# **Family Website Project Summary**

## 1. Project Planning

- Defined project scope, milestones, and phases.
- Created and saved a detailed PDF project plan.

### 2. Flask Application Setup

- Initialized Flask app with SQLAlchemy integration.
- Configured file upload paths and static assets.

#### 3. Database Design

- Created FamilyMember model with attributes:
  - Full Name, Date of Birth, Date of Death, Biography, Relationship, Photo, Parent linkage.
- Managed circular imports and foreign key relations.

### 4. CRUD Operations

- Built Create, Read, Update, Delete functionality.
- Supported image upload/display for member profiles.
- Added search and filter by relationship type.

### 5. Family Tree Visualization

- Developed family tree structure with parent-child relations.
- Resolved foreign key ambiguity errors in SQLAlchemy.

### 6. Authentication System

- Implemented user registration and login using bcrypt hashing.
- Integrated Flask-Login for session management.
- Protected routes with login required decorator.
- Configured Flask secret key for session security.

#### 7. User Experience Improvements

- Designed Bootstrap-based login and registration pages.
- Added logout functionality and user display in navbar.

- Handled redirects to enhance user flow.

# **Next Steps (Optional)**

- Password reset feature.
- Enhanced UI and family tree visualization.
- User roles and permissions.
- Cloud deployment.
- Multimedia autobiographies.