**Milestones:**

Project Planning: Outline all tasks needed to be completed for the project

Research: Figure out which components will need to be purchased for table, which programming language to use for code

Development: Create program and build table

Testing: Stress test both the code and table itself

Refinement: Iron out any issues remaining after testing

Presentation: Assemble project documents for presentations and report

**Timeline:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TASK** | **ASSIGNED**  **TO** | **PROGRESS** | **START** | **END** |
| **Project Preparation and Planning** |  |  |  |  |
| Identify project scope, constraints, and budget | All | 100% | 12/1/22 | 11/25/22 |
| Develop general requirements for mech. components | Quinton & Luke | 0% | 11/25/22 | 12/2/22 |
| Create high-level details of physical design | Quinton & Luke | 0% | 11/25/22 | 12/2/22 |
| Develop simplified flowchart for CS requirements | Connor | 63% | 11/18/22 | 11/23/22 |
| Organize Brainstorm Notes | All | 0% | 11/28/22 | 12/7/22 |
| Present initial design review with ME advisor | All | 0% | 11/18/22 | 1/16/22 |
| Review Planning/Preparation Documentation | All | 0% | 1/1/22 | 1/16/22 |
| **Material Aquisition and Component Design** |  |  |  |  |
| Refine flowchart to include language, communication, and integration specifics | Connor | 0% | 1/16/22 | 1/31/22 |
| Create detailed designs and drawings of full and sub-assemblies | Quinton & Luke | 0% | 1/16/22 | 1/31/22 |
| Identify required materials and complete purchasing and budget review w/ BOM | All | 0% | 1/31/22 | 2/3/22 |
| Finalize initial draft of program components | Connor | 0% | 1/31/22 | 2/7/22 |
| Purchase components | All | 0% | 1/31/22 | 2/3/22 |
| Review Materials and Design Documentation | All | 0% | 1/31/22 | 2/3/22 |
| **Construction and Testing** |  |  |  |  |
| Complete construction & assembly of components/table | Quinton & Luke | 0% | 2/1/22 | 3/9/22 |
| Complete first full assembly and integration of mechanics, electronics, and code | All | 0% | 3/10/22 | 3/12/22 |
| Identify errors or areas of improvement | All | 0% | 3/12/22 | 3/14/22 |
| Finalize project design and assembly | All | 0% | 3/13/22 | 3/17/22 |
| Review Const. and Testing Documentation | All | 0% | 3/15/22 | 3/19/22 |
| **Presentation Preparation** |  |  |  |  |
| Create Presentation Outline | All | 0% | 3/12/22 | 3/19/22 |
| Identify Table Transportation | All | 0% | 3/19/22 | 3/21/22 |
| Assemble PowerPoint Pres. | All | 0% | 3/22/22 | 3/28/22 |
| Practice Presentation | All | 0% | 3/29/22 | 4/5/22 |
| Project Presentation Expo | All | 0% | 4/6/22 | 4/6/22 |

**Effort Matrix:**

|  |  |
| --- | --- |
| **Task** | **Effort** |
| Identify project scope, constraints, and budget | Quinton 33%, Luke 33%, Connor 33% |
| Develop general requirements for mech. components | Quinton 50%, Luke 50% |
| Create high-level details of physical design | Quinton 50%, Luke 50% |
| Develop simplified flowchart for project CS requirements | Connor 100% |
| Present initial design review with ME advisor | Quinton 33%, Luke 33%, Connor 33% |
| Refine flowchart to include language, communication, and integration specifics | Connor 100% |
| Create detailed designs and drawings of full and sub-assemblies | Quinton 50%, Luke 50% |
| Identify required materials and complete purchasing and budget review | Quinton 33%, Luke 33%, Connor 33% |
| Begin construction of assembly of components/table | Quinton 33%, Luke 33%, Connor 33% |
| Finalize initial draft of program components | Connor 100% |
| Complete first full assembly and integration of mechanics, electronics, and code | Quinton 33%, Luke 33%, Connor 33% |
| Identify errors or areas of improvement | Quinton 33%, Luke 33%, Connor 33% |
| Finalize project design and assembly | Quinton 33%, Luke 33%, Connor 33% |
| Prepare presentation materials for final review | Quinton 33%, Luke 33%, Connor 33% |