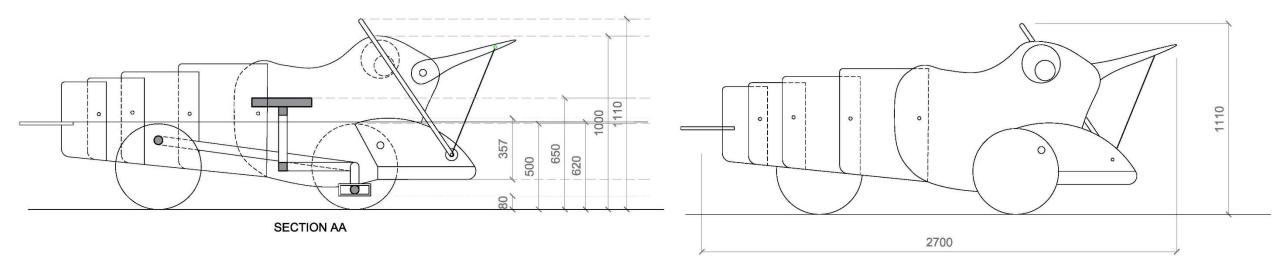
# **Formal Variations**

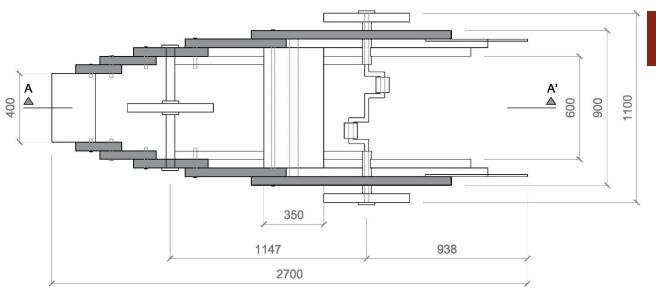




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- Exploring forms for the tail to ensure free movement.
- Also visual expressions for making it children friendly.



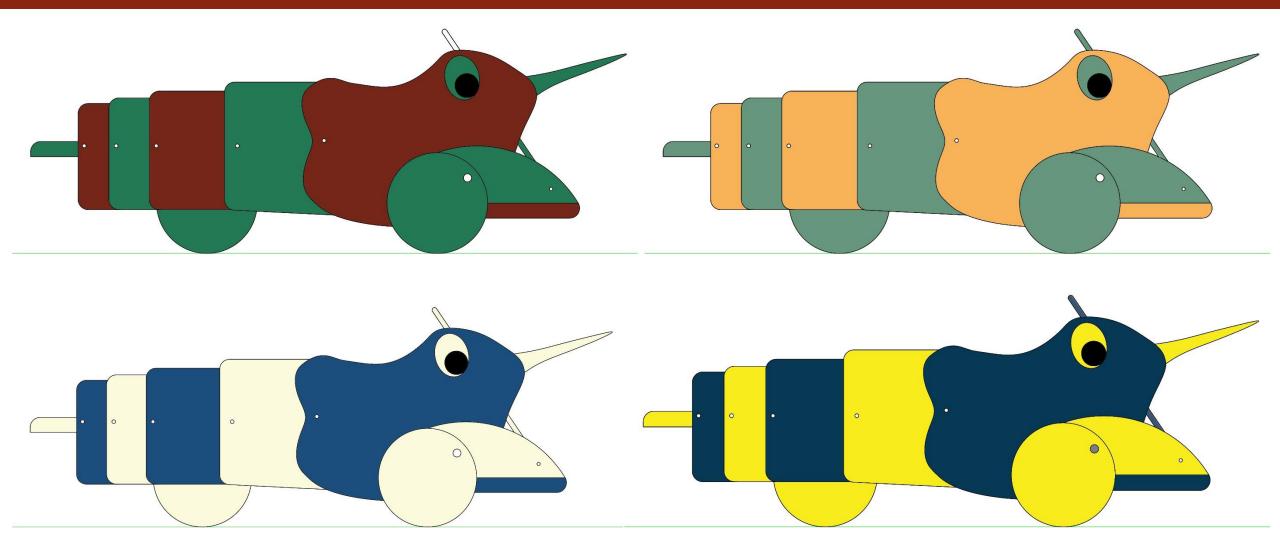


## Measured Drawings

- Understanding Scale and proportions of the product at 1:1 scale.
- Enabling build of the product.

PLAN

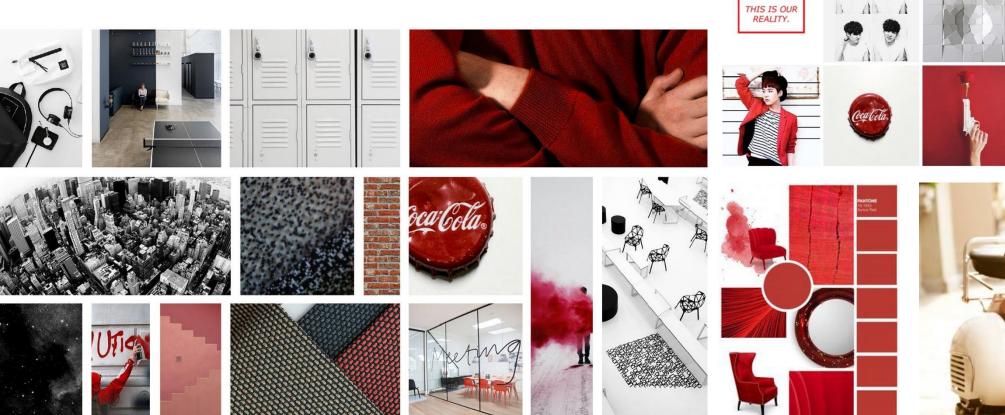
# **Colour Variations**



• Explorations with high contrast and bright yet sober colours to appeal to the children.

### Mood Board



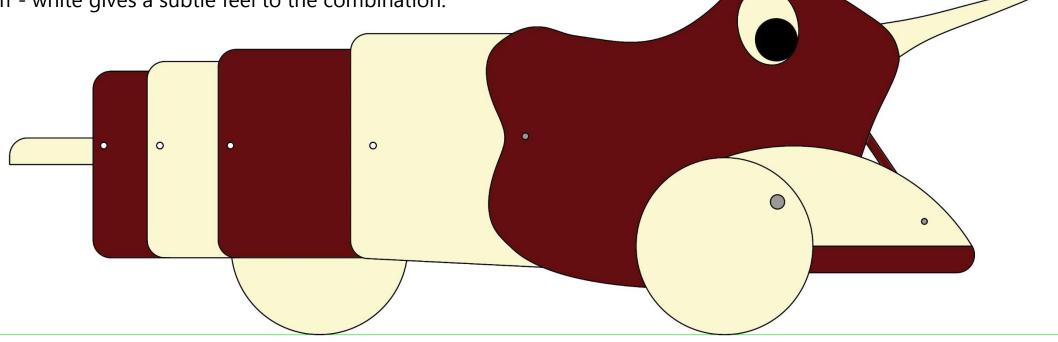


• Looking at inspirations for red and white contrasts.



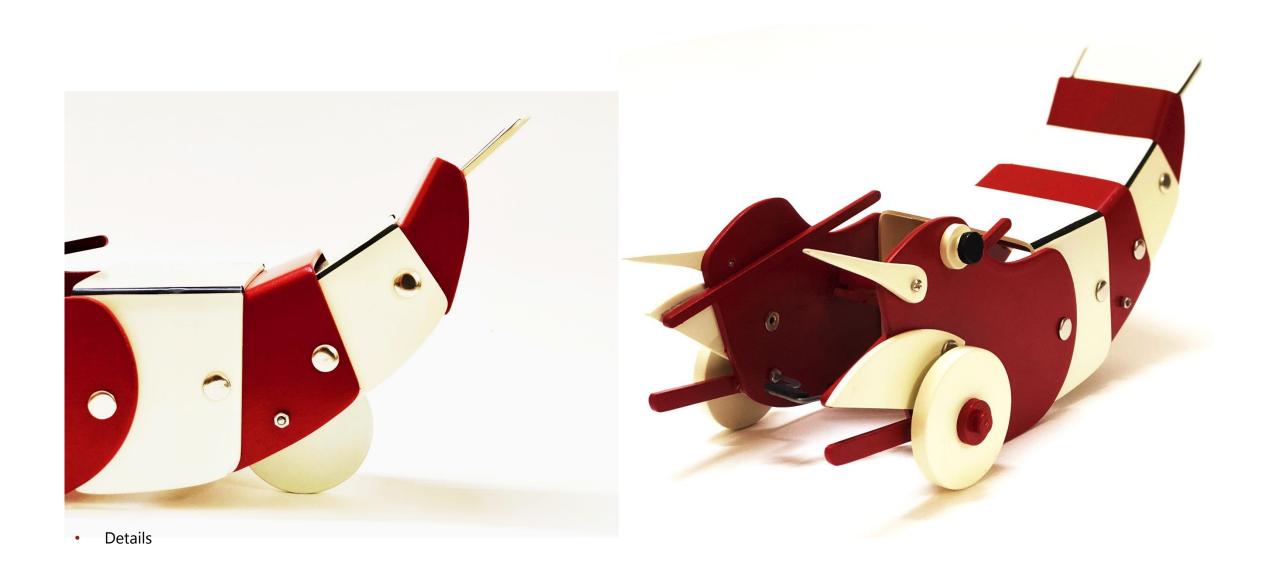
#### Colours

- High contrast to give clear differentiation of shades.
- Bright and inviting.
- Red has highest wavelength and is eye catching.
- Off white gives a subtle feel to the combination.

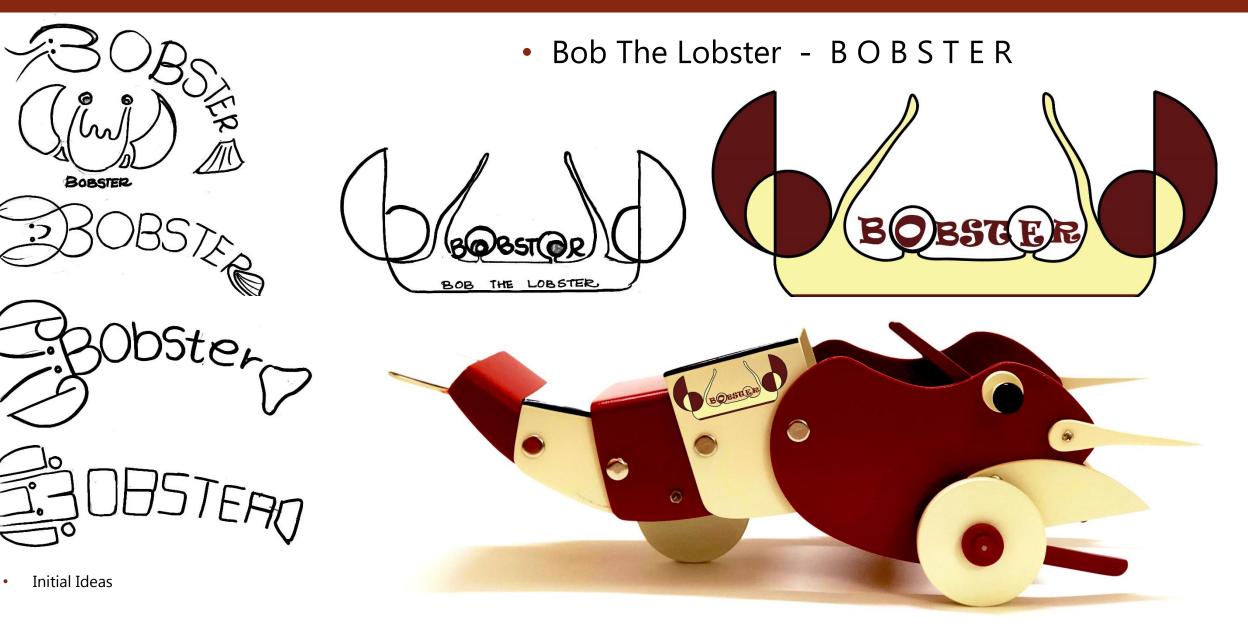


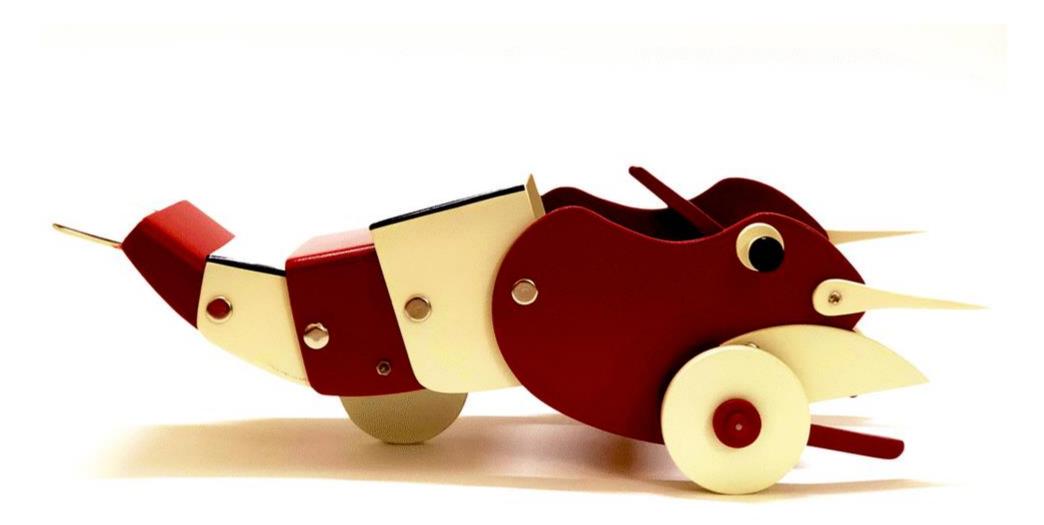
# Final Design





# Colours





Thank You