SMART BIN
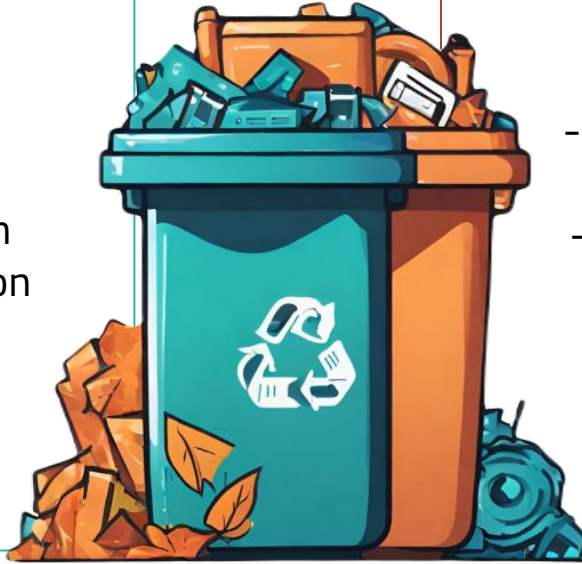
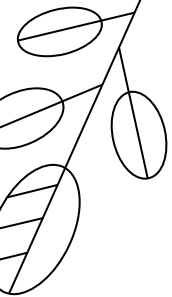Donald Heddesheimer & Carter Fleming

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SMART
BIN

THE PLAN

HARDWARE

- Two bins
- One platform
- Seesaw motion

SOFTWARE

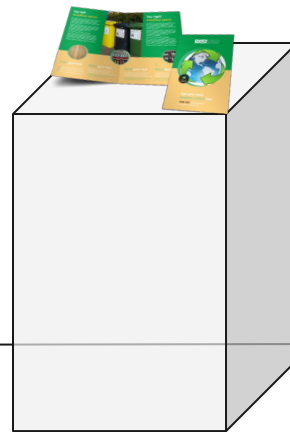- Trained recycling model
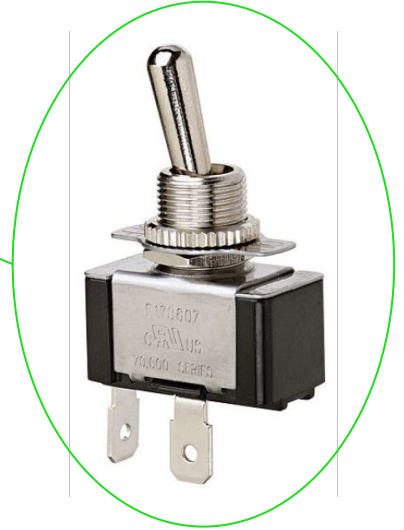- Data Tailored to Western Reserve Academy

SMART BIN

THE STATION
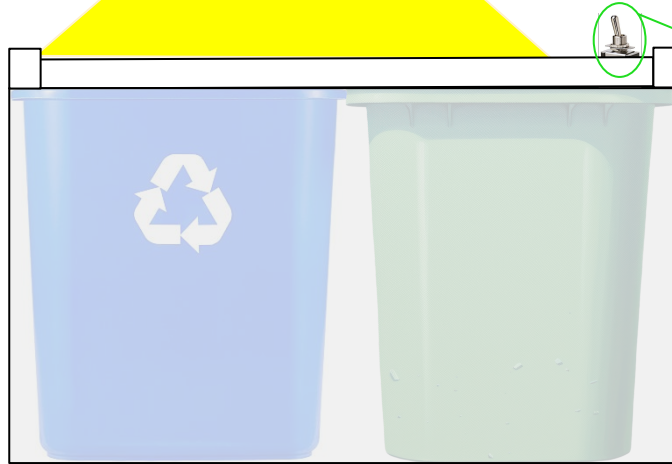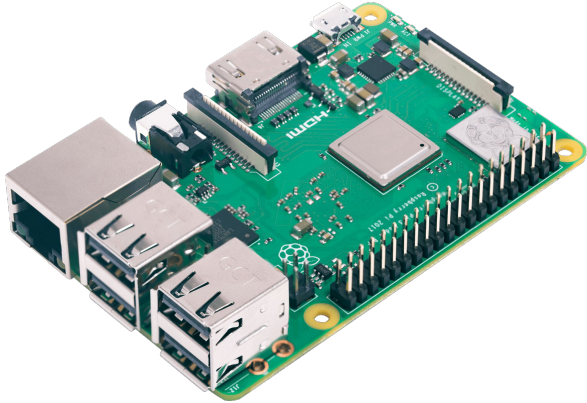
Reduce
Reuse
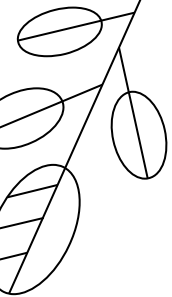Recycle !

SMART
BIN

SMART
BIN

THE PROTOTYPE

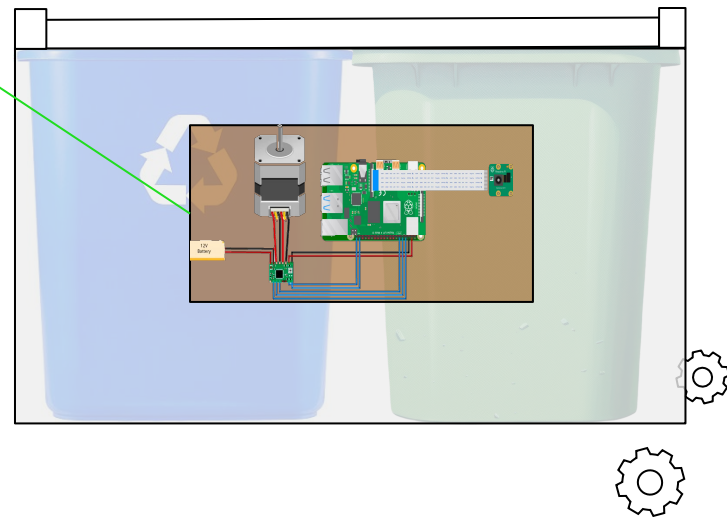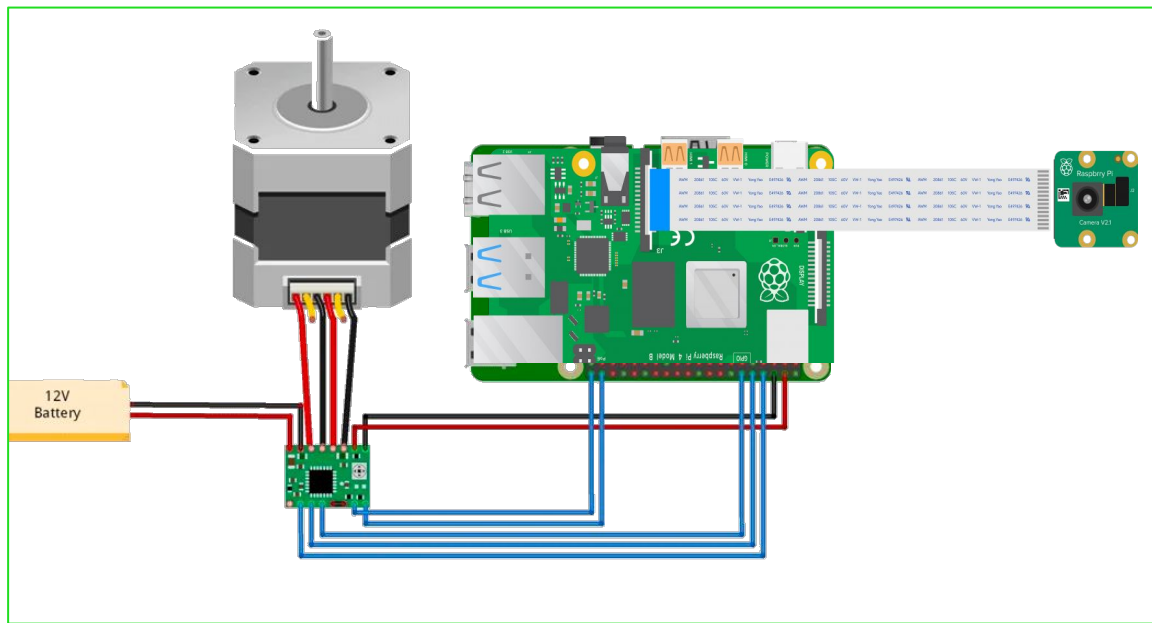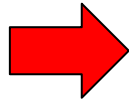SMART
BIN

THE ELECTRONICS

TILTING MECHANISM

SMART
BIN

Plastic - 98.4%

model loss
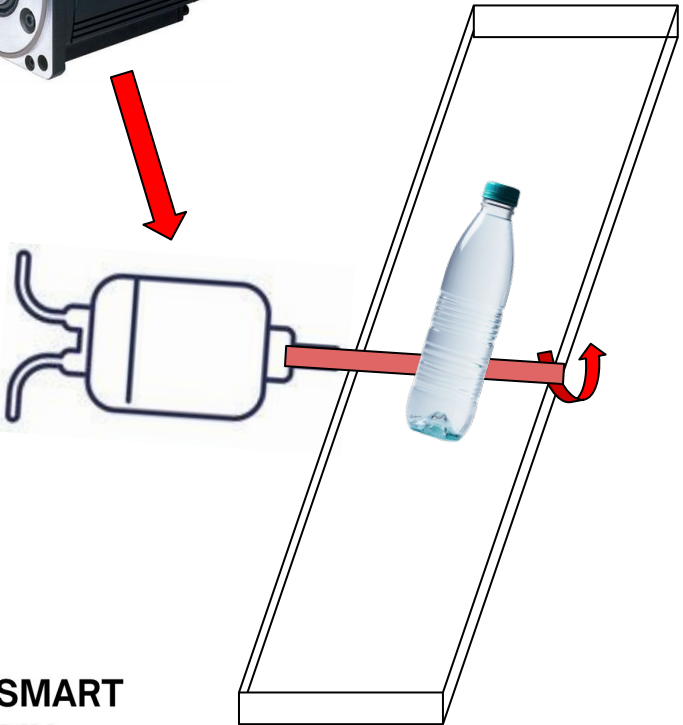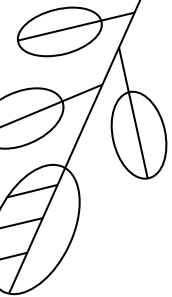
SMART BIN
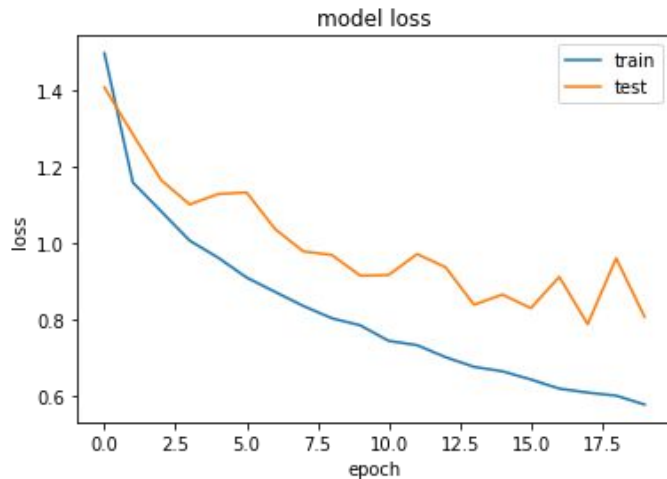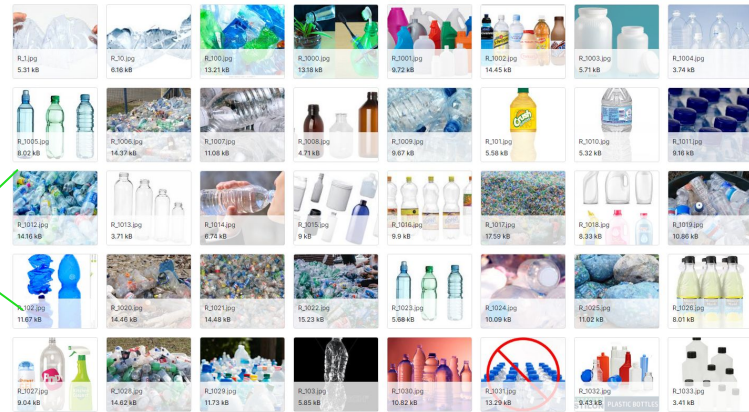
MORE DATA + MORE ACCURACY

THE COSTS

$670.00 → $425.00
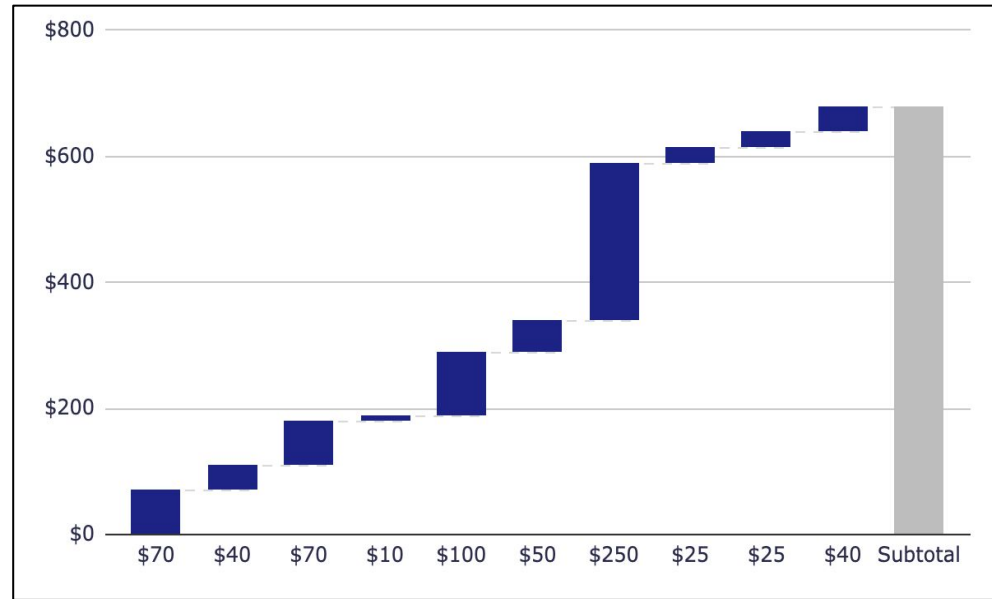
PRODUCT	UNITS	TYPE	COST
Raspberry Pi	1-2	Hardware	$70
Servo Motor	1-2	Hardware	$40
Camera	1-2	Hardware	$70
Excess Wires	25-50	Hardware	$10
Large Bins	2-4	Utility	$100
Station Decor	5+	Utility	$50
Display	1-2	Utility	$250
Posters/Flyers	100+	Utility	$15
Data	1-2	Software	$25
Program Subscriptions	1-5	Software	$40

Total Costs

$800, $600, $400, $200, $0

$70 $40 $70 $10 $100 $50 $250 $25 $25 $40 Subtotal

THANK YOU

QUESTIONS?