**Ibadur Rahman Academy Website Requirements Engineering Document**

**1. Project Overview**

**1.1 Project Description**

This project involves designing and developing a modern, responsive website for Ibadur Rahman Academy, a senior high school in Ghana. The website will serve as an informational platform for current and prospective students, parents, staff, and the wider community.

**1.2 Project Objectives**

* Create a professional, responsive website that represents the school's identity
* Provide clear, accessible information about the school's programs and activities
* Establish a platform that can be easily maintained and updated by school staff
* Build a foundation that can be expanded to include portals and interactive features in the future
* Ensure fast loading times and good performance for users in Ghana

**1.3 Stakeholders**

* School Administration
* Teachers and Staff
* Students and Parents
* Prospective Students
* Alumni
* Website Administrator (initially you, later potentially teachers)

**1.4 Timeline**

* MVP Development: 1 month
* Post-MVP Features: To be determined based on school priorities

**2. Functional Requirements**

**2.1 Core Website Features**

**2.1.1 Public Pages**

* **Homepage**
  + Hero banner with school motto and imagery
  + News and announcements section
  + Quick links to important pages
  + Welcome message or school introduction
  + Upcoming events section
* **About Us Section**
  + History
  + Message from Headmaster
  + PTA Information
  + Board of Governors
  + Past Heads
  + Vision & Mission Statement
  + School Rules
  + School Anthem
* **Academic Section**
  + Departments overview
  + Programs offered
  + Admission information and list
  + Academic calendar
* **Staff Section**
  + Teaching staff
  + Non-teaching staff
  + Management team
* **Students Section**
  + Prefects
  + Student Representative Council (SRC)
  + Clubs and societies
  + Cadet
  + Campus life
* **Gallery**
  + Photo galleries
  + Videos
* **Contact Page**
  + Contact form
  + School address and map
  + Phone numbers and email addresses
  + Social media links

**2.1.2 Navigation and Structure**

* Hierarchical navigation menu with dropdowns
* Mobile-responsive navigation system
* Breadcrumb navigation for deeper pages
* Footer with quick links and contact information
* Search functionality

**2.2 Content Management System**

**2.2.1 Administrative Features**

* Secure admin login
* Dashboard with content overview
* User management (for future additional administrators)

**2.2.2 Content Types**

* **News Articles**
  + Title, content, featured image
  + Publication date
  + Category/tag options
* **Events**
  + Title, description, location
  + Date and time
  + Featured image
* **Gallery Items**
  + Image uploads with captions
  + Video embeds or uploads
  + Album/category organization
* **Static Pages**
  + Standard pages with rich text content
  + Ability to update existing pages
  + Option to add new pages

**2.2.3 Media Management**

* Image upload and optimization
* Document uploads (PDF, DOC, etc.)
* Media library/asset management

**2.3 Interactive Features**

**2.3.1 Forms and Feedback**

* Contact form with spam protection
* Newsletter signup
* Event registration (future enhancement)

**2.3.2 Social Media Integration**

* Social media sharing buttons
* Display of social media feeds (optional)

**2.4 Future Enhancements (Post-MVP)**

**2.4.1 Portals**

* Student portal with grades, assignments, and resources
* Teacher portal with class management tools
* Parent portal with student information access

**2.4.2 Advanced Features**

* Online admission application system
* Alumni directory
* E-learning resources
* School calendar integration
* Fee payment system

**3. Non-Functional Requirements**

**3.1 Performance**

* Page load time under 3 seconds
* Mobile optimization for varying connection speeds
* Efficient asset loading and caching

**3.2 Security**

* HTTPS implementation
* Secure authentication for admin access
* Data protection for contact form submissions
* Regular security updates

**3.3 Usability**

* Responsive design for all device sizes (mobile, tablet, desktop)
* Accessibility compliance (WCAG 2.1 AA standards)
* Intuitive navigation and information architecture
* Readable typography and adequate contrast

**3.4 Reliability**

* 99.9% uptime (leveraging Netlify's infrastructure)
* Automated backups of site content
* Graceful error handling

**3.5 Scalability**

* Architecture that supports future expansion
* Clean separation of content and presentation
* API-first approach for future integrations

**3.6 Maintainability**

* Documented codebase
* Training materials for content managers
* Component-based design for reusability

**4. Technical Requirements**

**4.1 Development Stack**

* **Frontend Framework**: Next.js (React)
* **Styling**: Tailwind CSS
* **Content Management**: Headless CMS (Sanity.io)
* **Hosting/Deployment**: Netlify

**4.2 Responsive Design**

* Mobile-first approach
* Support for screen sizes from 320px to 2560px width
* Optimized images for different screen sizes

**4.3 Browser Support**

* Chrome (latest 2 versions)
* Firefox (latest 2 versions)
* Safari (latest 2 versions)
* Edge (latest 2 versions)
* Opera (latest version)

**4.4 Integration Requirements**

* Google Analytics or similar for site metrics
* Social media sharing capabilities
* Embeddable maps for contact page

**4.5 SEO Requirements**

* Semantic HTML structure
* Meta tags for all pages
* Structured data (Schema.org)
* Sitemap generation
* Optimized page URLs

**5. Content Requirements**

**5.1 Text Content**

* School history and background
* Academic program descriptions
* Staff information
* School policies and rules
* Contact information

**5.2 Visual Content**

* Professional photography of the school campus
* Images of students, staff, and activities
* School logo in various formats
* Icons and illustrations as needed

**5.3 Document Content**

* Academic calendar
* Admission forms
* School handbook
* Curriculum outlines

**6. Constraints**

**6.1 Budget**

* Development is being done pro bono
* Solution should minimize ongoing costs

**6.2 Timeline**

* MVP must be completed within one month

**6.3 Technical**

* Solution must be maintainable by non-technical staff
* Must work well with varying internet connectivity

**7. Assumptions and Dependencies**

**7.1 Assumptions**

* Content will be provided by the school
* School will provide necessary approvals in a timely manner
* Existing design elements (logo, colors) will be retained

**7.2 Dependencies**

* Access to current website content
* School approval for design concepts
* Availability of school staff for content reviews

**8. Success Criteria**

**8.1 Business Goals**

* Improved online presence for the school
* Increased accessibility of school information
* Establishment of a maintainable digital platform

**8.2 Measurable Outcomes**

* Website fully functional and responsive
* All required content successfully migrated
* Staff trained on content management
* Positive feedback from key stakeholders

**9. Glossary**

* **MVP**: Minimum Viable Product
* **CMS**: Content Management System
* **Responsive Design**: Design approach where the website adapts to different screen sizes
* **Headless CMS**: Content management system that separates content from presentation