

# Photo Sharing App

---

## Web Programming Project BCS-7A

### Project Name

FotoSync

### Group Members

- Muhammad Tayyab 21L-7686
- Haziq Ali 21L-5484

### Project Description

It serves as a photo sharing platform where photographers can showcase their work and users can access high-quality, legally-usable images for various creative projects. FotoSync aims to streamline the process of finding and sharing visual content, fostering collaboration between content creators.

### Scope of Project

- User authentication and profile management
- Photo upload, management, and organization
- Search and discovery features
- Analytics and user engagement tracking

### Functional Requirements

#### **Fundamental Business Logic:**

- User registration and authentication system
- Photo upload and management functionality
- Advanced search and filtering capabilities
- Download tracking and analytics

#### **Personal Productivity:**

- User-friendly dashboard with navbar and sidebar
- Personalized user profiles and portfolios
- Favorite photos

#### **Collaboration:**

- Social features: following users, liking and commenting on photos
- Share buttons for easy distribution on social media platforms
- Collaborative albums or projects

**Miscellaneous:**

- Login/Sign Up:
  - Implement secure user authentication with a robust login and registration system, allowing for user personalization and data protection.
- Multi-Device Optimization:
  - Responsive design for seamless experience across desktop, tablet, and mobile devices
- Contact Information and Location:
  - About page with contact details and Google Maps link
- Blog Integration:
  - Blog section for sharing photography tips, featured artists, and platform updates
- Social Media Integration:
  - Social media buttons for users to connect with your profiles and share your content across platforms.
- User-Friendly Design (UI/UX):
  - Prioritize a well-designed, intuitive, and aesthetically pleasing user interface to enhance user retention and satisfaction.
- High Security Standards:
  - Implement robust security measures to protect user data and uploaded content
- State Management:
  - Utilize Redux or other similar libraries for efficient state management across the application
- AI-Powered Recommendation System:
  - Implement an AI-based system to suggest relevant photos based on user preferences and behavior
- CRUD Operations:
  - Enable Create, Read, Update, and Delete operations for photos, collections, and user profiles
- Error Handling:
  - Implement comprehensive error handling and user-friendly error messages
- Clean and Valid Code:
  - Maintain clean, well-structured, and properly indented code, which is crucial for project maintainability and performance.

- User Profiles:
  - Enable users to create and manage their profiles, including customizable information, avatars, and settings.
- Analytics Dashboard:
  - Provide detailed analytics for photographers, including views, downloads, and engagement metrics
- User Notifications:
  - Implement a notification system for likes, comments, follows, and important updates