✓	Description/Item	Qty	Image/Rendering	Kit Bin #
	General Kit Items			
	Kit Box Storage Box, 22-Compartment, 16.53 " x 13.18 " x 2.44 "	1		n/a
	Paper Ruler mm and cm 25 cm / 250 mm	1		16
	Stanley 64-170 100 Plus Pocket Screwdriver 0 Pt. Phillips Tip	1		16
	Mini Phillips Screwdriver, 5.0mm Cross Head with Non-Slip Handle	1	ABS Plastic Material	n/a
	3D Printed 5.5 mm Wrench	1	5:5 mm 12	16
	Clear Polycarbonate Base w/ grid and holes 260mm x 190mm	1		n/a
 	Clear Adhesive Bumper Pads	5		9
	General Microcontroller Items			

✓	Description/Item	Qty	Image/Rendering	Kit Bin #
	Cypress PSoC Controller - CY8CKIT-043	1		15
	USB Cable 1-Feet, Type A, Male to Female	1		15
	Header Strip 40 Position Header Connector 0.100" (2.54mm) Through Hole	2		16
	Solderless Breadboard Terminal Strip 3.20" L x 2.00" W (81.3mm x 50.8mm)	1		16
	120pcs Multicolored Dupont Wire 40pin Male to Female, 40pin Male to Male, 40pin Female to Female Breadboard Jumper Wires Ribbon Cables Kit	1		11
	6 volt Power Items			
	6V 1A Power Supply Adapter AC 100-240V to DC 6 Volt Transformers DC Connector Jack 5.5mmx2.1mm US Plug	1		12
	Power Barrel Connector Jack 2.50mm ID (0.098''), 5.50mm OD (0.217'') Through Hole	1		10
	Red Power Wire (6 inch length) 22 AWG Hook-Up Wire Solid	1		10
	Black Power Wire (6 inch length) 22 AWG Hook-Up Wire Solid	1		10
	Heat Shrink Tubing 3 to 1 Black 0.5" (12.70mm) length	2		10
	Servos, Brackets, & Hardware Items			

\checkmark	Description/Item	Qty	Image/Rendering	Kit Bin #
	Servo Motor MG995 *180 Control Angle *Metal Gear *12 kg/cm @ 6.0V	3		13
	25T Metal Servo Disc *Aluminum Alloy *Disk Dia 20mm dia/.8in Dia *Mounting Hole 14mm/0.55in (4x) M3 tapped	3		13
	Interconect Servo Bracket (Shown hardware not included)	3		2
	L' Angled Metal Servo Bracket (Shown hardware not included)	2		2
	Metal Multi-Purpose Servo Bracket (Shown hardware not included)	2		2
	Brass Standoffs Female to Female Brass Hex *30mm tall *4mm hexagon	4		4

\checkmark	Description/Item	Qty	Image/Rendering	Kit Bin #
	Phillips Pan Head Screws M3 x 0.5 mm Thread, 45 mm Long	4		1
	Phillips Pan Head Screws M3 x 0.5 mm Thread, 10 mm Long	30		7
	Steel Hex Nut	30		7
	M3 x 0.5 mm Thread Phillips Pan Head Screws	50		/
	M2 x 0.4 mm Thread, 10 mm Long	4		7
	Steel Hex Nut	4		7
	M2 x 0.4 mm Thread DC Motor Items			
	5V Stepper Motor 28BYJ-48 ULN2003	1		3
	ULN2003 Driver Board	1		5
	3D Printer Pinion Gear - Stepper Motor **oval slot	1		3
	IC SN754410NE Motor / Motion / Ignition Controllers & Drivers Quad Half-Hs	1		6

✓	Description/Item	Qty	Image/Rendering	Kit Bin #
	6V 150:1 Micro Metal Gearmotor w/ Encoder & Cable, 100rpm	2		5
	3D Printed Pinion Gear - Geared Motor	2		5
	Pan Head Phillips Screws M1.6 x 0.35mm Thread, 6mm Long	4		7
Later	Pan Head Phillips Screws M1.6 x 0.35mm Thread, 4mm Long	2		n/a
	Sensor Items			
	Adafruit VL53L0X Time of Flight Distance Sensor - ~30 to 1000mm	1	VLS3L0X ToF Distance O GND SDA XSHUT VIN SCL GPI0	8
	Magnetic contact switch (door sensor)	1		8

\checkmark	Description/Item	Qty	Image/Rendering	Kit Bin #
	INA169 Analog DC Current Sensor Breakout - 60V 5A Max	1	AND CONTRACTOR	8
	Items for Labs			
	3D Printed Dry Erase Pen Holder/Base	1		11
	Dry Erase Pen -Black - Fine Tip	1		11
	Inductor Coil	1		6
	3D Printed Inductor Holder/Base	1		6
	3D Printed Rack Arm-Standard	1		11

\checkmark	Description/Item	Qty	Image/Rendering	Kit Bin #
	3D Printed Rack Base - Standard	1		11
	3D Printed Rack Arm - Long X-Y Setup	1		11
	3D Printed Long Rack Arm Support X-Y Setup	1		11
	3D Printed X-Y Riser	4		1
	3D Printed Rack Arm-Traveling X-Y Setup	1		11

\checkmark	Description/Item	Qty	Image/Rendering	Kit Bin #
	3D Printed Rack Base w Sensor Mount	1		11
	3D Printed Magnetic Contact Switch Spacer X-Y Setup	1		6
	Items for AI Lessons			
	UBS Web Camera * Dynamic resolution: 640 * 480p * Frame rate: 30fps * Focal length: 8mm unlimited	1		14
	Colored Shaped -Large and Small Square, Circle, Triangle -Red, Blue, Green	1		n/a