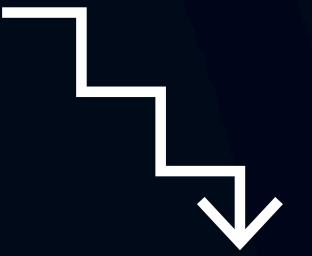
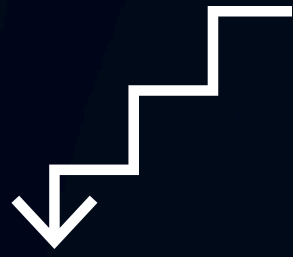


ROBOT ICON OR ILLUSTRATION.

MINI DELIVERY

ROBOT

OPTIMIZING INTERNAL LOGISTICS
THROUGH AUTOMATION



INTRODUCTION



- Mini Delivery Robot automates small parcel deliveries in confined spaces.
- Reduces delays, labor costs, and human errors.
- Enhances accuracy, efficiency, and resource allocation.
- Designed for cost-effectiveness, stability, and easy navigation.
- Scalable solution for streamlining logistics operations.



INTRODUCTION



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PROBLEM STATEMENT

- Manual deliveries cause inefficiencies, delays, and high labor costs.
- Human errors and workflow disruptions affect delivery consistency.
- Repetitive tasks waste resources better used for higher-value work.
- Mini Delivery Robot automates logistics for faster, cost-effective, and reliable deliveries.



OBJECTIVES

- Mini Delivery Robot prototype for automating small parcel deliveries.
- Enhances efficiency in offices, hospitals, and campuses.
- Reduces labor costs, errors, and delays.
- Optimizes resource allocation and logistics.
- Scalable with AI and IoT for future advancements.



OBJECTIVES

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SCOPE

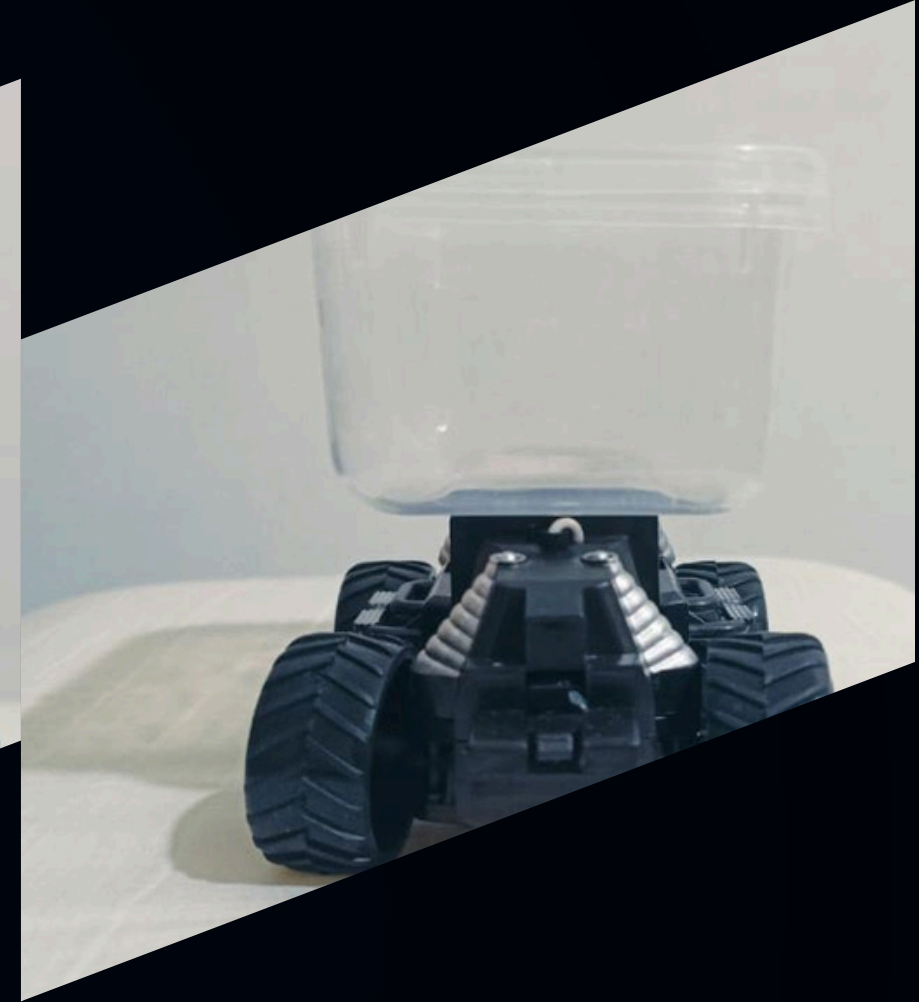
- Mini Delivery Robot for lightweight indoor deliveries.
- Remote-controlled base for mobility and stability.
- Secure compartment for package protection.
- Future upgrades: Sensor navigation & AI integration.
- Commercial design for user acceptance.



REQUIREMENTS & MATERIALS

A FUNCTIONAL REMOTE CONTROLLED WHEELBASE TO SERVE AS THE ROBOT'S MOBILITY MECHANISM.

A LIGHTWEIGHT CONTAINER FOR SECURELY HOLDING AND TRANSPORTING PARCELS.



BASIC FUNCTIONAL ELECTRONICS TO ENSURE THE FUNCTIONALITY OF REMOTE-CONTROLLED NAVIGATION.

BATTERY OR POWER SOURCE TO SUPPLY ADEQUATE ENERGY FOR THE ROBOT'S OPERATION

DECORATIVE MATERIALS TO ENHANCE THE VISUAL APPEARANCE OF THE PROTOTYPE

PROJECT TIMELINE

Start Date	Time to Complete	End Date	Task	Responsibility	Progress
19-Feb-25	2.0	21-Feb-25	Concept Development & Finalisation	ISAAC THAM	Completed
22-Feb-25	2.0	24-Feb-25	Material Sourcing & Purchasing	HEE POOI SUAN	Completed
25-Feb-25	3.0	28-Feb-25	Chassis & Container Assembly	CHAN UI CHEN	Completed
01-Mar-25	2.0	03-Mar-25	Remote Control Integration	JAYSON LEE	Completed
04-Mar-25	1.0	05-Mar-25	Aesthetic Design & Decorations	WOO JIN YOUNG	Completed
06-Mar-25	2.0	08-Mar-25	Initial Functionality Testing	EZRA TAN	Completed
09-Mar-25	2.0	11-Mar-25	Adjustments & Improvements	AKMAL ARIEF	Completed
12-Mar-25	3.0	15-Mar-25	Final Testing & Refinements	YONG JUEN XUAN	Completed
16-Mar-25	4.0	20-Mar-25	Presentation Preparation	ADILAH	Completed

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COST ESTIMATION

Expenses Category	Estimated Cost (RM)	Budgeted Overhead (RM)(20%)	Total (RM)	Cost	Actual (RM)	Variance Cost (RM)
RC Car	20.00	4.00	24.00		17.39	-6.61
Power Supplies (battery)	10.00	2.00	12.00		5.90	-6.10
Testing & Prototyping Material	5.00	1.00	6.00		2.90	-3.10
Total Cost	35.00	7.00	42.00		26.19	-15.81

WORK BREAKDOWN STRUCTURE

- **PROJECT MANAGER**

**COORDINATE TASKS & COMMUNICATION
TRACK PROGRESS & BUDGET**

- **CHASSIS BUILDER**

**BUILD DURABLE CHASSIS
ENSURE LOAD STABILITY
INTEGRATE HARDWARE**

- **MOTOR SPECIALIST**

**SELECT & TEST MOTORS
ENSURE SMOOTH OPERATION**

- **WIRING TECHNICIAN**

**WIRE MOTORS & CONTROLS
ENSURE SAFETY & NEATNESS**

- **TESTER**

**IDENTIFY & DOCUMENT ISSUES
TEST & TROUBLESHOOT**

- **DOCUMENTATION LEAD**

**RECORD PROGRESS
PREPARE PRESENTATIONS**

TASKS AND ACTIVITIES

RESEARCH AND CONCEPT
DEVELOPMENT

SECURING THE CONTAINER
STABILITY

MODEL DESIGN AND PLANNING

TESTING AND ADJUSTMENTS

MATERIAL SELECTION AND
PROTOTYPE BUILDING

DOCUMENTATION AND
PRESENTATION



RACI MATRIX

Task	ISAAC THAM	HEE POOI SUAN	CHAN LU CHEN	JAYSON LEE	WOO JIN YOUNG	YONG JUEN XUAN	EZRA TAN	AKMAL ARIEF	ADILAH	TEOH JIA HERNG	LECTURER
Concept Development & Finalisation	A	R	R	I	I	I	I	I	I	I	C
Material Sourcing & Purchasing	A	R	R	I	I	I	I	I	I	I	C
Chassis & Container Assembly	A	I	R	R	I	I	I	I	I	I	C
Remote Control Integration	A	I	I	R	R	I	I	I	I	I	C
Aesthetic Design & Decorations	A	I	I	I	R	R	I	I	I	I	C
Initial Functionality Testing	A	I	I	I	I	R	R	I	I	I	C
Adjustments & Improvements	A	I	I	I	I	I	R	R	I	I	C
Final Testing & Refinements	A	I	I	I	I	I	R	R	I	I	C
Documentation & Presentation	A	I	I	I	I	I	I	I	R	R	C


R = RESPONSIBLE

A = ACCOUNTABLE

C = CONSULTED

I = INFORMED

CONCLUSION

- Mini Delivery Robot revolutionizes internal logistics with automation.
 - Enhances efficiency, reduces labor, and minimizes errors.
 - Cost-effective & scalable for small parcel transport in confined spaces.
 - Foundation for future AI navigation & IoT integration.
 - Promotes sustainable robotic solutions for modern logistics.
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THANK YOU

