

Gannt_revised

Nov 7, 2024

<http://>

Project manager

Project dates

Oct 10, 2024 - Dec 14, 2024

Completion

43%

Tasks

52

Resources

4

Tasks

2

| Name | Begin date | End date |
|------------------------------------------------------------------------------------------------|------------|----------|
| Design PCBA Enclosure | 10/28/24 | 10/28/24 |
| Learn Basics of 3d CAD | 10/29/24 | 10/30/24 |
| Make a box in CAD | 10/31/24 | 11/1/24 |
| Print 3d model of box | 11/4/24 | 11/8/24 |
| Alter Design to Increased Complexity | 11/11/24 | 11/13/24 |
| Design/Implement Bed Structure | 10/31/24 | 10/31/24 |
| BrainStorm Materials | 11/1/24 | 11/1/24 |
| Sketch Out Structure and Components | 11/4/24 | 11/8/24 |
| Create Initial Prototype | 11/11/24 | 11/13/24 |
| Iterate on prototype and Create Final Design | 11/14/24 | 11/19/24 |
| Work on Display of Measurements | 10/18/24 | 10/18/24 |
| Research ways to display plot of data to user | 10/21/24 | 10/22/24 |
| Test methods of visual data representation | 10/23/24 | 10/24/24 |
| Screen mounted to bed housing | 10/28/24 | 10/28/24 |
| Research libraries for interpretation of user input | 10/29/24 | 10/30/24 |
| Implement interface for user input | 10/31/24 | 11/1/24 |
| Test if user input (WiFi name) is handled correctly | 11/4/24 | 11/8/24 |
| Web browser | 11/12/24 | 11/12/24 |
| Determine how it will receive information | 11/13/24 | 11/13/24 |
| Code interpretation of recieved data | 11/14/24 | 11/15/24 |
| Code data storage scheme | 11/14/24 | 11/15/24 |
| Implement Display of Output for Users | 11/18/24 | 11/20/24 |
| Wireless Communication | 10/28/24 | 10/28/24 |
| Research methods to transmit data wirelessly from ESP32 | 10/29/24 | 10/30/24 |
| Research how to do http post on ESP32 using either wifi.h or httpclient.h arduino libraries | 10/31/24 | 11/1/24 |
| Setup client server scheme on ESP32 | 11/4/24 | 11/5/24 |
| Test communication with outside server | 11/6/24 | 11/11/24 |

Tasks

| Name | Begin date | End date |
|-----------------------------------------------------------------------------------|------------|----------|
| Load Cell/Strain Gauge - Sensor | 10/28/24 | 10/28/24 |
| Research types of sensors that can be used for measuring weight | 10/29/24 | 10/30/24 |
| Get load cell and ADC, additional components ala datasheet | 10/31/24 | 11/5/24 |
| Get force reading from strain gauge and ADC on breakout board and ESP32 dev board | 10/31/24 | 11/4/24 |
| Transmit and receive force reading wirelessly | 11/6/24 | 11/11/24 |
| Force Sensor Circuit | 10/28/24 | 10/30/24 |
| Research force sensors | 11/6/24 | 11/6/24 |
| Select force sensors | 11/7/24 | 11/8/24 |
| Design force sensor circuit | 11/11/24 | 11/14/24 |
| Order force sense circuit parts | 11/7/24 | 11/13/24 |
| Test sensitivity with weights according to data sheet | 11/15/24 | 11/19/24 |
| Test if ESP32 responds to interpretation logic | 11/15/24 | 11/19/24 |
| Power Circuit | 10/28/24 | 10/28/24 |
| Research what's required for power needs | 11/4/24 | 11/5/24 |
| Design power distribution circuit | 11/6/24 | 11/8/24 |
| Order parts for Power Circuit | 11/6/24 | 11/11/24 |
| Implement Power Circuit | 11/12/24 | 11/14/24 |
| Test Power Circuit | 11/15/24 | 11/15/24 |
| Finalize Research | 11/11/24 | 11/11/24 |
| Integrate Hardware Circuitry | 11/21/24 | 11/27/24 |
| Integrate Hardware and Software | 11/28/24 | 12/3/24 |
| Finalize Integration | 12/4/24 | 12/6/24 |
| TESTING!!!! | 12/9/24 | 12/13/24 |
| Generate Three Project Ideas | 10/10/24 | 10/17/24 |
| Work on PDS | 10/18/24 | 10/25/24 |

Resources

| Name | Default role |
|------------|--------------|
| Liuz H | undefined |
| Mohammad A | undefined |
| Tim H | undefined |
| Stuart P | undefined |

Gantt Chart



