# BGHS Alumni Website Development Summary

## Project Overview

**Project Name**: BGHS Alumni Website  
**Technology Stack**: Next.js 14, Supabase, TypeScript, Tailwind CSS  
**Current Status**: Development Phase - Server Running on http://localhost:3000

## Recent Development Work Completed

### 1. User Registration Form Updates

**Date**: Current Session  
**Files Modified**: - app/register/page.tsx - app/api/auth/register/route.ts

**Changes Made**: - **Replaced “Batch Year” field** with two new fields: - **“Passing Year”** (mapped to year\_of\_leaving in database) - **“Last Class”** (mapped to last\_class in database) - **Updated Field Labels**: - “Batch Year (10th Standard)” → “Passing Year” - Added “Last Class Attended” with dropdown (Class 1-12) - **Enhanced Validation**: Both new fields are required with proper validation - **Database Schema**: Updated to use year\_of\_leaving (integer) and last\_class (string)

### 2. Bengali School Name Standardization

**Date**: Current Session  
**Files Modified**: - app/page.tsx (Home page) - app/about/page.tsx (About page)

**Changes Made**: - **Removed “প্রাক্তন ছাত্র সমিতি”** (Alumni Association) from all instances - **Standardized to**: “বারাসাত প্যারীচরণ সরকার রাষ্ট্রীয় উচ্চ বিদ্যালয়” - **Updated Locations**: - Home page: 3 locations (header, hero section, footer) - About page: 2 locations (header, footer)

### 3. About Page Enhancements

**Date**: Previous Sessions  
**Files Modified**: app/about/page.tsx

**Features Implemented**: - **Bilingual Content**: English/Bengali toggle for main content only - **Notable Alumni Cards**: Redesigned with profile photos and achievement badges - **Hero Section**: Professional styling matching home page design - **Content Structure**: Mission, Vision, History, Achievements, Notable Alumni sections

### 4. Technical Infrastructure

**Date**: Current Session  
**Files Modified**: next.config.js

**Issues Resolved**: - **DNS Error Fix**: Removed problematic bghs-gallery.alumnibghs.org from remotePatterns - **Server Stability**: Eliminated TypeError: fetch failed with ENOTFOUND errors

## Current System Architecture

### Database Schema

* **Primary Database**: Supabase (PostgreSQL)
* **Authentication**: Supabase Auth with OTP verification
* **User Profiles**: Extended with education fields (year\_of\_leaving, last\_class)
* **Role-Based Access**: Hierarchical role system implemented

### User Roles & Permissions

Role Hierarchy:  
├── public (Unauthenticated)  
├── alumni\_member (Basic member)  
├── alumni\_premium (Premium member)  
├── content\_moderator  
├── event\_manager  
├── content\_creator  
├── donation\_manager  
└── super\_admin

### Key Features Implemented

1. **User Registration**: Email/Phone with OTP verification
2. **Profile Management**: Extended education fields
3. **Event Management**: Admin event creation and management
4. **Gallery System**: Image upload and display
5. **Directory**: Alumni member listing
6. **About Page**: School history and legacy information
7. **Bilingual Support**: Bengali/English content toggle

## Technical Implementation Details

### Frontend Architecture

* **Framework**: Next.js 14 with App Router
* **Styling**: Tailwind CSS with custom components
* **State Management**: React hooks (useState, useEffect, useRef)
* **Form Handling**: Client-side validation with server-side verification

### Backend Architecture

* **API Routes**: Next.js API routes for authentication and data management
* **Database**: Supabase with Row Level Security (RLS)
* **External Services**: Twilio (SMS), SendGrid (Email)
* **File Storage**: R2 storage for gallery images

### Security Implementation

* **Authentication**: Supabase Auth with OTP verification
* **Authorization**: Role-based access control
* **Data Validation**: Client and server-side validation
* **Row Level Security**: Database-level access control

## Current Status & Next Steps

### ✅ Completed

* User registration form with education fields
* Bengali school name standardization
* About page with bilingual content
* Technical infrastructure fixes
* Server stability improvements

### 🔄 In Progress

* Registration ID system design (discussion phase)
* Asynchronous messaging requirements analysis
* Role-based access control documentation

### 📋 Pending

* Registration ID implementation
* Asynchronous messaging system
* Advanced role-based permissions
* Content management system for About page
* Enhanced notification system

## Development Environment

### Server Status

* **Status**: Running
* **Port**: 3000
* **URL**: http://localhost:3000
* **Build Status**: Successful
* **Errors**: None (DNS issues resolved)

### Key Files Structure

app/  
├── register/page.tsx # Updated registration form  
├── about/page.tsx # Enhanced About page  
├── page.tsx # Updated home page  
├── api/auth/register/route.ts # Updated registration API  
└── admin/ # Admin functionality  
  
lib/  
├── auth-utils.ts # Authentication utilities  
├── email-service.ts # Email service  
└── sms-service.ts # SMS service  
  
public/  
├── bghs-logo.png # Updated logo  
└── school-building.jpg # About page background

## Technical Notes

### Database Migrations

* add-education-fields.sql: Added education fields to profiles table
* update-contact-fields-constraints.sql: Updated contact field constraints
* add-registration-id.sql: Prepared for registration ID implementation

### Configuration Files

* next.config.js: Updated remote patterns for image optimization
* tailwind.config.js: Custom styling configuration
* package.json: Dependencies and scripts

## Conclusion

The BGHS Alumni Website development has made significant progress with enhanced user registration, improved content management, and technical stability. The system now supports comprehensive alumni management with role-based access control and bilingual content support. The foundation is solid for implementing advanced features like registration IDs and asynchronous messaging systems.

**Next Priority**: Implement the registration ID system based on the architectural discussions and continue with asynchronous messaging requirements analysis.