



Mahatma Gandhi Missions College  
of Engineering & Technology

# Design and Fabrication of Moto Drift Trike

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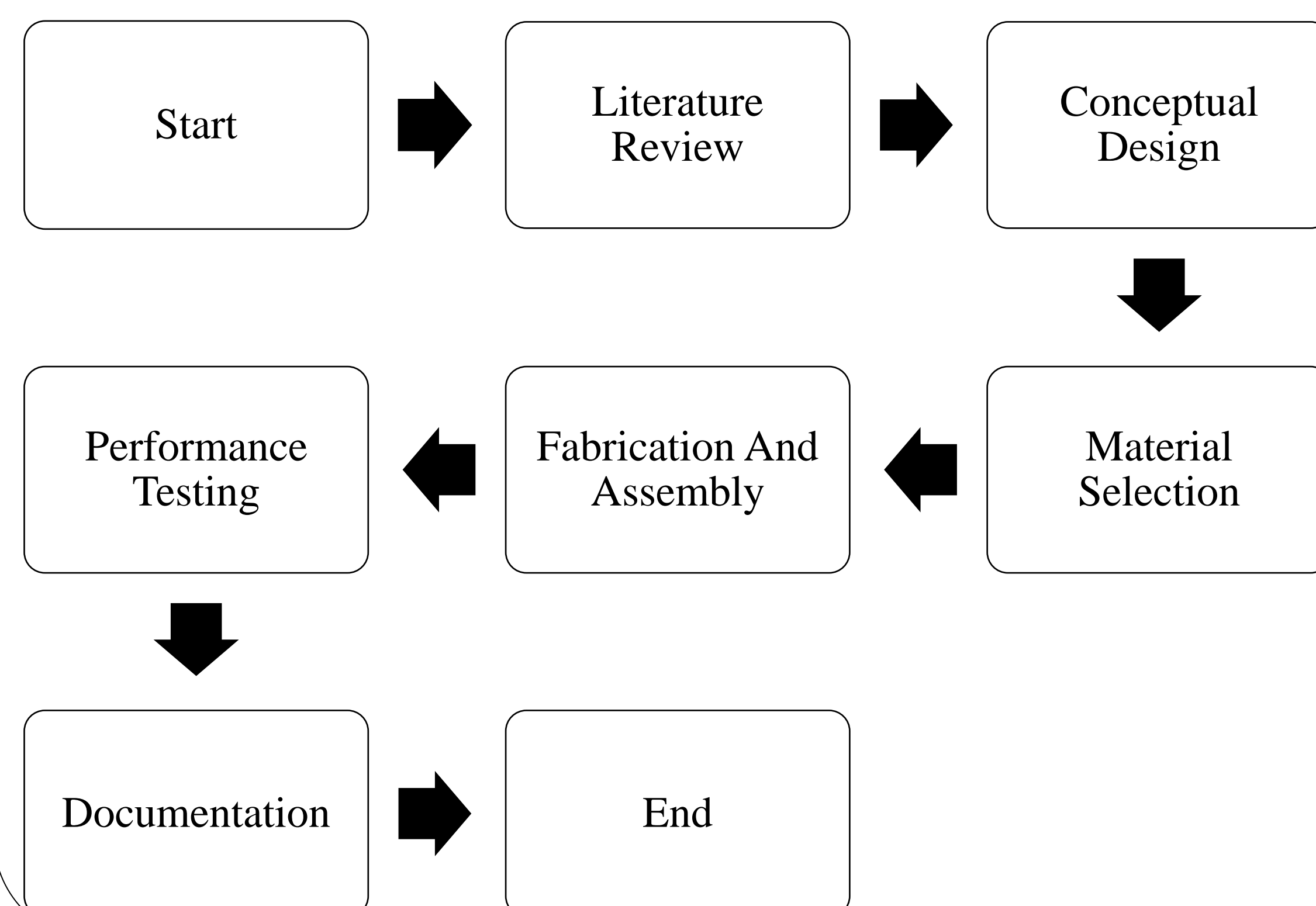
## Introduction

- Tricycles are the 3-wheeled vehicles that has two wheels either at the front end or rear end.
- These kind of vehicle can be manually operated or automatically operated powered at front or rear end.
- A three Wheeled vehicle comprises a frame with a rear axle assembly that mounts a pair of spaced rear Wheels.
- Drift trikes are like three wheeled go karts with smooth rear wheels that allow the trike to slide sideways around corners.
- Drift trikes are tricycles that have slick rear wheels, normally made from a hard plastic, often PVC.
- Motorized trikes can be powered by motorcycle engines, smaller automatic transmission scooter motors, or electric motors.
- They are designed to drift, by intentionally initiating loss of traction to the rear wheels and counter-steering to negotiate corners. They are usually ridden on paved roads with steep downhill gradients, with corners and switchbacks.

## Project Objectives

- Design and fabrication of a single rider, automatically operated trike.
- To make the three-wheeled vehicle drift.

## Methodology



## Results and Discussion

Specification of Trike

s. No.	Vehicle Specification	Target	Actual
1	Wheel base	100-130 cm	111 cm
2	Track width	90-120 cm	110 cm
3	Ground clearance	Maximum 7 inches	5 inches
4	Engine	2-stroke (125cc)	2-stroke (98cc)
5	Brakes	double disc brakes	Single disc brake

Overall Performance

S. No.	Aspect	Value
1	Total mass	40 kg (approx.)
2	Maximum velocity	40 kmph
3	Turning radius	3 m

## IMAGES



## Conclusions

- The fabrication of the drift trike was completed with great satisfaction.
- Our prime motive was to limit the money invested in building the drift trike and this objective was well achieved.
- The following modifications can be implemented on the vehicle to improve its overall performance in the future:
  - An engine with the higher power rating can be used to increase the speed and overall performance of the trike.
  - The thickness of tubes can be increased so as to form a more rigid base and support heavier weights.
  - Double disc brakes can be installed to increase the braking effect.

## References

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