

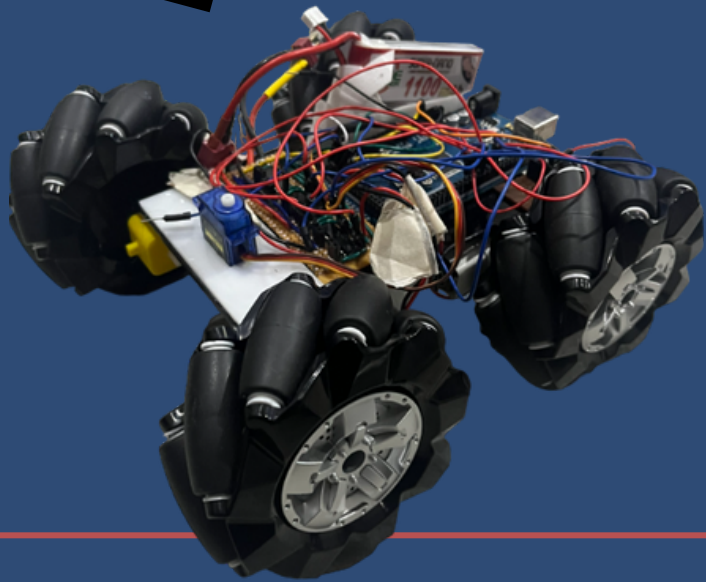
ROBOTS TO RESCUE

TEAM 3

Engineering Quality

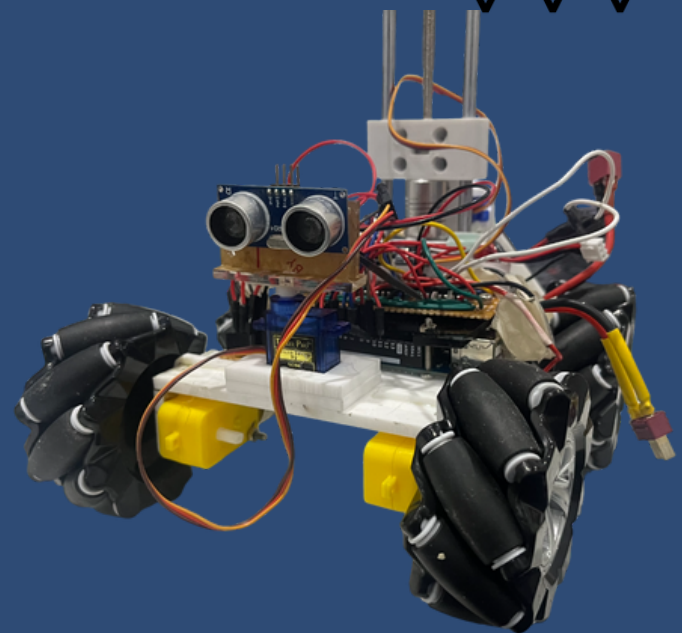
The rescue robot with an acrylic chassis is lightweight (1kg) and equipped with a claw for gentle handling of the victim at an adjustable height.

Compact and agile, it extends to 25 cm and overcomes 30mm steps easily with a wheel radius of 40mm.



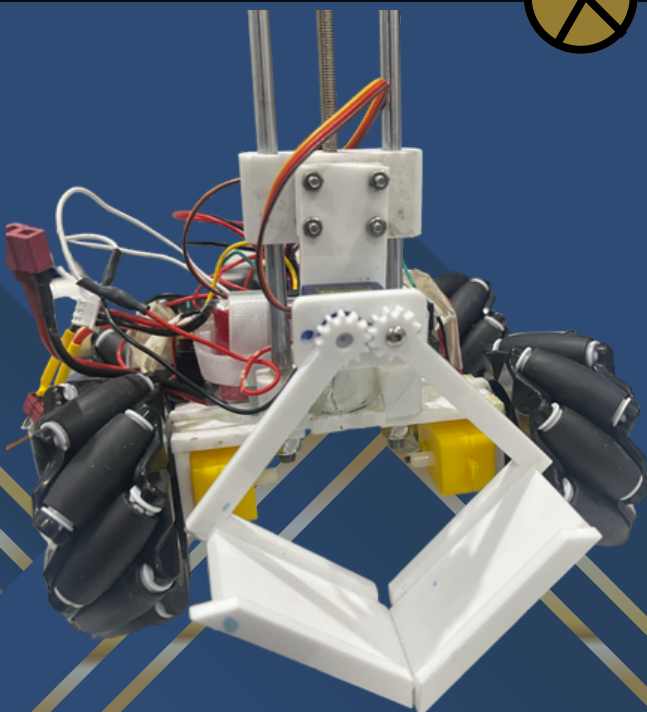
Robustness

The robot's strength is demonstrated by its large, elevated wheels for navigating rough terrain, an acrylic body for impact resistance and long-lasting ABX plastic wheels, which ensure dependable performance in challenging rescue scenarios.



Aesthetic Appeal

From start we aim for streamlined appearance in design with the integration of Arduino board along with circuits and battery under a single chassis, hiding the complexity and technical components from audience. The white acrylic chassis and metal z-axis added to a modern clean look on top of their functional advantage.



Innovation

Our robot has innovative Mecanum wheels for 360-degree movement and a z-axis screw mechanism that allows for dynamic height adjustment of the claw via a motorized, 3D-printed assembly, providing precise control when navigating and manipulating objects.