# BGHS Alumni Website - Features Implementation Status

## Overview

This document outlines the implementation status of features for the BGHS Alumni Website project. Features are categorized as **Implemented**, **Partially Implemented**, or **Not Yet Implemented**.

## ✅ IMPLEMENTED FEATURES

### 🎥 Hero Background Video

* **Video Integration**: Home page hero section uses bghs-5mb.mp4 with loop, autoplay, muted, playsInline
* **Resolution & Positioning**: Video covers full hero with object-fit: cover and adjustable objectPosition: 'center 10%'
* **Fallback**: Static background image fallback if video fails to load

### 🌐 About Page Language Handling

* **English Default**: Bengali toggle removed as requested
* **Content Preservation**: Bengali text content remains in codebase for future use
* **Consistent Styling**: Hero section contrast aligned with home page

### 👥 Notable Alumni Section

* **Static Cards**: Alumni cards with images/placeholders displayed
* **Call-to-Action**: Links to Hall of Fame page
* **Responsive Design**: Cards adapt to different screen sizes

### 📸 Gallery System

* **Multiple Photo Upload**: Upload page supports multiple file selection
* **Event-Specific Photos**: Upload API accepts optional event\_id parameter
* **Event Page Integration**: Event-specific photos displayed on individual event pages
* **Pagination**: Main gallery implements “Load More” functionality with proper count
* **Database Schema**: gallery\_photos table supports event linking

### 🎓 Academic Fields Standardization

* **Field Replacement**: batch\_year replaced with last\_class, year\_of\_leaving, start\_class, start\_year
* **Admin Interface**: Admin can update all academic fields for alumni members
* **Registration Form**: Updated registration page with new academic fields
* **API Consistency**: All APIs (admin, registration) use new field structure
* **Database Migration**: SQL scripts provided for schema updates

### 📝 Registration System & Validation

* **Top-to-Bottom Validation**: Form validation follows logical field order
* **Inline Error Display**: Red borders and error messages for invalid fields
* **Auto-Focus**: First invalid field automatically focused and scrolled to
* **OTP Integration**: Email and phone OTP verification with cooldown timers
* **Flexible Contact Verification**: Accepts either email OR phone verification (not both required)
* **Field Constraints**: Year fields limited to 4 digits, consistent field heights
* **UX Improvements**: Password icon shift prevention, “Back to Home” link
* **Custom Validation**: Native browser validation disabled in favor of custom logic

### 🔐 Authentication & OTP System

* **OTP Debugging**: OTPs logged to console for development
* **SMS Service**: Twilio integration with graceful error handling
* **Email Service**: Email OTP delivery with error logging
* **Cooldown Management**: 60-second cooldown between OTP requests
* **Re-verification**: Users can re-verify if contact information changes
* **Forgot Password**: Email-based password reset with OTP

### 👨‍💼 Admin Management

* **User Management**: Admin can add/edit alumni with all profile fields
* **Academic Field Updates**: Admin interface supports new academic field structure
* **Event Management**: Admin can create and manage events
* **Gallery Management**: Admin can manage photo uploads

### 🖼️ Profile System

* **Avatar Upload API**: /api/profile/avatar route implemented
* **Profile Page**: User profile display with navigation fixes
* **Link Integration**: Next.js Link component properly imported

### 🛠️ Technical Infrastructure

* **Viewport Configuration**: Next.js viewport warnings resolved
* **Build System**: Clean build and start processes
* **Port Management**: Server restart procedures for port conflicts
* **Error Handling**: Comprehensive error logging and user feedback

## ⚠️ PARTIALLY IMPLEMENTED FEATURES

### 📷 Profile Photo End-to-End Integration

* **Status**: API route exists but UI integration needs verification
* **Missing**: Camera capture UI (getUserMedia) implementation
* **Missing**: Gallery upload UI integration on profile page
* **Missing**: Alumni directory cards showing uploaded avatars

### 📤 Multiple Image Upload UX

* **Status**: Backend supports multiple files, basic UI exists
* **Missing**: Robust progress indicators for batch uploads
* **Missing**: Error state handling for individual file failures
* **Missing**: Event and category selection UI working together

### 🏛️ Hall of Fame Page

* **Status**: CTA links exist from notable alumni section
* **Missing**: Verify destination route implementation
* **Missing**: Confirm content completeness and design

### 📱 Mobile Video Optimization

* **Status**: Basic video implementation complete
* **Missing**: Data usage optimization for mobile networks
* **Missing**: iOS/Android autoplay policy testing
* **Missing**: Progressive loading strategies

## ❌ NOT YET IMPLEMENTED FEATURES

### 📸 Camera Capture Integration

* **Missing**: navigator.mediaDevices.getUserMedia implementation
* **Missing**: Camera permission handling
* **Missing**: Photo capture UI components

### 🏷️ Category-Based Photo Management

* **Missing**: First-class category taxonomy (separate from events)
* **Missing**: Category-only batch upload workflows
* **Missing**: Category filtering in gallery

### 🔍 Photo Moderation System

* **Missing**: Admin moderation queue for uploaded photos
* **Missing**: Approval/rejection workflow
* **Missing**: Bulk moderation tools

### 🌍 Runtime Language Toggle

* **Status**: Intentionally removed per user request
* **Note**: Bengali content preserved for future implementation

### 📊 Analytics & Reporting

* **Missing**: User engagement tracking
* **Missing**: Photo view/download analytics
* **Missing**: Event attendance reporting

### 🔔 Notification System

* **Missing**: Email notifications for events
* **Missing**: Push notifications for mobile
* **Missing**: Admin notification system

### 💰 Donation System

* **Missing**: Payment gateway integration
* **Missing**: Donation tracking and reporting
* **Missing**: Donor recognition features

### 📱 Mobile App

* **Missing**: Native mobile application
* **Missing**: Offline functionality
* **Missing**: Push notification support

## 🎯 PRIORITY RECOMMENDATIONS

### High Priority

1. **Complete Profile Photo Integration**: Implement camera capture and ensure alumni cards display avatars
2. **Enhance Multiple Upload UX**: Add progress indicators and error handling
3. **Verify Hall of Fame Page**: Complete the destination route and content

### Medium Priority

1. **Mobile Video Optimization**: Test and optimize for mobile networks
2. **Category Management**: Implement category-based photo organization
3. **Photo Moderation**: Add admin moderation workflow

### Low Priority

1. **Analytics Integration**: Add user engagement tracking
2. **Notification System**: Implement email/push notifications
3. **Donation Features**: Add payment and donation tracking

## 📋 TECHNICAL DEBT

### Code Quality

* **Global CSS**: Avoid global CSS modifications to prevent layout issues
* **Error Handling**: Standardize error handling patterns across components
* **Type Safety**: Ensure consistent TypeScript usage

### Performance

* **Image Optimization**: Implement proper image compression and lazy loading
* **Bundle Size**: Optimize JavaScript bundle for faster loading
* **Database Queries**: Review and optimize database query patterns

### Security

* **File Upload Security**: Implement proper file type validation and virus scanning
* **API Rate Limiting**: Add rate limiting to prevent abuse
* **Input Sanitization**: Ensure all user inputs are properly sanitized

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