Task Estimations

Task		Optimistic Hour	Realistic Hour	Pessimistic Hour
Preliminary Work				
PW1. Team Introduction		1	2	3
PW2. Architectural Design		5	8	12
PW3. Technical Documentation		8	12	16
Machine Learning & AI Module - Data Processing				
DP1. Preprocess datasets		10	12	15
DP2. Implement image processing pipeline		15	20	25
Machine Learning & AI Module - Model Training				
MT1. Train deep learning models		20	30	40
MT2. Develop disease detection algorithms		25	35	50
Machine Learning & AI Module - Model Evaluation				
ME1. Evaluate model performance		8	10	12
ME2. Benchmark AI models		10	12	15
Machine Learning & AI Module - API Integration and F				
API1. Integrate GEMINI API		12	15	18
API2. Test fallback mechanisms		8	10	12
Web - Backend				
BE1. Set up backend architecture		5	8	12
BE2. Implement user authentication		8	12	15
BE3. Develop APIs for image upload		10	15	20
BE4. Configure database		12	18	25
BE5. Enable real-time data updates		15	20	25
BE6. Secure APIs with tokens		10	15	20
Web - Frontend				
FE1. Create login and sign-up UI		5	8	10
FE2. Develop Home Page		10	12	15
FE3. Build disease analysis components		12	15	20
FE4. Design interactive map		15	18	25
FE5. Implement community page UI		10	12	15
FE6. Test accessibility		8	10	12
TotalDevelopment		**242**	**329**	**432**
Non-Dev Tasks				
ND1. PM	0.05	12,1	16,45	21,6
ND2. TL	0.07	16,94	23,03	30,24
QA1. Test Planning	0.10	24,2	32,9	43,2
QA2. Functional Testing	0.15	36,3	49,35	64,8
QA3. Regression Testing	0.10	24,2	32,9	43,2
QA4. Performance Testing	0.12	29,04	39,48	51,84
QA5. Security Testing	0.08	19,36	26,32	34,56
QA6. Conduct Smoke Tests	0.05	12,1	16,45	21,6
BF1. Identify and resolve bugs	0.08	19,36	26,32	34,56
BF2. Verify bug fixes	0.10	24,2	32,9	43,2
DO1. Staging Deployment	0.07	16,94	23,03	30,24
DO2. Production Deployment	0.03	7,26	9,87	12,96
Grand Total		**484.0**	**658.0**	**864.0**