

*…Your professional compliance and development partner*

**DESIGN AND INSTALLATION OF ENTERPRISE & LEARNING MANAGEMENT SYSTEM WEB APPLICATION FOR OGTAN (OGTAN.ORG.NG)**

**(PROPOSED PROJECT BLUEPRINT AND PLAN)**

Submitted to:

****

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Doc No:** PL-OGTAN-PQ02A-0001 | | | |  |
| **Control:** Business Division (Management Consulting & Enterprise Solutions) | | | |  |
| **Security classification:** Restricted | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 00 | 29.10.2024 | **Christopher Andrew**  (QA Officer) | **Ifeanyi K. Eziokwu**  (Managing Partner) |  |
| **Rev** | **Date** | **Prepared by** | **Reviewed** | **OGTAN Approval** |

|  |
| --- |
| **COPYRIGHT PROTECTION**  These technical and commercial data disclosed herein are the exclusive property of **Proliance Ltd**, or contain proprietary rights of others, and shall not be disclosed to others without the written consent of **Proliance Ltd**. The recipient of the document, by its retention and use, agrees to hold in confidence the technical and commercial contained herein. The foregoing shall not apply to persons having proprietary rights to such information to the extent that such right exists. |
| **The President**  **Oil and Gas Trainers Association of Nigeria (OGTAN)**  20 Awudu Epkekha Boulevard Street,  Off Admiralty way, Lekki, Lagos – Nigeria.  Dear Sir,  **RE: DESIGN AND INSTALLATION OF ENTERPRISE & LEARNING MANAGEMENT SYSTEM WEB APPLICATION FOR OGTAN (OGTAN.ORG.NG)**  Following our identified need to have a standard web application process to support essential accreditation, training and certification activities of the Oil and Gas Trainers Association of Nigeria (OGTAN), attached is our proposal for the **design and installation of enterprise and Learning Management System for OGTAN.**  The proposal aims at specifying technical information with regards to the features, benefits, general scope and methodology, stages/phases and cost implication for designing the system using improved and secure technology solutions.  We look forward to using our expertise to work for you and we trust that the implementation of a user friendly and comprehensive web application, in line with international best practices and standards, will enhance your **operational control and reduce risks of information mismanagement, enhance the corporate image of the Body, Improve stakeholder engagement,** as well as position OGTAN as a global training association and personnel certification body.  We promise to offer you a quality consultancy support for the proposed design and installation.  Your faithfully,  **For: PROLIANCE LTD**  **Engr. Ifeanyi K. Eziokwu**  Managing Partner  ***COREN: R.69,845***  ***NSE****:* ***59927*** |

Table of Contents

[FORWARD 4](#_Toc181444310)

[1.0 EXECUTIVE SUMMARY 6](#_Toc181444311)

[**1.1** **Overview of the project** 6](#_Toc181444312)

[**2.1** **Objectives of the OGTAN.ORG.NG Web Application** 6](#_Toc181444313)

[2.0 ABOUT PROLIANCE LTD 7](#_Toc181444314)

[**2.1** **Why choose us** 8](#_Toc181444315)

[4.0 PROPOSED SYSTEM DESIGN AND INSTALLATION 8](#_Toc181444316)

[**4.1** **User Roles and Permissions** 8](#_Toc181444317)

[**4.2** **Approval Workflow** 10](#_Toc181444318)

[5.0 TECHNICAL IMPLEMENTATION: 10](#_Toc181444319)

[**5.1** **Frontend Development (React.js)** 10](#_Toc181444320)

[**5.2** **Backend Development (Python)** 10](#_Toc181444321)

[6.0 DEVELOPMENT PLAN FOR OGTAN.ORG.NG 10](#_Toc181444322)

[**6.1** **Development Phases** 10](#_Toc181444323)

[7.0 KEY PROJECT TECHNICAL RESOURCES 12](#_Toc181444324)

[8.0 PROCESSING OF PERSONAL DATA 12](#_Toc181444325)

[9.0 COMMERCIAL 12](#_Toc181444326)

[APPENDIX 1: PRICE BREAKDOWN FOR OGTAN ENTERPRISE & LEARNING MANAGEMENT WEB APPLICATION 13](#_Toc181444327)

# **FORWARD**

This document is to provide relevant information to all relevant interested parties on the proposed **design and installation of enterprise and learning management system for OGTAN** and how **Proliance Ltd** will manage project activities to ensure project objectives are achieved for short term and long-term purposes. This project blueprint and proposal aim at specifying the technical information required for successful completion of the project. The document highlights relevant features and overview of the proposed OGTAN System (OGTAN.ORG.NG) to ensure development meets all technical expectation for user friendly and efficient service delivery of the Association.

**PROLIANCE LTD CONTACT DETAILS**

|  |  |
| --- | --- |
| **Contact Person:** | Ifeanyi K. Eziokwu |
| **Designation:** | Managing Partner |
| **Email:** | [Ifeanyi.eziokwu@prolianceltd.com](mailto:Ifeanyi.eziokwu@prolianceltd.com) |
| **Phone:** | +2348065176423, +2348079701019 |

|  |  |
| --- | --- |
| **Contact Person (Quality Assurance):** | Christopher Andrew |
| **Designation:** | Quality Assurance Officer (Products & Services) |
| **Email:** | [enterprise@prolianceltd.com](mailto:enterprise@prolianceltd.com) |
| **Phone:** | +2348065176423, +2348079701019 |

**OIL AND GAS TRAINERS ASSOCIATION OF NIGERIA CONTACT DETAILS**

|  |  |
| --- | --- |
| **Contact Person:** | Mazi Sam A. Onyechi |
| **Designation:** | President, OGTAN |
| **Email:** | Sam.onyechi@inspectionandtests.com |
| **Phone:** | 08035006525 |

|  |  |
| --- | --- |
| **Contact Person:** | Darlington Nwosu |
| **Designation:** | Manager, OGTAN |
| **Email:** | Nwosu.darlington@ogtan.org.ng |
| **Phone:** | 08134785676 |

# **1.0 EXECUTIVE SUMMARY**

## **1.1 Overview of the project**

**“OGTAN.ORG.NG”** is a sophisticated Enterprise and Learning Management System (LMS) designed for trainers and learner’s management services. It aims to provide an intuitive and robust platform for Trainers, Learners and groups. The system comprises four main sections: Admin, Users (Trainers, Assessment Centres, Learners), Super Admin. The front end of the website is to be built using React.js for a dynamic and responsive user experience, while the backend is powered by Python to handle the server-side logic and database interactions.

The Admin is for the proper management of information and registered users on the website by OGTAN, Approval of Registrations and Applications, upload of certificates, upload of training & certification programmes, events and other essential features. the Super-Admin with the overall control of activities on the platform which is to be fully managed by Proliance Ltd with the overall responsibility to ensure that the LMS continues to function at optimal performance.

## **2.1 Objectives of the OGTAN.ORG.NG Web Application**

Organizations around the world have continued to shape the way they work considering increasing demand for seamless operations and use of improved technologies to deliver world class solutions. The primary objective of the system is to automate OGTAN Membership and Certification Management Process that meet requirements of ISO/IEC 17024, improve system operations and services to contribute more effectively towards global trade advancement in the Human Capacity Development within the region. The following are the project objectives;

**OPERATIONAL OBJECTIVES:**

* To fully automate OGTAN membership application processes through a secure, user friendly web application system
* To improve stakeholder’s engagement and collaborative workflow with global community through 24/7 online system
* To reduce the risks of information mismanagement and bridge of data protection laws through unapproved means of processing of personal information
* To reduce the risks of information loss as a result of disaster, breakdown, sabotage and destruction of individual computers and physical backup devices.
* To remove the drudgery in processing of large information by OGTAN staff
* To enable easy applications of different schemes and management from any location within Africa and the globe
* To boost members’ and sponsors confidence due to increase awareness of OGTAN Activities and ease of information processing
* To improve information and feedback gathering form members of the community for continual improvement of the body.

**MARKET BENEFITS:**

* To promote OGTAN as a key driver of innovation in Human Capacity Development and Personnel Certification within the region and around the globe
* To provide a competitive market tool (reputation/good corporate image) Demonstrates to stakeholder that organization is meeting quality, environmental and sustainability requirements as well as pursuing continual improvement.
* To promote local content technology in the design and deployment of Enterprise and Learning Management Solutions within the region.
* To position OGTAN as a Global Player in Learning Management and Personnel Certification Body around the globe
* To provide framework for meeting present and identifying future customer needs through seamless feedbacks and reviews analysis
* To provide framework to offer better customer service and win more high value customers as a result

**COST BENEFITS:**

* To improve OGTAN Returns and Cash inflows through Automated Online Payment System for online purchases, LMS Services, automated registrations and online donor management systems
* To reduce business liabilities due to elimination of possible nonconformities, direct and indirect costs and associated risks
* To reduce costs due to wastes, loss of goodwill and boost access to capital as a result of demonstration of sustainable business practices

**REGULATORY BENEFITS:**

* To demonstrates to regulatory authorities’ organization’s commitment towards meeting legal expectations
* To broaden business opportunities by demonstrating compliance and a culture of continual improvement
* To improve members statutory requirements, update through automated tracking and notification of status of statutory requirements.

# **2.0 ABOUT PROLIANCE LTD**

**Proliance Ltd is** an ISO 9001 certified management consulting, engineering, supply chain management, project management and training services provider in the Energy and Natural Resources, Manufacturing, Technology and Communication, Healthcare, Food and Agriculture Industries, Government and International Development Agencies. Proliance Ltd was founded by a team of seasoned management consultant and conformity assessment professionals with TRUTH and INTEGRITY as the core foundation to provide solutions that meet our clients’ needs. We are registered with the Corporate Affairs Commission of Nigeria with certificate of incorporation number RC 1451877.

At Proliance Ltd, we assist our customers to enhance their business processes and operational performancee, through provision of streamlined and market-oriented business, technology and developmental solutions. We employ technology in the provision of services to the convenience of users and clients. Our team of dedicated Consultants and Software Engineers are creative, effective, and efficient. We are here to add to your success stories.

## **2.1 Why choose us**

* **Truth & Integrity;** integrity forms the foundation of what we do. We have established a business environment of trust and our people understand the concept of executing tasks impartially.
* **Our People:** We have a prolific team of energetic and competent professionals with broad experience in systems development and operational risk management in different industrial sectors. Our Management Consultants work closely with our Technical Team to deploy a solution that fits your process needs and functional. A factor we take into consideration in the selection process of team members for each project execution.
* **Performance driven**; Proliance Ltd is a performance driven organization and our people are duly motivated and equipped to lead in their individual process with all support from company leadership. We deliver our services with speed and effectiveness to help our clients achieve their business needs in a well-timed manner.
* **Innovation**: At Proliance Ltd, we encourage and support creativity and innovation at all levels and within applicable legal and statutory framework. Our personnel are cultured to continually improve in their approach to service deliveries so as to ensure that our customers always improve and remain competitive.
* **Growth:** We believe that both our people and customers shall experience growth through the services we render. The growth of our people is essential to the success of our business and customers and we have excellent human resources support to ensure sustained personal and professional growth.

# **4.0 PROPOSED SYSTEM DESIGN AND INSTALLATION**

## **4.1 User Roles and Permissions**

|  |  |  |
| --- | --- | --- |
| 1. | **Admin:** | * Approves all applications and Registrations * View Users activities, analytics, progress and enrollment tracking * Update Membership List/Database * Upload Certificates information for download and verification * Notify users on updates and news * Confirm online payments * Course creation and management * Manage Assessment * Other identified key features |
| 2 | **Organization**   * Trainers/Members * Assessment Centres | * User Registration and Login: Secure user authentication using email/password. * Register organizations profile as an Applicant or Registered member * View Applications Status * Apply for new membership, certificates or renewal * Generate invoice for service request * Pay for application/renewals * Upload supporting documents * View options and make payments via approved gateway/direct transfer * Track applications and membership progress and status * download issued certificates and badges, * receive auto notification from Admin * Other identified key features |
| 3 | **Learners / Certified Individuals** | * User Registration and Login: Secure user authentication using email/password. * User Dashboard: An intuitive dashboard displaying enrolled courses, progress tracking, and upcoming assessments. * Online payment for training or assessment registrations * Course Access: Users can access course content presented in an approved format. * Assessments: Users can take quizzes and submit assignments as part of their course requirements. * Progress Tracking: Visual representation of course / assessment completion status and performance analytics. * Profile Management: Users can update their personal information and view their learning history. |
| 4 | **Approved Quality Assessors** | * Register as a user * Confirm/Decline assigned task * mark status of assigned assessment * upload completed documents * Make recommendations * View and track status of all recommendations * Other identified |
| 5. | **Super-Admin** | * For overall management of the LMS for good performance. * Other identified features |

## **4.2 Approval Workflow**

|  |  |  |
| --- | --- | --- |
| 2 | **Approval Workflow** | * All registrations will require admin approval after review of user submissions * Admin reviews and approves or rejects any user registration * Admin will migrate Applicant to Registered User Portal after review of submissions * Admin can deregister any user from the system * All Organizations profile shall remain in the Applicant until Approval / Accreditation is issued and Unique Accreditation / Membership ID used to migrate profile to “Registered Members” * Only approved Certificates are to be uploaded on the platform by the admin |

# **5.0 TECHNICAL IMPLEMENTATION:**

## **5.1 Frontend Development (React.js)**

**React Components:** Modular components for Users Dashboard, Verification Results Viewer, Admin Dashboard, and Super Admin Dashboard.

**State Management:** Use of Redux or Context API for managing state across the application.

**Routing:** React Router for navigation between different sections of the site.

**UI Framework:** Material-UI or Bootstrap for consistent and responsive design.

## **5.2 Backend Development (Python)**

**Framework:** Flask or Django for building the RESTful API.

**Database:** PostgreSQL or MySQL for robust data storage.

**Authentication:** JWT (JSON Web Tokens) for secure authentication.

**File Storage**: Integration with cloud storage services (e.g., AWS S3) for storing Certificate content.

**Background Tasks:** Celery for handling background tasks such as sending emails or processing large file uploads.

# **6.0 DEVELOPMENT PLAN FOR OGTAN.ORG.NG**

Total Planned Duration: 3.5 months (approximately 105 days)

## **6.1 Development Phases**

**6.1.1 Planning and Design (10 days)**

* Requirement Gathering and Analysis (3 Days); understand detailed requirements and create a feature list.
* UI/UX Design (5 Days): Design wireframes and mockups for the user interface.
* Architecture Design (2 Days): Plan the system architecture, including the database schema and API design.

**6.1.2 Frontend Development (30 days)**

* Initial Setup and Components Development (10 Days): Set up the React project and develop basic components (Header, Footer, Navigation).
* User Sections (10 Days): Implement user registration, login, dashboard, course view, and assessment components.
* Sub Admin Section (5 Days): Develop components for course creation, content upload, and user management.
* Super Admin Section (5 Days): Create components for managing users, sub admins, site settings, and analytics.

**6.1.3 Backend Development (35 days)**

* Initial Setup and Authentication (10 Days): Set up the Flask/Django project, configure the database, and implement user authentication with JWT.
* User Management APIs (10 Days): Develop APIs for user registration, login, profile management, and enrollments.
* Courses and Contents Management (5 Days): Implement APIs for creating and managing courses and handling assessments.
* Admin Management and Analytics (5 Days): Develop APIs for sub admin management, user tracking, and site analytics.

**6.1.4 Integration and Testing (20 days)**

* Frontend-Backend Integration (10 Days): Connect the React frontend with the Python backend through RESTful APIs.
* Testing: Perform unit testing, integration testing, and user acceptance testing to ensure all functionalities work as expected.

**6.1.5 Deployment, Hosting and Final Testing and Training (10 days)**

* Set up hosting environment
* Deployment-Deploy the frontend and backend applications to the host environment.
* Final Testing and Launch
* Conduct final testing in the production environment, perform any necessary optimizations, and launch the website.

Figure 7.1: Contract organizational Chart

# **7.0 KEY PROJECT TECHNICAL RESOURCES**

|  |  |
| --- | --- |
| PROJECT MANAGER | Responsible with overall project delivery, schedule management and implementation of execution plan, Concept initialization, liaison with client Reps |
| FRONTEND ARCHITECT | Plan, design, build, and implement the user interface systems |
| BACKEND ARCHITECT | Plan, develop and implement essential architect solutions with Python backend technologies |
| PRODUCT QUALITY ASSURANCE & GRAPHICS OFFICER | Monitor Blueprint implementation  Design all essential graphics to reflect OGTAN brand projections |

# **8.0 PROCESSING OF PERSONAL DATA**

As a registered consulting company, all our services are carried out with the clear understanding that our customer data privacy is important and we are committed to the protection of personal information in accordance with the Nigerian Data Protection Act (NDPA), European General Data Protection Regulation (GDPR) and other relevant global privacy regulations.

We will work with OGTAN Team to develop “Data and Privacy Policy” that meets global requirements for the storage and processing of personal information on the Website. This is to ensure full compliance with Nigerian Data Protection Act and other global data protection regulations.

# **9.0 COMMERCIAL**

Our mode of payment is usually distributed for control, viz. 1st MILESTONE 25%, 2nd MILESTONE 25%, 3rd MILESTONE 25%, 4th MILESTONE 25%

Payment is done before commencement of each Stage, this to enhance the mobility and other requirements by the consultants.

* REFER TO APPENDIX 1, FOR PRICE BREAKDOWN AND COSTS

# APPENDIX 1: PRICE BREAKDOWN FOR OGTAN ENTERPRISE & LEARNING MANAGEMENT WEB APPLICATION