| **Component** | **Reason** | **Quantity** | **Cost** | **Link** |
| --- | --- | --- | --- | --- |
| N20 Gear Motors | Motors for wheels | 1 | $11.98 | https://shorturl.at/wuBFi |
| L298N Motor Driver | Motor Driver for wheels motors | 1 | $10.89 | https://shorturl.at/FukKl |
| Servo Motor |  |  |  |  |
| Spring | Spring for flipper | 1 | $7.95 | https://shorturl.at/N4Gd1 |
| RS-380 Motor DC | Motor for vertical spinners | 1 | $17.43 | https://shorturl.at/WeK50 |
| ESP32 | Microcontroller | 1 | $10.50 | https://www.digikey.com/en/products/detail/espressif-systems/ESP32-DEVKITC-32E/12091810 |
| Plastic for 3D printing |  |  |  |  |
| 3D printing costs |  |  |  |  |

**SUM OF ALL COSTS =**

So far we will not require more than 2-3 hours of help from the machine shop. We would not need them to build anything for us, since we are ordering most of our components and 3D printing the rest. We may need their help in understanding how the spring flipping motion would work and that is what we think will take 2-3 hours from start to finish.

I think we all would be working about 10 hours per week to ensure the battle bot is made and about 5 weeks at least. Since this task requires expertise in electrical engineering, mechanical engineering, physics, and math, we think a fair pay rate would be about $21 per hour.

Based on this math, each of us would make a total of 10 \* 21 \* 5 = $1050 at the end of 5 weeks.

MG996R Analog Servo Metal Gear Torque Digital Servo Motor – [HTLNUZD 4Pack MG996R Analog Servo Metal Gear Torque Digital Servo Motor,180/360 Degree for DIY Project RC Helicopter Car Boat Robot : Amazon.ca](https://www.amazon.ca/HTLNUZD-MG996R-Digital-Project-Helicopter/dp/B0C2PM5BGZ/ref=sr_1_5?crid=3R69DCC9GTTI6&dib=eyJ2IjoiMSJ9.QhbzuCy8CossNZrfBo-Rjua-zfQ-U0MXiJg7gRZrMaH23VRCCew4oh18UZ2kCGzX_8tAdrpJvC2i3hbePmmKg9mnq9rZqAhBZGgalPnciEM.kEpUb_uNLvQLAhoN5xZkOdrb2HCxFriaHMpcgJOeMdQ&dib_tag=se&keywords=TowerPro%2BMG995%2B360%2Bdegrees&qid=1727723635&s=toys&sprefix=towerpro%2Bmg995%2B360%2Bdegree%2Ctoys%2C79&sr=1-5&th=1)