## **Resource List**

Resource Name	Туре	Initials	Max Utilization	Standard Rate
Mian Abdul Hadi	Work	Н	100%	\$5.0/hour
Shaaf Salman	Work	S	100%	\$5.0/hour
Muhammad Junaid	Work	J	100%	\$5.0/hour
Ali Hamza	Work	Α	100%	\$5.0/hour
Development Environment	Material	D	-	-
Web Hosting Service	Material	W	-	\$4.0/month
Version Control System	Material	V	-	-
Database	Material	D	-	-
Cloud Service	Material	С	-	-
QA Tools	Material	Q	-	-

## **Statement of Work**

Serial Number	Work Product	Human Resource Responsible
1.	Statement of Work	Shaaf, Hadi
2.	Resource List	Junaid, Ali
3.	WBS	Shaaf
4.	Gantt Chart	Hadi, Ali
5.	Effort Estimation	Junaid, Ali
6.	Risk plan	Hadi, Junaid, Ali
7.	Domain Management	Shaaf, Hadi
8.	Deployment and VPS	Shaaf
9.	Database Design and Operation	Junaid, Ali, Hadi
10.	Admin Portal UI	Hadi, Shaaf, Ali, Junaid
11.	User Portal UI	Hadi, Shaaf, Ali, Junaid
12.	Backend Implementation and Integration	Hadi, Shaaf, Ali, Junaid
13.	User Manual	Ali, Junaid
14.	Testing	Shaaf, Hadi
15.	Website Material Preparation	Hadi, Shaaf, Junaid

### **Effort Estimate**

MEASUREMENT PARAMETER	COUNT (value >= 0)	WE Simple	IGHTING FACT Average	OR Complex
Number of User Input	3	•	0	0
Number of User Outputs	2	•	0	0
Number of User Inquiries	1	•	0	0
Number of Files	1	•	0	0
Number of External Interfaces	2	•	0	0

Complexity Adjustment Table | FP Calculation

RESULT						
PROJECT FUNCTION POINTS	27.75					

Top of Page | Domain Characteristic Table | Complexity Adjustment Table

Total Funtion Points = 27.75.

Since, SLOC = Funtion Points \* 47

Thus, SLOC = 27.75 \* 47 = 1304.25

Software	Size	Sizing M	ethod So	ource Lines o	of Code 😌							
	SLOC	% Design Modified	% Code Modified	% Integration Required		Understanding n (0% - 50%)	Jnfamiliari (0-1)	ty				
New	1304											
Reused		0	0									
Modified												
Software	Scale Drive	ers										
Preceder	ntedness			High	Archite	cture / Risk Resolu	ıtion	Nominal	<b>©</b>	Process Maturity	Low	0
Develop	ment Flexibili	ity		High	Team	Cohesion		Low	•			
Software	Cost Drive	ers										
Product					Perso	nnel				Platform		
Required	Software R	eliability		High	Analys	t Capability		Nominal		Time Constraint	High	•
Data Bas	se Size			Nominal	Progra	mmer Capability		High		Storage Constraint	Nominal	•
Product (	Complexity			High	Persor	nel Continuity		High	•	Platform Volatility	Low	<b>©</b>
Develope	ed for Reusa	bility		Very High	Application	ation Experience		High	0	Project		
Documer	ntation Match	n to Lifecycl	e Needs	Nominal	Platfor	m Experience		High	•	Use of Software Tools	High	•
					Langu	age and Toolset Ex	perience	High	0	Multisite Development	Very Low	
										Required Development Schedule		0
Maintena	nce Off 🤤											
	Labor Rates Person-Monti		600									

#### Results

#### **Software Development (Elaboration and Construction)**

**Staffing Profile** 

Effort = 3.6 Person-months Schedule = 7.2 Months Cost = \$2141 Your project is too small to display a staffing profile due to truncation.

Total Equivalent Size = 1304 SLOC Effort Adjustment Factor (EAF) = 0.91

#### **Acquisition Phase Distribution**

Phase	Effort (Person- months)	Schedule (Months)	Average Staff	Cost (Dollars)
Inception	0.2	0.9	0.2	\$128
Elaboration	0.9	2.7	0.3	\$514
Construction	2.7	4.5	0.6	\$1628
Transition	0.4	0.9	0.5	\$257

- 1 Person Day = 4 hours
- 1 Person Month = 30 Days = 30 \* 4 = 120 person-hours

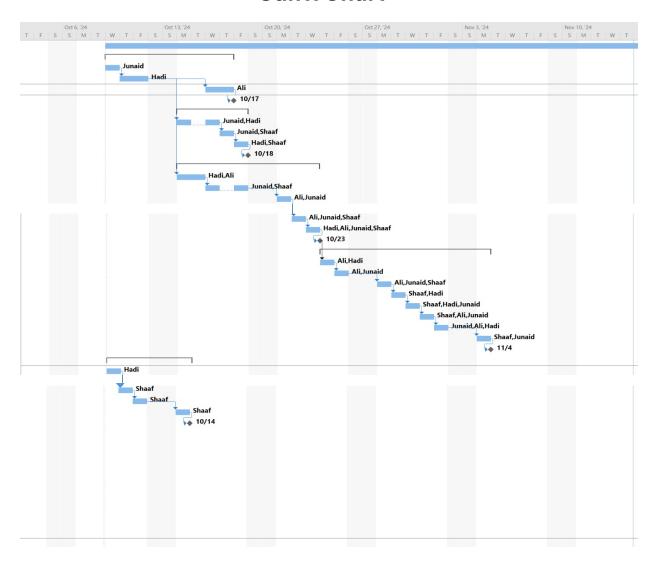
So, 3.6 person-months = 3.6 \* 120 = 432 person-hours

Total Effort = 432 person-hours

## Risk Plan

Serial Number	Risk Description	Impact (1-10)	Probability (0-1)	Risk Exposure	Mitigation Strategy
1.	Delay in Database Setup	8	0.4	3.2	Prioritize database tasks, allocate extra resources, monitor progress closely.
2.	Issues with Web Hosting Service	6	0.3	1.8	Have a backup web hosting service ready, test deployment early.
3.	Incomplete Testing and QA	9	0.5	4.5	Allocate sufficient time for QA, have dedicated testing resources and QA tools.
4.	Team Collaboration Challenges	7	0.4	2.8	Schedule regular team meetings, use collaboration tools, and improve documentation.
5.	Insufficient Experience with Development Environment	6	0.3	1.8	Provide training on tools and IDEs, assign mentors to less experienced members.
6.	Changes in Requirements	8	0.5	4.0	Define scope clearly, implement change management process, involve stakeholders frequently.
7.	Product Complexity leading to Integration Issues	7	0.6	4.2	Break down complex tasks, conduct frequent integration tests, allocate more time for integration.
8.	Resource Unavailability	8	0.3		Ensure resource availability in advance, create contingency plans for key roles.
9.	Unexpected Technical Challenges with Tools	7	0.4	2.8	Perform a technology assessment early, identify alternate tools, provide team training.
10.	Delays in Domain and Deployment Setup	6	0.3	1.8	Start deployment preparations early, ensure backup plans for domain and hosting.

### **Gantt Chart**



# **Work Breakdown Structure**

D	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Lumus Lights Software	28 days	Wed 10/9/24	Fri 11/15/24		
2	Phase 1- Database Setup	7 days	Wed 10/9/24	Thu 10/17/24		
3	Database Server Setup	1 day	Wed 10/9/24	Wed 10/9/24		Junaid
4	Database Schema Design	2 days	Thu 10/10/24	Fri 10/11/24	3	Hadi
5	Database Insertion Setup	2 days	Wed 10/16/24	Thu 10/17/24	4	Ali
6	Milestone: DataBase Setup	0 days	Thu 10/17/24	Thu 10/17/24	5	
7	Phase 2- Website Material Perparation	5 days	Mon 10/14/24	Fri 10/18/24		
8	Data Structuring	2 days	Mon 10/14/24	Wed 10/16/24	4	Junaid,Hadi
9	Logo Processing	1 day	Thu 10/17/24	Thu 10/17/24	8	Junaid,Shaaf
10	Thumbnails Processing	1 day	Fri 10/18/24	Fri 10/18/24	9	Hadi,Shaaf
11	Milestone: Website Material Prepared	0 days	Fri 10/18/24	Fri 10/18/24	10	
12	Phase 3- Backend Development	8 days	Mon 10/14/24	Wed 10/23/24		
13	Category DAO Setup	2 days	Mon 10/14/24	Tue 10/15/24	4	Hadi,Ali
14	Product DAO Implementation	2 days	Wed 10/16/24	Fri 10/18/24	13	Junaid,Shaaf
15	Product Controller Setup	1 day	Mon 10/21/24	Mon 10/21/24	14	Ali,Junaid
16	Category Controller Implementation	1 day	Tue 10/22/24	Tue 10/22/24	15	Ali,Junaid,Shaaf
17	Login Register Implementation	1 day	Wed 10/23/24	Wed 10/23/24	16	Hadi, Ali, Junaid, Shaa
18	Milestone: Backend Development Complete	0 days	Wed 10/23/24	Wed 10/23/24	17	
19	Phase 4- Frontend Development	8 days	Thu 10/24/24	Mon 11/4/24		
20	Hero Page Intro Module Creation	1 day	Thu 10/24/24	Thu 10/24/24	18	Ali,Hadi
21	Hero Page Scroll View Implementation	1 day	Fri 10/25/24	Fri 10/25/24	20	Ali,Junaid
22	Category View Page Creation	1 day	Mon 10/28/24	Mon 10/28/24	21	Ali,Junaid,Shaaf
23	Admin Dashboard	1 day	Tue 10/29/24	Tue 10/29/24	22	Shaaf,Hadi
24	Login Creation	1 day	Wed 10/30/24	Wed 10/30/24	23	Shaaf,Hadi,Junaid
25	Manage Products Page	1 day	Thu 10/31/24	Thu 10/31/24	24	Shaaf,Ali,Junaid
26	Manage Categories Page	1 day	Fri 11/1/24	Fri 11/1/24	25	Junaid,Ali,Hadi
27	Custom UI Library	1 day	Mon 11/4/24	Mon 11/4/24	26	Shaaf,Junaid
28	Milestone: Frontend Development Complete	0 days	Mon 11/4/24	Mon 11/4/24	27	
29	<b>Phase 5- Deployment Management</b>	4 days	Wed 10/9/24	Mon 10/14/24		
30	Domain Purchase	1 day	Wed 10/9/24	Wed 10/9/24		Hadi
31	Domain and Hosting	1 day	Thu 10/10/24	Thu 10/10/24	30	Shaaf
32	SSH Connection	1 day	Fri 10/11/24	Fri 10/11/24	31	Shaaf
33	Deployment Script	1 day	Mon 10/14/24	Mon 10/14/24	32	Shaaf
34	Milestone: Deployment Successful	0 days	Mon 10/14/24	Mon 10/14/24	33	