

Task Dependencies

Work Package	Task	Dependency	Role
Preliminary Work	PW1. Team Introduction		PM: Ayşe
Preliminary Work	PW2. Architectural Design	PW1	PM: Ayşe
Preliminary Work	PW3. Technical Documentation	PW2	PM: Ayşe
Machine Learning & AI Module - Data Processing	DP1. Preprocess datasets	PW3	AI Dev: Irmak
Machine Learning & AI Module - Data Processing	DP2. Implement image processing pipeline	DP1	AI Dev: Irmak
Machine Learning & AI Module - Model Training	MT1. Train deep learning models	DP2	AI Dev: Irmak
Machine Learning & AI Module - Model Training	MT2. Develop disease detection algorithms	MT1	AI Dev: Irmak
Machine Learning & AI Module - Model Evaluation	ME1. Evaluate model performance	MT2	QA: Pamir
Machine Learning & AI Module - Model Evaluation	ME2. Benchmark AI models	ME1	QA: Pamir
Machine Learning & AI Module - API Integration and Resilience	API1. Integrate GEMINI API	PW3	DevOps: Emre
Machine Learning & AI Module - API Integration and Resilience	API2. Test fallback mechanisms	API1	QA: Pamir
Web - Backend	BE1. Set up backend architecture	PW3	TTL: İrem
Web - Backend	BE2. Implement user authentication	BE1	TTL: İrem
Web - Backend	BE3. Develop APIs for image upload	BE2	TTL: İrem
Web - Backend	BE4. Configure database	BE3	TTL: İrem
Web - Backend	BE5. Enable real-time data updates	BE4	TTL: İrem
Web - Backend	BE6. Secure APIs with tokens	BE5	TTL: İrem
Web - Frontend	FE1. Create login and sign-up UI	PW3	Mobile Dev: Efe
Web - Frontend	FE2. Develop Home Page	FE1	Mobile Dev: Efe
Web - Frontend	FE3. Build disease analysis components	FE2	Mobile Dev: Efe
Web - Frontend	FE4. Design interactive map	FE3	Mobile Dev: Efe
Web - Frontend	FE5. Implement community page UI	FE4	Mobile Dev: Efe
Web - Frontend	FE6. Test accessibility	FE5	Mobile Dev: Efe
Non-Dev Tasks	ND1. PM		PM: Ayşe
Non-Dev Tasks	ND2. TL		TTL: İrem
Non-Dev Tasks - Quality Assurance (QA)	QA1. Test Planning	PW3	QA: Pamir
Non-Dev Tasks - Quality Assurance (QA)	QA2. Functional Testing	QA1	QA: Pamir
Non-Dev Tasks - Quality Assurance (QA)	QA3. Regression Testing	QA2	QA: Pamir
Non-Dev Tasks - Quality Assurance (QA)	QA4. Performance Testing	QA3	QA: Pamir
Non-Dev Tasks - Quality Assurance (QA)	QA5. Security Testing	QA4	QA: Pamir
Non-Dev Tasks - Quality Assurance (QA)	QA6. Conduct Smoke Tests	QA5	QA: Pamir
Non-Dev Tasks - Bug-fix	BF1. Identify and resolve bugs	QA1, QA2	QA: Pamir
Non-Dev Tasks - Bug-fix	BF2. Verify bug fixes	QA3, QA4	QA: Pamir
DevOps	DO1. Staging Deployment	QA5, QA6	DevOps: Emre
DevOps	DO2. Production Deployment	BF1	DevOps: Emre