

| | |
|---------------------|------------|
| Class | 1MCT1 |
| First Name: | Glenn |
| Name | Troncquo |
| Project Name : | Smart Lamp |
| Assembly Revision : | 1 |
| Approval Date : | 15-Mar-20 |
| Part Count : | 15 |
| Total Cost : | €115 |

| Part # | Part Name | Description | Revision | Qty |
|--------|---|---|----------|-----|
| 1 | Raspberry Pi 4 model B 2GB | Raspberry Pi om het systeem te beheren | 1 | 1 |
| 2 | Raspberry Pi T-cobbler | GPIO uitbreidingsbord | 1 | 1 |
| 3 | GPIO 40P Rainbow Ribbon Kabel voor Raspberry Pi 2 | Ribbon kabel om snel en gemakkelijk aan het project te werken | 1 | 1 |
| 4 | Oplaadbare 3.7V Li-ion batterijen | Voeding voor het systeem | 1 | 1 |
| 5 | Batterij houder | Voeding voor het systeem | 1 | 1 |
| 6 | Jumper kabel man - man | Voor de schakeling | 1 | 1 |
| 7 | Lamphouder | Lamphouder | 1 | 1 |
| 8 | Hue lamp | Hue lamp | 1 | 1 |
| 9 | LCD-Display | Display | 1 | 1 |
| 10 | 830 Punten Soldeerloze Breadboard | Breadbord | 1 | 1 |

| | | | | |
|--------------|-----------------|-----------------------------------|-----------|-----------|
| 11 | PIR Sensor | Bewegingssensor | 1 | 1 |
| 12 | LDR | Lichtsensoren | 1 | 1 |
| 13 | Passive buzzer | Buzzer voor het alarm | 1 | 1 |
| 14 | One wire sensor | Temperatuursensor | 1 | 1 |
| 15 | Hout | Voor de behuizing van het project | 1 | 1 |
| Total | | | 15 | 15 |

Picture of Assembly

| Supplier | also available from | Units | Unit Cost |
|----------------------------------|----------------------------------|-------|-----------|
| kiwi-electronics | banggood | 1 | € 39.99 |
| banggood | kiwi-electronics | 1 | € 3.37 |
| banggood | kiwi-electronics | 1 | € 1.70 |
| lightinthebox | rlsales | 1 | € 10.80 |
| dx | banggood | 1 | € 1.76 |
| banggood | kiwi-electronics | 1 | € 3.66 |
| lkea | aliexpress | 1 | € 12.99 |
| 50five | amazon | 1 | € 19.95 |
| banggood | grandado | 1 | € 7.22 |
| dx | prolech | 1 | € 2.35 |

| | | | | |
|--------------------------|----------------------------------|---|---|------|
| banggood | allekabels | 1 | € | 4.01 |
| banggood | grandado | 1 | € | 1.40 |
| banggood | kiwi-electronics | 1 | € | 1.40 |
| banggood | lightinthebox | 1 | € | 3.01 |
| hubo | houthandelonline | 1 | € | 1.80 |

| Max Cost | Real Cost |
|----------|-----------|
| € 39.99 | |
| € 3.37 | |
| € 1.70 | |
| € 10.80 | |
| € 1.76 | |
| € 3.66 | |
| € 12.99 | |
| € 19.95 | |
| € 7.22 | |
| € 2.35 | |

€ 4.01

€ 1.40

€ 1.40

€ 3.01

€ 1.80

€ 115.41

Bill of Materials for LEGO® Design

EXAMPLE on how to list parts of your project

| |
|------------------------------|
| Assembly Name : Mini X-Wing™ |
| Assembly Number : Custom |
| Assembly Revision : |
| Approval Date : |
| Pieces : 46 |
| Total Cost : \$5.85 |



| Category | Part # | Elem ID | Part Name | Color | Qty | Supplier |
|-----------------|--------|---------|------------------------|-------------------------|-----|----------|
| Bricks, Sloping | 50746 | 4504369 | ROOF TILE 1X1X2/3, ABS | 1 - White | 1 | nephew |
| Plates | 3024 | 302401 | PLATE 1X1 | 1 - White | 1 | nephew |
| Plates | 3023 | 302301 | PLATE 1X2 | 1 - White | 2 | nephew |
| Plates | 3023 | 4211398 | PLATE 1X2 | 194 - Medium Stone Grey | 1 | nephew |
| Plates | 3794 | 379401 | PLATE 1X2 W. 1 KNOB | 1 - White | 1 | nephew |
| Plates | 3623 | 362301 | PLATE 1X3 | 1 - White | 1 | nephew |
| Plates | 3623 | 362321 | PLATE 1X3 | 21 - Bright Red | 1 | nephew |
| Plates | 94148 | 302201 | PLATE 2X2 | 1 - White | 1 | nephew |
| Plates, Special | 6141 | 4210633 | PLATE 1X1 ROUND | 199 - Dark Stone Grey | 1 | nephew |
| Plates, Special | 3070 | 307021 | FLAT TILE 1X1 | 21 - Bright Red | 4 | nephew |

| | | | | | | |
|--------------------|-------|---------|--------------------------------|----------------------------|---|--------|
| Plates, Special | 2412 | 241201 | RADIATOR GRILLE 1X2 | 1 - White | 1 | nephew |
| Plates, Special | 6019 | 4538353 | PLATE 1X1 W/HOLDER VERTICAL | 1 - White | 4 | nephew |
| Plates, Special | 2431 | 4558168 | FLAT TILE 1X4 | 1 - White | 1 | nephew |
| Plates, Special | 63868 | 4535737 | PLATE 2X1 W/HOLDER,VERTICAL | 1 - White | 4 | nephew |
| Plates, Special | 2540 | 4211632 | PLATE 1X2 W. STICK | 194 - Medium Stone Grey | 4 | nephew |
| Plates, Special | 3176 | 4225733 | COUPLING PLATE 2X2 | 199 - Dark Stone Grey | 1 | nephew |
| Bricks, Special | 49668 | 4224793 | PLATE 1X1 W/TOOTH | 5 - Brick Yellow | 1 | nephew |
| Technic | 32123 | 4211573 | 1/2 BUSH | 194 - Medium Stone Grey | 4 | nephew |
| Technic | 6590 | 4211622 | BUSH FOR CROSS AXLE | 194 - Medium Stone Grey | 8 | nephew |
| Accessories | 3957 | 4211473 | STICK/AERIAL | 194 - Medium Stone Grey | 4 | nephew |

Total

46



| Alternative available from | Action? | Units | Picture | Unit Cost | max Cost | Real Cost |
|---|---------|-------|---------|-----------|----------|-----------|
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.20 | \$ 0.20 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.15 | \$ 0.15 | \$ 0.15 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | | each | | \$ 0.10 | \$ 0.40 | \$ 0.40 |

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|--|------|---|---------|----------------|----------------|
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.15 | \$ 0.60 | \$ 0.60 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.20 | \$ 0.20 | \$ 0.20 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.15 | \$ 0.60 | \$ 0.60 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.15 | \$ 0.60 | \$ 0.60 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.20 | \$ 0.20 | \$ 0.20 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.10 | \$ 0.10 | \$ 0.10 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.10 | \$ 0.40 | \$ 0.40 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.15 | \$ 1.20 | \$ 1.20 |
| 4500069: Plate 1X2 W. 1 Knob Brickset: LEGO set | each |  | \$ 0.10 | \$ 0.40 | \$ 0.40 |
| | | | | \$ 5.85 | \$ 5.85 |