**Please see the supporting document “Helpful Guidance for Milestone 2” for additional information before using / applying this rubric.**

**FUNCTIONAL CRITERIA**

| **Team Member (Name)** | **Key Function / Feature**  **Metric** | | **How It Will Be Demonstrated/Software Used** | **Target Specification** | **Score 4-0** |
| --- | --- | --- | --- | --- | --- |
| 1 |  | |  |  |  |
| 2 |  | |  |  |  |
| 3 |  | |  |  |  |
| 4 |  | |  |  |  |
| 5 |  | |  |  |  |
| 6 |  | |  |  |  |
| 7 |  | |  |  |  |
| 8 |  | |  |  |  |
|  | | | | **Average** |  |
| **Instructions:**  Each team member must demonstrate one key feature for their subsystem. They must define how they will make that demonstration and identify the target value for that metric. | | **Scoring:**  4 = Exhibits all functionality and meets all specs  3 = Partially exhibits functionality and usually meets the specs  2 = Exhibits some functionality and meets some of the specs  1 = Exhibits limited functionality and barely meets the specs  0 = did not exhibit functionality or meet specs | |  | X 10 |
| **Upper Score** |  |
|  |  |

**ADDITIONAL CRITERIA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Excellent** | **Good** | **Satisfactory** | **Poor** | **Unsatisfactory** |
| **Creativity** | Shows innovative use of technology  **(12)** | Some innovative use of technology  **(10)** | Innovations mentioned but not clearly visible  **(8)** | Innovations unclear, not mentioned  **(6)** | Simply a copy of existing technology  **(4)** |
| **Aesthetics Based on the design documentation** | Shows excellent durable workmanship  **(12)** | Shows some attention to durable workmanship  **(10)** | Can be assembled, components attached  **(8)** | Loose / poorly attached components, wiring disorderly  **(6)** | Shows little or no attempts at workmanship  **(4)** |
| **Intuitive /**  **Ease of use of prototype if correctly built from this design** | Self-communicates design intent, user manual not required  **(12)** | Prototype could be operated with little guidance / training  **(10)** | Prototype could be operated with guidance / training    **(8)** | Prototype operation would require detailed explanation or training  **(6)** | Prototype operation is unclear even with explanation  **(4)** |
| **Safety of prototype if correctly built from this design** | Safety features visible and demonstrated  **(12)** | Safety features visible or demonstrated    **(10)** | Features mentioned but not demonstrated  **(8)** | Features not mentioned  **(6)** | No safety features visible or demonstrated  **(4)** |
| **Robustness of prototype if correctly built from this design** | Prototype is expected to meet all requirements every time it’s operated without any adjustments  **(12)** | Prototype is expected to meet most requirements multiple times with little or no adjustment  **(10)** | Prototype is expected to meet some requirements multiple times but might requires some attention / adjustment  **(8)** | Prototype is expected to meet some requirements but is like to do so only once / operation cannot be repeated  **(6)** | Prototype is not expected to meet any requirements  **(4)** |