









	Name	Duration	Start	Finish	Predecessors	Resource Names
1		Start	0 days	1/16/26, 8:00AM	1/16/26, 8:00AM		
2		<b>Initiation</b>	<b>3 days</b>	<b>1/16/26, 8:00AM</b>	<b>1/20/26, 5:00PM</b>		
3		Project kick-off & objectives	0.5 days	1/16/26, 8:00AM	1/16/26, 1:00PM	1	Adridid;Pushkal;Shagnik;Vai...
4		Scope definition & constraints	0.5 days	1/16/26, 1:00PM	1/16/26, 5:00PM	3	Adridid;Pushkal;Shagnik;Vai...
5		Problem understanding & scope finalization	0.5 days	1/19/26, 8:00AM	1/19/26, 1:00PM	4	Pushkal
6		Project schedule & risk plan	0.5 days	1/19/26, 1:00PM	1/19/26, 5:00PM	5	Pushkal
7		System architecture & responsibility locking	1 day	1/20/26, 8:00AM	1/20/26, 5:00PM	6	Pushkal
8		<b>Requirement</b>	<b>5.5 days</b>	<b>1/21/26, 8:00AM</b>	<b>1/28/26, 1:00PM</b>		
9		Stakeholder identification	1 day	1/21/26, 8:00AM	1/21/26, 5:00PM	7	Adridid;Pushkal;Shagnik;Vai...
10		Functional requirements elicitation	1 day	1/22/26, 8:00AM	1/22/26, 5:00PM	9	Adridid;Pushkal;Shagnik;Vai...
11		Non-functional requirements	1 day	1/23/26, 8:00AM	1/23/26, 5:00PM	10	Adridid;Pushkal;Shagnik;Vai...
12		Requirement analysis & prioritization	1 day	1/26/26, 8:00AM	1/26/26, 5:00PM	11	Adridid;Pushkal;Shagnik;Vai...
13		SRS documentation & approval	1.5 days	1/27/26, 8:00AM	1/28/26, 1:00PM	12	Adridid;Pushkal;Shagnik;Vai...
14		<b>Design</b>	<b>5.5 days</b>	<b>1/28/26, 1:00PM</b>	<b>2/4/26, 5:00PM</b>		
15		System Architecture Design	1.5 days	1/28/26, 1:00PM	1/29/26, 5:00PM	13	Pushkal
16		UI/UX and Dashboard / Backend Overview	0.5 days	2/3/26, 1:00PM	2/3/26, 5:00PM	15	Pushkal;Shagnik;Vaibhav
17		Model Overview and Dataset selection	0.5 days	2/4/26, 8:00AM	2/4/26, 1:00PM	16	Pushkal;Vaibhav
18		Hardware Overview and Component selection	0.5 days	2/4/26, 1:00PM	2/4/26, 5:00PM	17	Adridid;Pushkal
19		<b>Development</b>	<b>41.5 days</b>	<b>2/5/26, 8:00AM</b>	<b>4/3/26, 1:00PM</b>		
20		<b>Hardware and Embedded</b>	<b>25 days</b>	<b>2/5/26, 8:00AM</b>	<b>3/11/26, 5:00PM</b>		
21		CT sensor selection & wiring	2 days	2/5/26, 8:00AM	2/6/26, 5:00PM	18	Adridid
22		Burden resistor & safety validation	2 days	2/9/26, 8:00AM	2/10/26, 5:00PM	21	Adridid
23		ESP32 ADC sampling firmware	3 days	2/11/26, 8:00AM	2/13/26, 5:00PM	22	Adridid
24		Wi-Fi, MQTT publish & relay control	2 days	2/16/26, 8:00AM	2/17/26, 5:00PM	23	Adridid;Pushkal
25		Fog Received Critical System Actuation	2 days	3/10/26, 8:00AM	3/11/26, 5:00PM	52	Adridid;Pushkal
26		<b>Fog(PHONE) Logic &amp; System Behavior</b>	<b>39.5 days</b>	<b>2/5/26, 8:00AM</b>	<b>4/1/26, 1:00PM</b>		
27		MQTT Receive Data from Car	2 days	2/5/26, 8:00AM	2/6/26, 5:00PM	18	Pushkal
28		Feature extraction (RMS, FFT, THD)	2 days	2/9/26, 8:00AM	2/10/26, 5:00PM	27	Pushkal
29		JSON schema & MQTT topic design	3 days	2/11/26, 9:16AM	2/16/26, 9:16AM	28	Pushkal
30		Fog decision engine & safety logic	2 days	2/18/26, 8:00AM	2/19/26, 5:00PM	24	Pushkal;Vaibhav
31		Offline Mode Predictive Repair Suggestions Logic	2 days	3/30/26, 1:00PM	4/1/26, 1:00PM	25	Adridid;Pushkal
32		<b>AI and Data Handling</b>	<b>40.5 days</b>	<b>2/5/26, 8:00AM</b>	<b>4/2/26, 1:00PM</b>		
33		Dataset preparation & labeling	2 days	2/5/26, 8:00AM	2/6/26, 5:00PM	18	Vaibhav
34		Model Selection and Output Schema Design	2 days	2/9/26, 8:00AM	2/10/26, 5:00PM	33	Vaibhav
35		Feature-based ML model training	3 days	2/11/26, 1:00PM	2/16/26, 1:00PM	34	Vaibhav
36		Fog(PHONE) AI (TFLite) optimization	2 days	2/20/26, 8:00AM	2/23/26, 5:00PM	30	Pushkal;Vaibhav
37		Model validation & accuracy report	1 day	4/1/26, 1:00PM	4/2/26, 1:00PM	31	Vaibhav
38		<b>Backend Development</b>	<b>21 days</b>	<b>2/5/26, 8:00AM</b>	<b>3/5/26, 5:00PM</b>		
39		Server and Database Setup	1 day	2/5/26, 8:00AM	2/5/26, 5:00PM	18	Shagnik
40		Database Model	1 day	2/24/26, 8:00AM	2/24/26, 5:00PM	36	Pushkal;Shagnik
41		AI Model Deployment and Backend Integration	1 day	2/25/26, 8:00AM	2/25/26, 5:00PM	40	Shagnik;Vaibhav
42		<b>Endpoint creation</b>	<b>6 days</b>	<b>2/26/26, 8:00AM</b>	<b>3/5/26, 5:00PM</b>		

		Name	Duration	Start	Finish	Predecessors	Resource Names
43		/upload (fog data to cloud upload endpoint)	2 days	2/26/26, 8:00AM	2/27/26, 5:00PM	41	Pushkal;Shagnik
44		/analyse(ai model analyse endpoint)	2 days	3/2/26, 8:00AM	3/3/26, 5:00PM	43	Shagnik;Vaibhav
45		Miscellaneous Enpoints	2 days	3/4/26, 8:00AM	3/5/26, 5:00PM	44	Adrivid;Pushkal;Shagnik;Vai...
46		<b>Frontend Development</b>	<b>40.5 days</b>	<b>2/6/26, 8:00AM</b>	<b>4/3/26, 1:00PM</b>		
47		Web Dashboard	2 days	2/6/26, 8:00AM	2/9/26, 5:00PM	39	Shagnik
48		Android UI	2 days	2/10/26, 8:00AM	2/11/26, 5:00PM	47	Shagnik
49		User UI	1 day	2/12/26, 8:00AM	2/12/26, 5:00PM	48	Shagnik
50		Dealership UI	1 day	2/13/26, 8:00AM	2/13/26, 5:00PM	49	Shagnik
51		Event visualization & logs	1 day	3/6/26, 8:00AM	3/6/26, 5:00PM	45	Pushkal;Shagnik
52		Report Generation - Visual Logs for User	1 day	3/9/26, 8:00AM	3/9/26, 5:00PM	51	Pushkal;Shagnik;Vaibhav
53		Digital Twin Visualization	1 day	4/2/26, 1:00PM	4/3/26, 1:00PM	37	Shagnik
54		<b>Integration</b>	<b>4 days</b>	<b>4/3/26, 1:00PM</b>	<b>4/9/26, 1:00PM</b>		
55		Device to Fog Module Integration	1 day	4/3/26, 1:00PM	4/6/26, 1:00PM	53	Adrivid;Pushkal
56		Fog to Cloud Integration	1 day	4/6/26, 1:00PM	4/7/26, 1:00PM	55	Pushkal;Shagnik;Vaibhav
57		DB to Backend Intergation	0.5 days	4/7/26, 1:00PM	4/7/26, 5:00PM	56	Pushkal;Shagnik;Vaibhav
58		Model Integration	0.5 days	4/8/26, 8:00AM	4/8/26, 1:00PM	57	Pushkal;Shagnik;Vaibhav
59		Frontend to Backend Integration	0.5 days	4/8/26, 1:00PM	4/8/26, 5:00PM	58	Shagnik
60		Hardware Integration	0.5 days	4/9/26, 8:00AM	4/9/26, 1:00PM	59	Adrivid;Pushkal
61		<b>Testing</b>	<b>4 days</b>	<b>4/9/26, 1:00PM</b>	<b>4/15/26, 1:00PM</b>		
62		System and Integration Testing	1 day	4/9/26, 1:00PM	4/10/26, 1:00PM	60	Adrivid;Pushkal;Shagnik;Vai...
63		Bug fixing and Regression Testing	1 day	4/10/26, 1:00PM	4/13/26, 1:00PM	62	Adrivid;Pushkal;Shagnik;Vai...
64		Azure Deployment environment setup	1 day	4/13/26, 1:00PM	4/14/26, 1:00PM	63	Pushkal;Shagnik;Vaibhav
65		Final configuration & smoke testing	1 day	4/14/26, 1:00PM	4/15/26, 1:00PM	64	Adrivid;Pushkal;Shagnik;Vai...
66		<b>Closure</b>	<b>2 days</b>	<b>4/15/26, 1:00PM</b>	<b>4/17/26, 1:00PM</b>		
67		User training & documentation	1 day	4/15/26, 1:00PM	4/16/26, 1:00PM	65	Adrivid;Pushkal;Shagnik;Vai...
68		Project closure & handover	1 day	4/16/26, 1:00PM	4/17/26, 1:00PM	67	Adrivid;Pushkal;Shagnik;Vai...
69		Finish	0 days	4/17/26, 1:00PM	4/17/26, 1:00PM	68	