Project Title: Authentication / Authorization Service

Project Manager: Stephen Ubogu

Project Sponsor: Lagos JUG

Project Start Date:

Project End Date:

Project Objectives:

* Develop a comprehensive access control policy that aligns with LagosJUG security requirements and compliance standards.
* Design and deploy a role-based access control system to efficiently manage user permissions based on functions.
* Design the authorization and authentication services to be scalable, accommodating growth in user base and resource access demands without compromising Performance.
* Implement robust logging and auditing mechanisms to track user access, changes to permissions, and potential security events, facilitating compliance and incident response.
* Develop an intuitive administrative interface for managing user roles, permissions, and access policies, reducing the complexity of system administration tasks. (post MVP authorization)
* Ensure that the authorization service follows industry best practices and security standards, providing a secure foundation for user access management. (post MVP authorization)
* Establish a process for continuous Monitoring of access patterns and system performance, with a commitment to ongoing improvement based on feedback and emerging security threats. (Decide on which tools to use)
* Create detailed Technical Documentation for the authorization service, API documentation, and system architecture documentation to facilitate future maintenance and knowledge transfer. (post MVP authorization)
* Ensure the authorization service complies with relevant legal and regulatory data privacy, security, and access control requirements.
* Design and deploy an Attribute-based access control system to efficiently manage user permissions based on roles. (post MVP authorization)

Project Scope:

This Project aims to develop and deploy secure authentication and authorization services for streamlined user access management. Critical aspects of the scope include:

* Develop an access control policy that is aligned with LagosJUG standards.
* Design RBAC system for efficient user permissions.
* Create scalable authentication and authorization services.
* Implement robust logging for user access and changes.
* Develop a user-friendly admin interface (Post-MVP).
* Establish continuous Monitoring and improvement process.
* Generate technical Documentation (Post-MVP).
* Ensure legal and regulatory compliance.
* Design ABAC system (Post-MVP).

Project Deliverables:

* A comprehensive document specifying access control policies aligned with LagosJUG security requirements and compliance standards.
* Deployed RBAC system using Spring Security framework configured with role-based access rules and permissions.
* Deployed Authentication service using Spring Security OAUTH2 leveraging Open ID Connect
* Deployed Authorization service conforming to OAUTH2 standards
* Documentation outlining the design for scalability and Performance ensures that the authentication and authorization services can accommodate growth in user base and resource access demands without compromising Performance.
* Configured logging and auditing mechanisms using Log4j or Logback for logging user access and permission changes to files or centralized logging systems like ELK Stack.
* Developed an intuitive administrative interface using Spring Boot for backend development and Thymeleaf, React, or Angular frontend development.
* Integrated monitoring tools such as Micrometer for application metrics and Prometheus for monitoring access patterns and system performance.
* Detailed Documentation, including API documentation and system architecture documentation, facilitating future maintenance and knowledge transfer.
* Documentation confirms compliance with relevant legal and regulatory data privacy, security, and access control requirements.
* Designed and deployed an Attribute-Based Access Control (ABAC) system using frameworks like Apache Shiro or integrating with Auth0 to manage user permissions based on attributes.

Project Stakeholders:

Project Sponsor: LagosJUG

Project Manager: Stephen Ubogu

Team Members: Members of LagosJUG

Assumptions and Constraints:

The Project assumes:

* Active cooperation from stakeholders throughout implementation.
* Availability of budget, skilled personnel, and necessary technology.
* Timely progression according to the defined timeline.
* Positive reception and adoption of the new authorization service.

The Project may be constrained by the following:

* Operation within the allocated budget.
* Potential adjustments due to changes in legal or regulatory requirements.
* Compliance with strict data privacy requirements impacting certain functionalities.
* Resistance to change within the organization requires effective change management.
* Dependencies on third-party vendors introducing risks.
* Challenges related to scalability affecting design decisions.

Milestones:

Project Initiation (2 weeks):

* Define roles and responsibilities.
* Kickoff meeting and project plan development.

Access Control Policies (4 weeks):

* Collaborate on policy definition.
* Finalize policies with stakeholders.

RBAC System Development (8 weeks):

* Design and implement RBAC system.
* Testing and validation.

Integration with Existing Systems (6 weeks):

* Assess integration requirements.
* Implement integration and conduct testing.

Scalability and Performance (4 weeks):

* Design for scalability.
* Implement performance optimization measures.

Logging and Auditing (3 weeks):

* Implement logging and Auditing.
* Testing for accuracy and effectiveness.

Administration Interface (5 weeks):

* Design and implement a user-friendly interface.
* Conduct user acceptance testing.

Security Standards Adherence (4 weeks):

* Conduct security audit.
* Implement adjustments as needed.

Continuous Monitoring (3 weeks):

* Implement monitoring processes.
* Establish procedures for improvement.

User Training and Communication (4 weeks):

* Develop training materials.
* Conduct training sessions and communicate changes.

Comprehensive Documentation (3 weeks):

* Generate detailed user guides and system documentation.

Legal and Regulatory Compliance (4 weeks):

* Review and verify compliance.
* Implement adjustments for continued compliance.

Project Closure and Handover (2 weeks):

* Prepare closure report and hand it over to the operational team.
* Complete administrative tasks and Documentation.

Budget: (I Think this should be resources)

The total project budget is estimated at $XXX, XXX.

Risks:

Security Vulnerabilities:

Risk: Potential unauthorized access or data breaches.

Mitigation: Thorough security assessments, encryption protocols, and regular updates.

Budget Overruns:

Risk: Unforeseen costs impacting project feasibility.

Mitigation: Detailed cost analysis, contingency planning, and continuous expense monitoring.

Regulatory Compliance Changes:

Risk: Legal or regulatory changes requiring scope modifications.

Mitigation: Stay informed, design flexibly, and communicate closely with legal and compliance teams.

Resource Constraints:

Risk: Insufficient availability of skilled personnel or resources.

Mitigation: Careful resource planning, potential outsourcing, and contingency plans.

Scope Creep:

Risk: Additional features expanding the project scope.

Mitigation: Clearly define and document scope, conduct regular reviews, and follow a formal change management process.

Third-Party Dependency Issues:

Risk: Risks related to Performance and availability of third-party vendors.

Mitigation: Select reliable vendors, conduct thorough evaluations, and have contingency plans.

Risk: Application failure

Mitigation: Monitoring and Detection, Disaster recovery planning, Backup recovery

Approved By:

Project Manager