

Personal Project

Project manager	
Project dates	Oct 3, 2024 - Dec 14, 2024
Completion	99%
Tasks	68
Resources	0












Tasks

Name		Begin date	End date	Completion	Duration	Predecessors	Priority
Pre-Project		10/3/24	10/7/24	100	5		Normal
Group Formation		10/3/24	10/7/24	100	5		Normal
Collaboration Site Set-up		10/3/24	10/7/24	100	5		Normal
Begin Brainstorming Projects		10/3/24	10/7/24	100	5		Normal
Project Concept Generation		10/8/24	10/15/24	100	8		Normal
Generate 3 Project Ideas		10/8/24	10/9/24	100	2	53, 54, 55	Normal
Pick a Project		10/10/24	10/10/24	100	1	56	Normal
Define Synthesizer Features		10/11/24	10/15/24	100	5	57	Normal
Research Components and Features		10/11/24	10/15/24	100	5	57	Normal
Establish Project Must, Shoulds and Mays		10/11/24	10/15/24	100	5	57	Normal
Initial Design and Planning		10/16/24	10/25/24	100	10		Normal
Design Block Diagrams and Determine Input/Outputs		10/16/24	10/16/24	100	1	2, 3, 4	Normal
Identify Necessary Components		10/16/24	10/18/24	100	3	2, 3, 4	Normal
Being Planning out a Prototype		10/16/24	10/20/24	100	5	2, 3, 4	Normal
Begin designing project Schematic		10/16/24	10/20/24	100	5	2, 3, 4	Normal
Clean up Project Schematic		10/21/24	10/25/24	100	5	58	Normal
Create and Finalize a Product Design Specification		10/19/24	10/23/24	100	5	6, 7	Normal
Hardware Prototyping		10/14/24	10/30/24	100	17		Normal
Create Schematic for Class D Amplifier		10/16/24	10/20/24	100	5	4	Normal
Create Layout for Class D Amplifier		10/21/24	10/25/24	100	5	60	Normal
Order Class D Amp PCB		10/26/24	10/30/24	100	5	61	Normal
Begin ESP32 PWM and Library Derisking		10/21/24	10/25/24	100	5		Normal
Begin Component Derisking		10/14/24	10/18/24	100	5		Normal
Finalize Component Combinations and Values		10/19/24	10/21/24	100	3	11	Normal
Order Components		10/22/24	10/26/24	100	5	12	Normal
Wait For Components		10/27/24	10/29/24	100	3	74	Normal
Firmware Development for Core Synth Functions		10/26/24	11/7/24	100	13		Normal
Begin to develop code for PWM generation		10/26/24	10/30/24	100	5	10	Normal

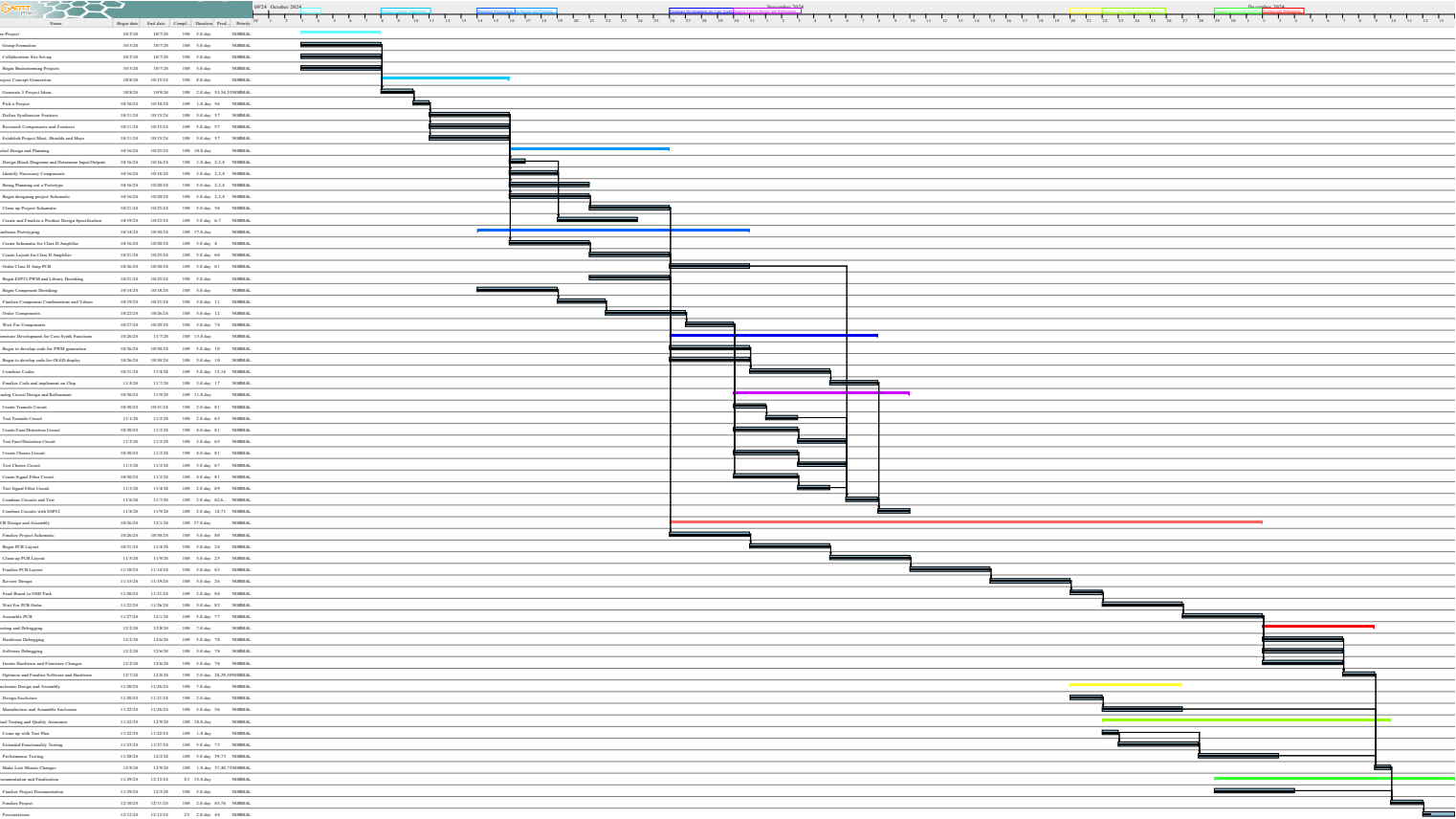
Tasks

Name		Begin date	End date	Completion	Duration	Predicted accessors	Priority
Begin to develop code for OLED display	<div></div>	10/26/24	10/30/24	100	5	10	Normal
Combine Codes	<div></div>	10/31/24	11/4/24	100	5	15, 16	Normal
Finalize Code and implement on Chip	<div></div>	11/5/24	11/7/24	100	3	17	Normal
Analog Circuit Design and Refinement	<div></div>	10/30/24	11/9/24	100	11		Normal
Create Tremolo Circuit	<div></div>	10/30/24	10/31/24	100	2	81	Normal
Test Tremolo Circuit	<div></div>	11/1/24	11/2/24	100	2	63	Normal
Create Fuzz/Distortion Circuit	<div></div>	10/30/24	11/2/24	100	4	81	Normal
Test Fuzz/Distortion Circuit	<div></div>	11/3/24	11/5/24	100	3	65	Normal
Create Chorus Circuit	<div></div>	10/30/24	11/2/24	100	4	81	Normal
Test Chorus Circuit	<div></div>	11/3/24	11/5/24	100	3	67	Normal
Create Signal Filter Circuit	<div></div>	10/30/24	11/2/24	100	4	81	Normal
Test Signal Filter Circuit	<div></div>	11/3/24	11/4/24	100	2	69	Normal
Combine Circuits and Test	<div></div>	11/6/24	11/7/24	100	2	62, 64, 66, 68, 70	Normal
Combine Circuits with ESP32	<div></div>	11/8/24	11/9/24	100	2	18, 71	Normal
PCB Design and Assembly	<div></div>	10/26/24	12/1/24	100	37		Normal
Finalize Project Schematic	<div></div>	10/26/24	10/30/24	100	5	80	Normal
Begin PCB Layout	<div></div>	10/31/24	11/4/24	100	5	24	Normal
Clean up PCB Layout	<div></div>	11/5/24	11/9/24	100	5	25	Normal
Finalize PCB Layout	<div></div>	11/10/24	11/14/24	100	5	83	Normal
Review Design	<div></div>	11/15/24	11/19/24	100	5	26	Normal
Send Board to OSH Park	<div></div>	11/20/24	11/21/24	100	2	84	Normal
Wait For PCB Order	<div></div>	11/22/24	11/26/24	100	5	82	Normal
Assemble PCB	<div></div>	11/27/24	12/1/24	100	5	77	Normal
Testing and Debugging	<div></div>	12/2/24	12/8/24	100	7		Normal
Hardware Debugging	<div></div>	12/2/24	12/6/24	100	5	78	Normal
Software Debugging	<div></div>	12/2/24	12/6/24	100	5	78	Normal
Iterate Hardware and Firmware Changes	<div></div>	12/2/24	12/6/24	100	5	78	Normal
Optimize and Finalize Software and Hardware	<div></div>	12/7/24	12/8/24	100	2	28, 29, 30	Normal
Enclosure Design and Assembly	<div></div>	11/20/24	11/26/24	100	7		Normal

Tasks

Name		Begin date	End date	Completion	Duration	Predecessors	Priority
Design Enclosure		11/20/24	11/21/24	100	2		Normal
Manufacture and Assemble Enclosure		11/22/24	11/26/24	100	5	36	Normal
Final Testing and Quality Assurance		11/22/24	12/9/24	100	18		Normal
Come up with Test Plan		11/22/24	11/22/24	100	1		Normal
Extended Functionality Testing		11/23/24	11/27/24	100	5	73	Normal
Performance Testing		11/28/24	12/2/24	100	5	39, 73	Normal
Make Last Minute Changes		12/9/24	12/9/24	100	1	37, 40, 75	Normal
Documentation and Finalization		11/29/24	12/13/24	83	15		Normal
Finalize Project Documentation		11/29/24	12/3/24	100	5		Normal
Finalize Project		12/10/24	12/11/24	100	2	43, 76	Normal
Presentations		12/12/24	12/13/24	25	2	44	Normal

Gantt Chart



Resources Chart

