

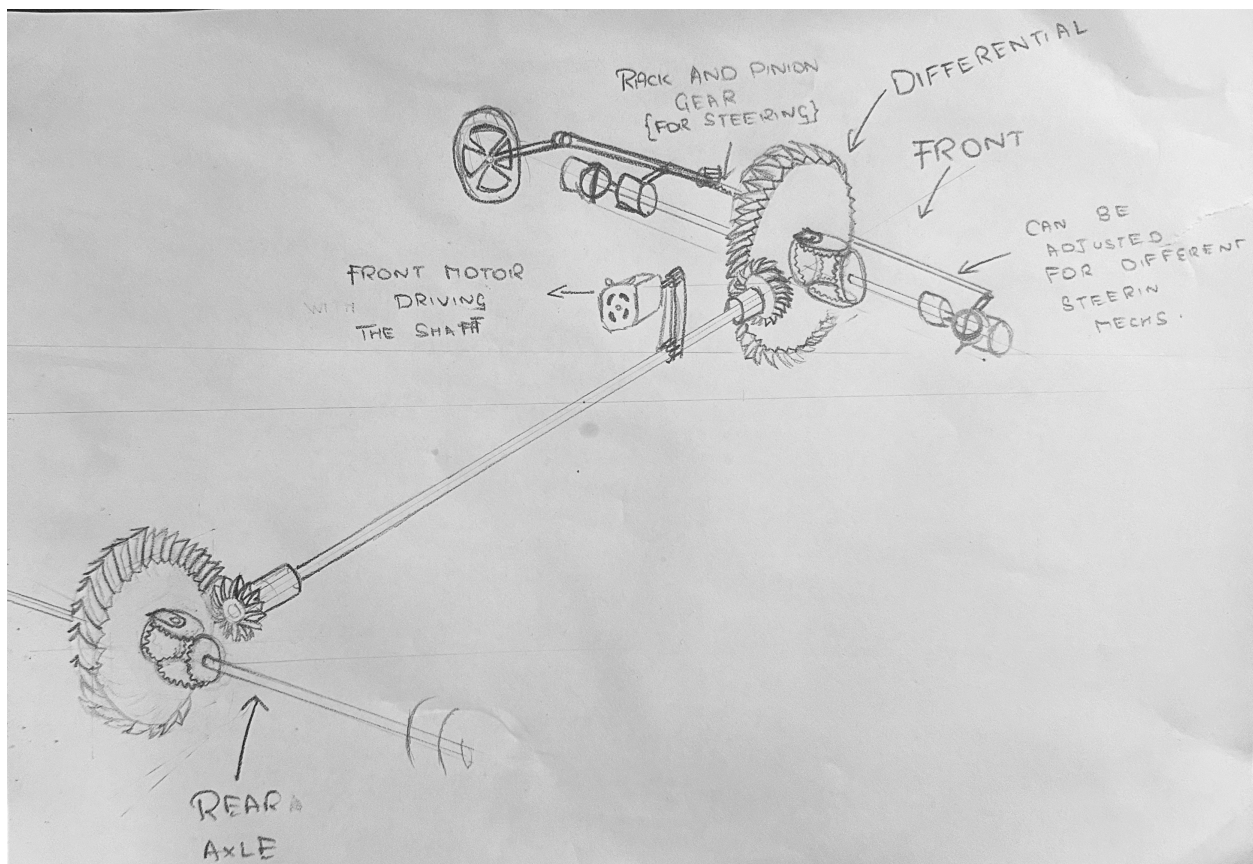


W4-A4

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📖 Class	RoboDive

Drivetrain

Image



Description

FRONT

- The motor is placed at the front (as specified in the design) and is used to drive the main shaft.
- The main shaft is connected to the front axle differential. The ends of the front axle are attached to pivotable components to enable steering, which are linked via a rod that can be adjusted for various steering mechanisms.
- Steering is facilitated through a rack-and-pinion gear mechanism, as shown in the figure.

REAR

- The main shaft is further connected to the rear axle via a rear differential.

DIFFERENTIAL

- **Front Differential:** The front differential is specially designed to integrate with the steering mechanism, allowing torque distribution while accommodating the turning angles of the front wheels.
- **Rear Differential:** The rear differential ensures smooth power delivery to the rear wheels, even on uneven terrain or when cornering, improving overall traction and stability.