

12-Week Project Plan Outline: Artist - Consumer Web Interface

Week 1-2: Project Setup & Database Design

- Set up project repository, development environment, and version control (Git).
- Design database schema and ER diagrams for users, portfolios, commission requests, and roles.
- Establish Docker containers for local development (DB, API service).
- Implement basic project scaffolding with chosen framework (Flask or FastAPI).

Week 3-4: User Authentication & Role Management

- Develop secure user registration and login endpoints.
- Implement JWT token-based authentication and refresh token logic.
- Set up role-based access control distinguishing artists and clients.
- Create user profile models and endpoints for profile creation and updates.

Week 5-6: Artist Portfolio Management

- Build CRUD endpoints for artists to upload, update, and delete artwork.
- Integrate cloud storage (AWS S3 or equivalent) for storing art images.
- Implement public/private visibility toggles for portfolio items.
- Create endpoints for retrieving public portfolios and artist info.

Week 7-8: Commission Request System

- Develop endpoints to allow clients to submit, view, and update commission requests.

- Implement request status workflow: pending, accepted, in progress, completed, rejected.
- Enable artists to view and respond to commission requests.
- Add validation and error handling for request submissions.

Week 9: Search and Filtering Functionality

- Create search endpoints to filter artists by style, location, rating (if implemented), or popularity.
- Implement pagination and sorting for large result sets.
- Optimize database queries for performance.

Week 10: Testing & Quality Assurance

- Write unit tests for core API endpoints and business logic.
- Conduct integration tests simulating typical user workflows.
- Perform security audits and fix vulnerabilities.
- Start load testing to assess API responsiveness under stress.

Week 11: Documentation & Code Refinement

- Generate API documentation using Swagger/OpenAPI standards.
- Refactor code for readability, modularity, and maintainability.
- Review and improve error handling and logging mechanisms.
- Prepare deployment scripts and environment configurations.

Week 12: Deployment & Final Review

- Deploy API backend to cloud platform (AWS, Heroku, or chosen provider).
- Conduct user acceptance testing with sample artist and client accounts.

- Gather feedback and fix critical issues.
- Finalize project deliverables and presentation materials.