

Projeto Interdisciplinar Guiado por Luz

Equipe

Bruno Wenderson Oliveira

Luiz Filipe Bartelega

Natalia Oliveira

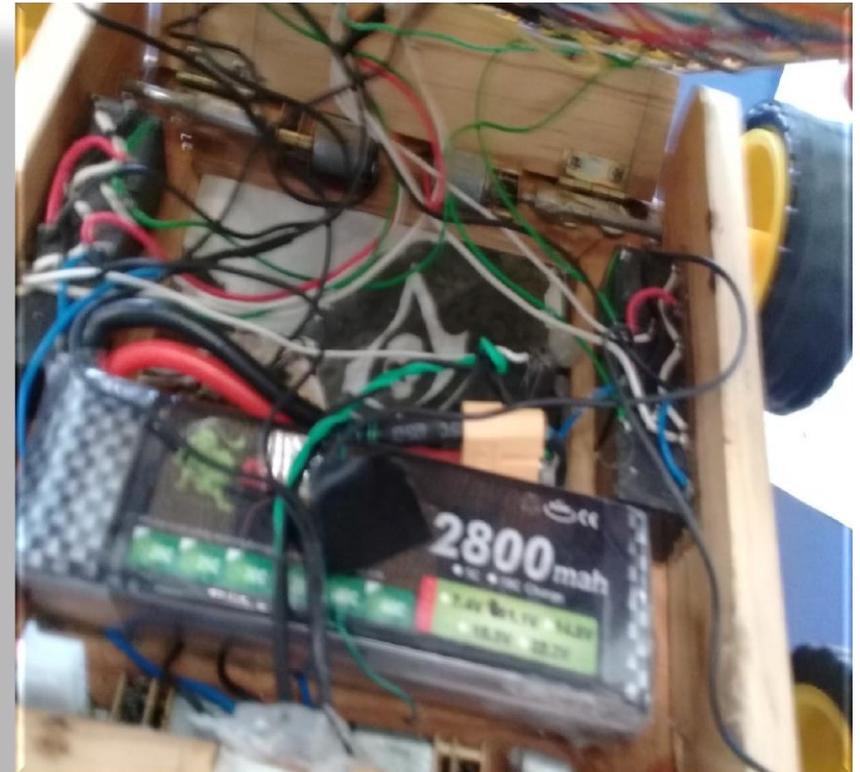
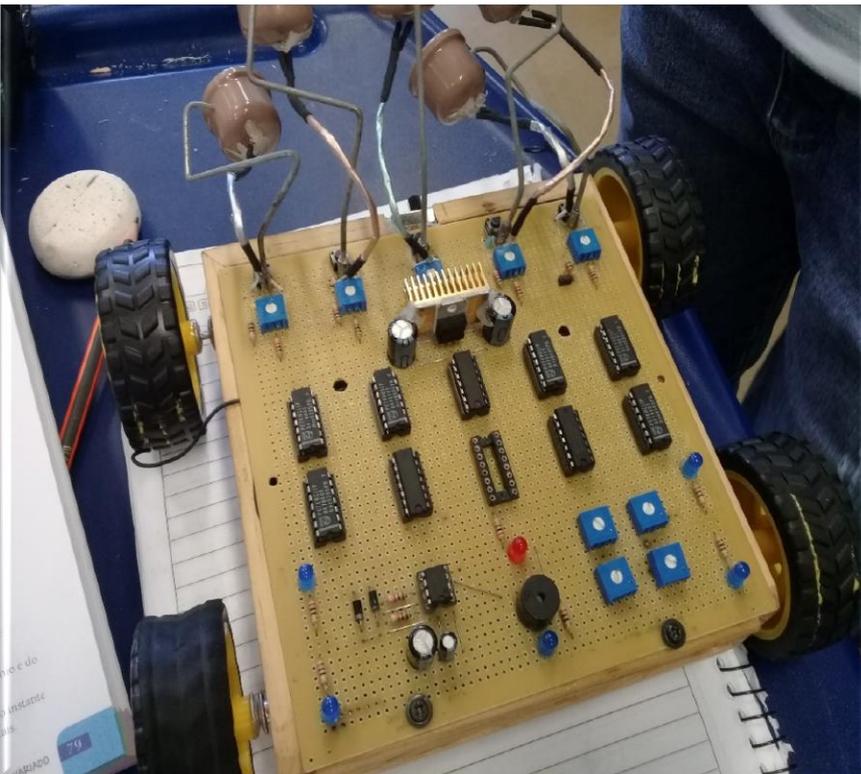
Richard Henrique

CURSO TÉCNICO EM MECATRÔNICA
1º ANO / 2018

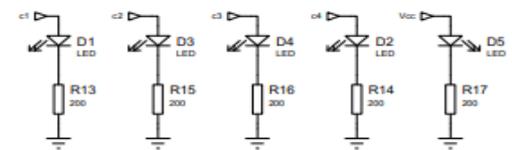
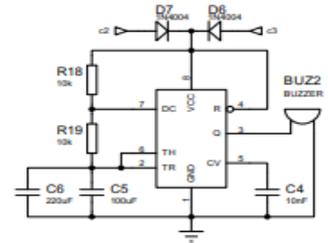
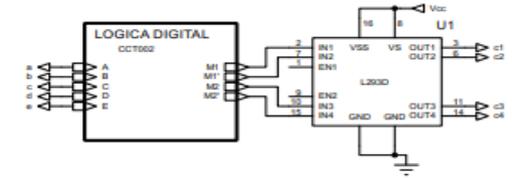
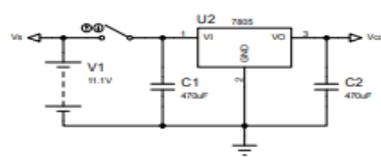
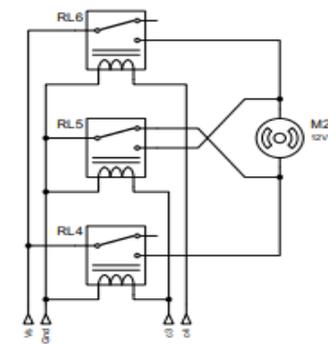
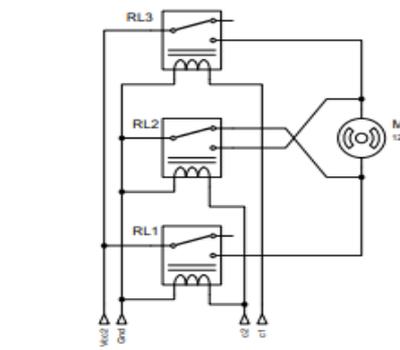
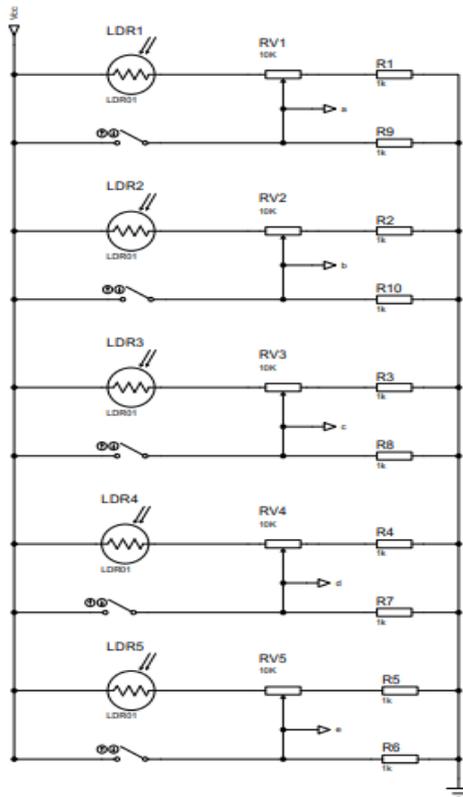
Projeto 1

Grupo: Hadler, João, Guilherme

Estrutura mecânica



Circuito eletrônico



Circuito Digital

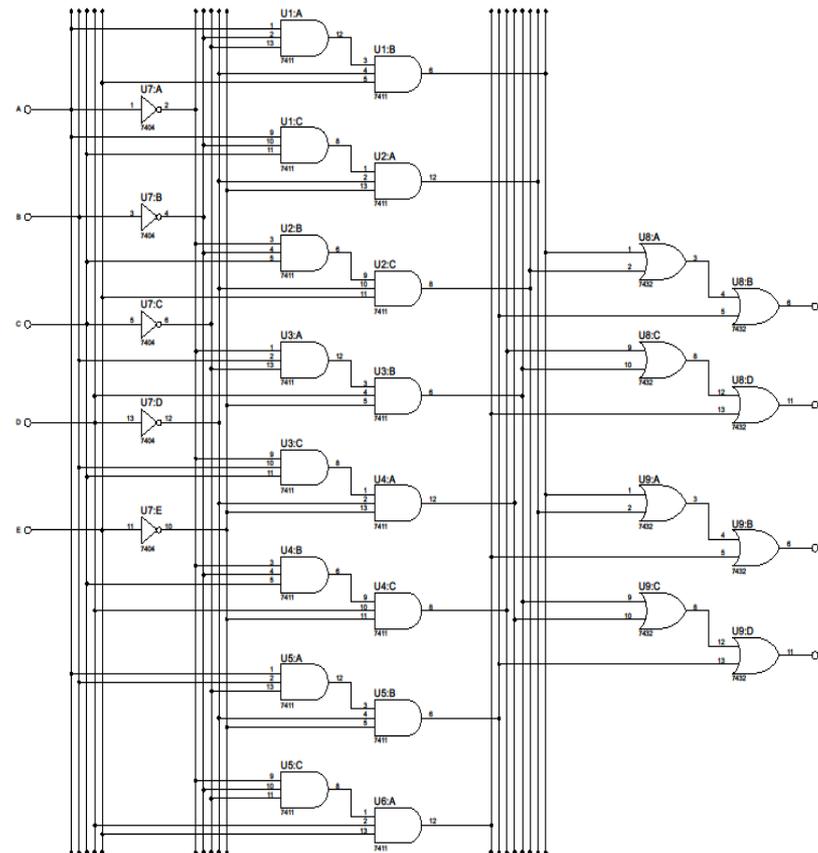


Tabela verdade

A	B	C	D	E	M1	M2	M1'	M2'	
0	0	0	0	0	0	0	0	0	
0	0	0	0	1	0	0	0	0	
0	0	0	1	0	0	0	0	0	
0	0	0	1	1	0	1	1	0	Girar no próprio eixo horário
0	0	1	0	0	1	0	0	0	
0	0	1	0	1	1	0	0	0	Esquerda
0	0	1	1	0	0	0	1	0	Esquerda para trás
0	0	1	1	1	0	0	0	0	
0	1	0	0	0	0	0	0	0	
0	1	0	0	1	0	0	0	0	
0	1	0	1	0	0	0	1	1	Ré
0	1	0	1	1	0	0	0	1	
0	1	1	0	0	0	0	0	1	Direita para trás
0	1	1	0	1	0	0	0	0	
0	1	1	1	0	0	0	0	0	
0	1	1	1	1	0	0	0	0	
1	0	0	0	0	0	0	0	0	
1	0	0	0	1	1	1	0	0	Para frente
1	0	0	1	0	0	0	0	0	
1	0	0	1	1	0	0	0	0	
1	0	1	0	0	0	1	0	0	Direita
1	0	1	0	1	0	0	0	0	
1	0	1	1	0	0	0	0	0	
1	0	1	1	1	0	0	0	0	
1	1	0	0	0	1	0	0	1	Girar no próprio eixo horário
1	1	0	0	1	1	0	0	0	
1	1	0	1	0	0	0	0	0	
1	1	0	1	1	0	0	0	0	
1	1	1	1	0	0	0	0	0	
1	1	1	0	1	0	0	0	0	
1	1	1	1	0	0	0	0	0	
1	1	1	1	1	0	0	0	0	

Componentes e Custos

- 5 LDRs 7mm
- 4 Tripots 300
- 16 Resistores 1K Ω
- 6 LEDs
- 1 regulador de tensão L7805
- 4 Rodas DC
- 1 Buzzer
- 1 CI LM555
- 6 Ends 7411
- 6 Relé
- 1 placa padrão 15x15 cm
- 1 bateria tipo vertical 9V
- 5 tripots 10k
- 2 CI 2432
- 1 CI 7404
- 4 motores
- 4 capacitores 470 μ F

Custo: R\$390,00

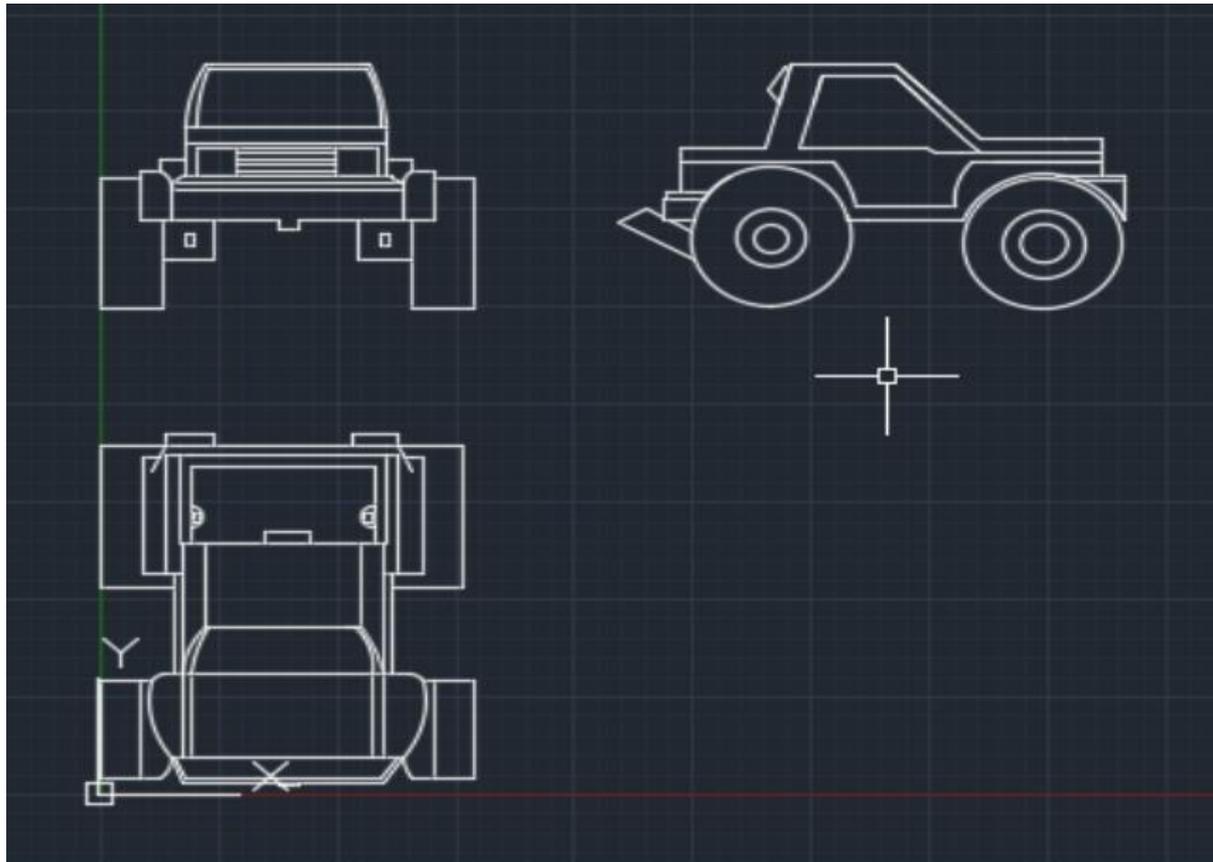
Escolhemos por...

Ele apresenta o sistema de ré, e queremos aplicar, no nosso projeto.

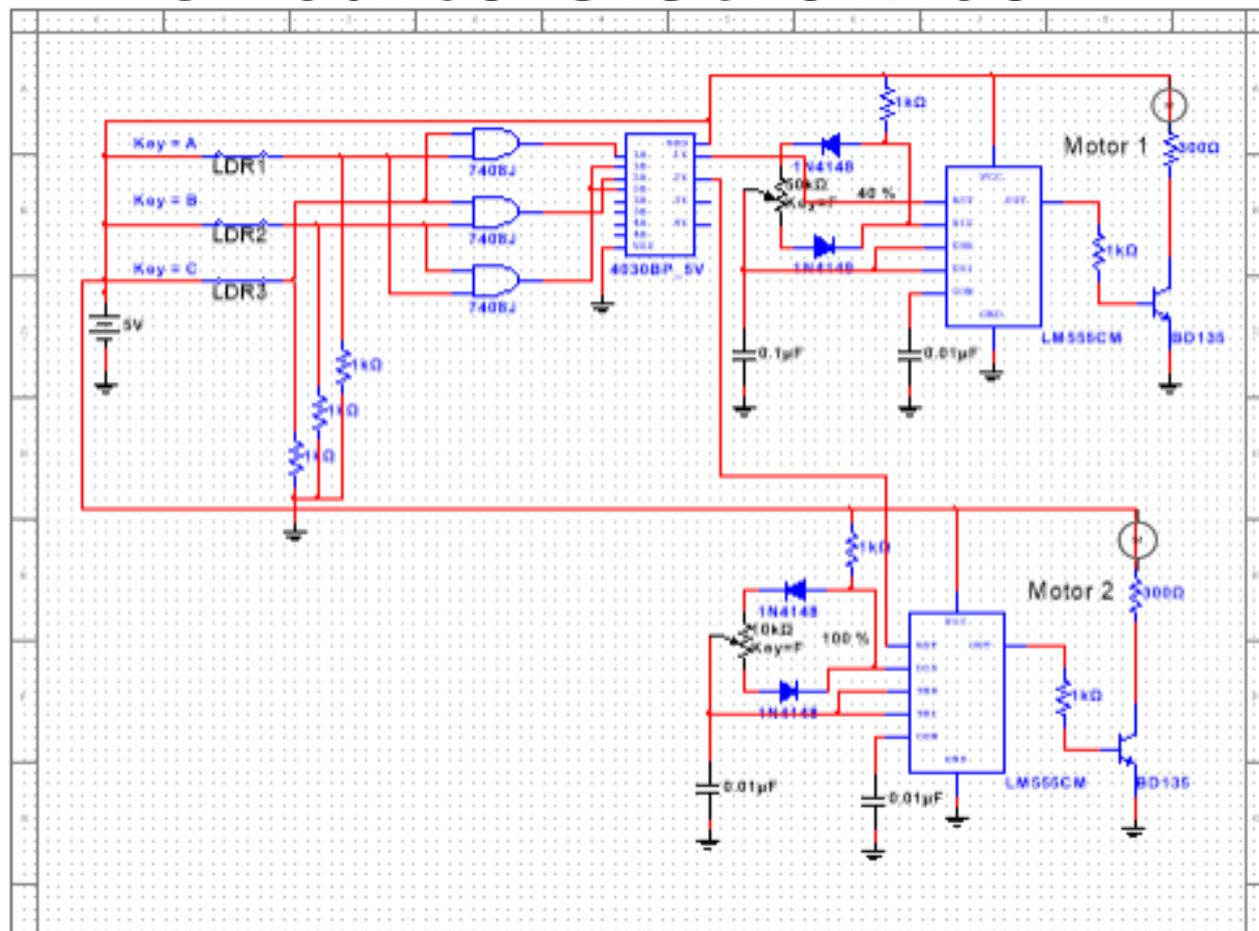
Projeto 2

Grupo:Igor, Guilherme(Alemão), Leandra

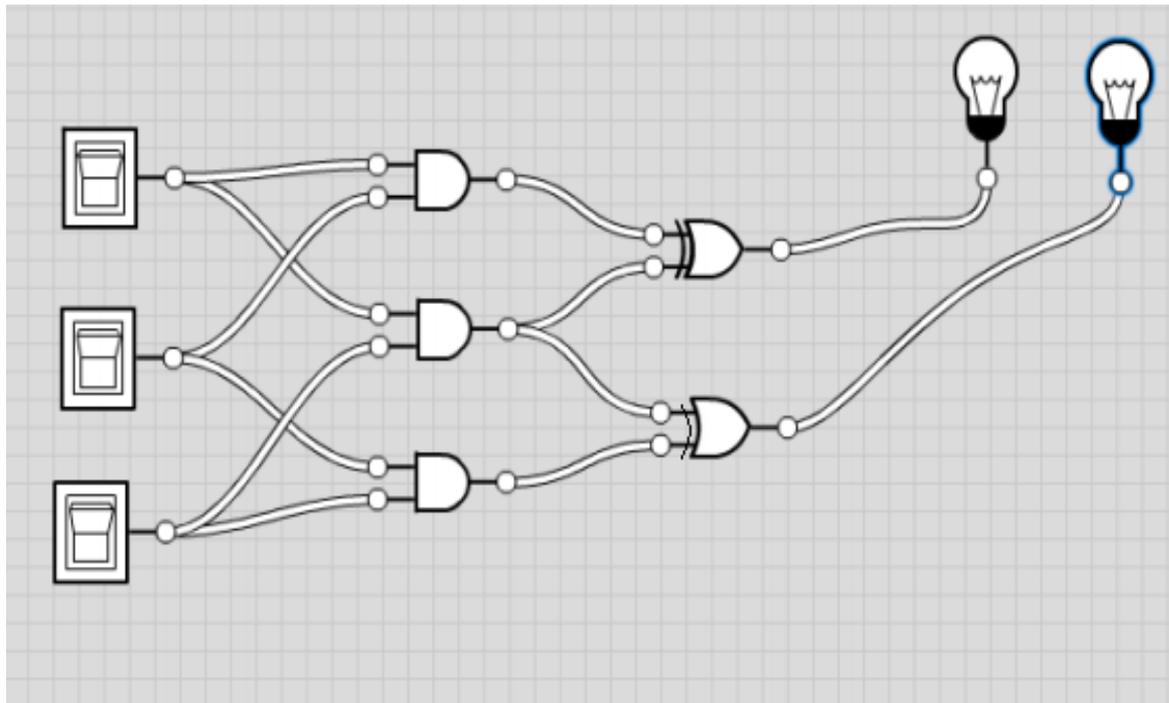
Estrutura mecânica



Circuito eletrônico



Circuito digital



A	B	C	M1	M2
0	0	0	0	0
0	0	1	0	0
0	1	0	0	0
0	1	1	0	1
1	0	0	0	0
1	0	1	1	0
1	1	0	1	1
1	1	1	0	0

Componentes utilizados

- 3 LDRs
- 7 Resistores 1K
- 2 Portas EXNOR 4030BP
- 2 Motor DC
- 3 Portas END
- 4 Rodas de brinquedo
- 1 N4143
- 4 Capacitores 0.01 μ F
- 2 Transistores DD136
- 1 Placa impressa

Custo: R\$114,00

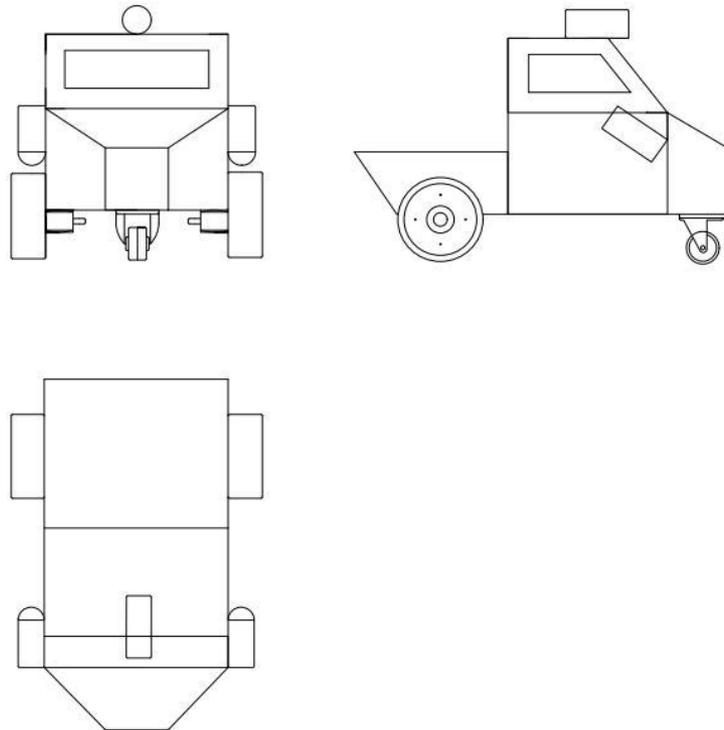
Escolhemos esse projeto por...

- Escolhemos esse projeto pelo fato de seu circuito ser bem montado, e fácil de entender.

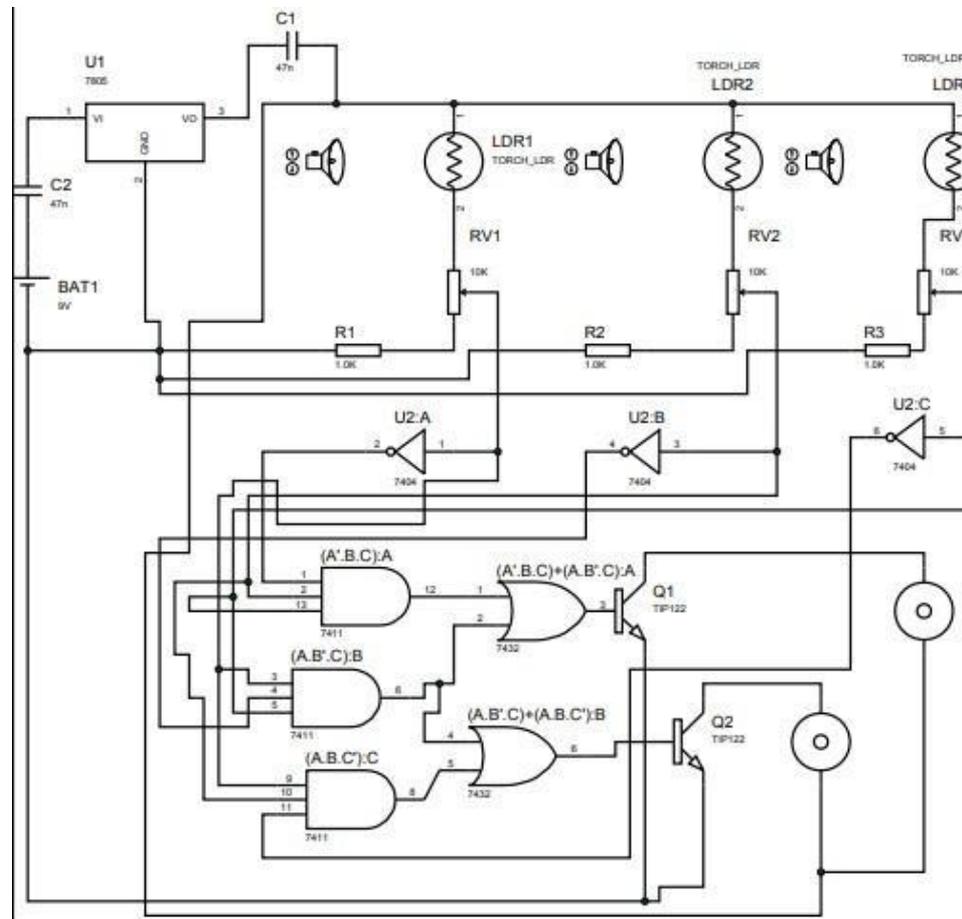
Projeto 3

Grupo: Kathlyn, Romulo, Maria Eduarda, Vinicius

Estrutura mecânica



Circuito eletrônico



Lista de materiais

- 3 circuitos integrados 7404 - Porta NOT
- 2 circuitos integrados 7432 - Porta OR
- 3 circuitos integrados 7411 - Porta AND
- 3 potenciômetros 10K Ω
- 3 LDR 5mm
- 3 resistores 1K
- 2 reguladores de tensão L7805
- 2 transistores NPN TIP122
- 1 clip de bateria 9V Tipo 1 (horizontal)
- 2 motor 9V com roda acoplada
- 1 roda boba
- 1 bateria 9V
- 1 placa padrão tipo ilha 10x10 cm
- 1 capacitor 16V

Custo: R\$125,00

Escolhemos esse por...

Por conta da estética dele ...

Nosso projeto

Croqui

