Programa de Especialização em AWS 2.0
Mentoria Arquiteto AWS Pro

Módulo de Projetos Individuais com Acompanhamento

PROJETO 01 - WordPress Migration

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Supervisão : Leandro Porciúncula

São Paulo
2025

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Este documento faz parte das atividades técnicas do Módulo
de Projetos Individuais com Acompanhamento no Curso de Especialização em AWS 2.0, ministrado pela Cloud Treinamentos, como requisito
parcial à obtenção do título de Especialista em Cloud AWS.

São Paulo
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History of the Documentation

Version	Date	Author	Description	Approved by
Draft	Arquiteto	April-2025	Luiz Carlos Rodrigues	Document creation

Project Participants

Name	Role	Date	mail	Phone
Luiz Carlos Rodrigues	Arquiteto	April-2025	lcfrod@hotmail.com	(11) 98548-9032
Leandro Porciuncula	Supervisor			
Cláudio Vieira	AWS Guru			

Confidentiality Agreement

This Confidentiality Agreement ("Agreement") is made between the parties involved in the migration of the Blog Platform ("Project01") to the Amazon Web Services ("AWS") Cloud Environment.

1. **Purpose** The parties acknowledge that during the execution of the Project, it will be necessary to disclose confidential information including, but not limited to, technical specifications, system architecture, user data, operational procedures, and business strategies ("Confidential Information").

2. **Obligations** Each party agrees to:

    - Use the Confidential Information solely for the purposes of the Project.
    - Limit access to Confidential Information to employees or contractors who need to know it for the Project and are bound by confidentiality obligations.
    - Take reasonable measures to protect the Confidential Information against unauthorized disclosure or use.
    - Not disclose any Confidential Information to third parties without prior written consent

3. **Exclusions** Confidential Information does not include information that:

    - Becomes publicly available through no fault of the receiving party.
    - Is independently developed by the receiving party without use of or reference to the disclosing partys Confidential Information.
    - Take reasonable measures to protect the Confidential Information against unauthorized disclosure or use.
    - Is lawfully received from a third party without restriction.

4. **Term** The confidentiality obligations shall remain in effect for a period of five (5) years from the date of disclosure of the Confidential Information, or until such time as the information no longer qualifies as Confidential Information.

5. **Return or Destruction of Information** Upon conclusion or termination of the Project, or upon written request by the disclosing party, the receiving party shall promptly return or destroy all materials containing Confidential Information.

6. **Governing Law** This Agreement shall be governed by and construed in accordance with the laws applicable in the jurisdiction mutually agreed upon by the parties.

7. **General Provisions** Nothing in this Agreement grants any rights, by license or otherwise, to the Confidential Information, except as expressly set forth herein.

Project Overview

The Company XYZKT currently hosts its WordPress blog on HostGator, but it has been facing several critical issues that are negatively impacting performance and user experience. The Company expects, within a short period, an estimated increase in traffic to 150,000 daily visits, totaling approximately 4.5 million monthly visits.
Currently the Company recurrently faces of following problems:

1. **Performance Issues:** The website suffers from slow loading times, especially during traffic peaks, harming both visitor experience and SEO performance.

2. **Frequent Downtime:** The blog experiences regular outages, mainly during periods of high traffic volume, leading to user dissatisfaction and potential loss of engagement.

3. **Security Threats:** The platform is a frequent target of cyberattacks, including brute force attacks, SQL injections, and DDoS attacks, raising significant concerns about data security and platform stability.

4. **Scalability Limitations:** he current hosting environment lacks the necessary infrastructure to support the anticipated growth in traffic. The number of visitors has been steadily increasing over the past months, and the system is not adequately prepared to handle future demand.

To solve the aforementioned problems, the Company has turned to our services to prevent or mitigate these threats to its business and is requesting that we migrate its Wordpress Blog to AWS cloud services.

The advantages, strategies and parameters for the migration are discussed in this document.

Sumário

1 Project Introduction

Por toda a última década, estudos baseados em grandes populações têm demonstrado que os calibres retinais estão associados com uma larga faixa de doenças subclínicas, tais como aterosclerose, hipercolesterolemia, inflamação e disfunção endotelial, bem como doenças clinicas cardiovasculares, tais como hipertensão arterial (AWS, 2025), diabete mellitus, acidentes cardiovascular (AVC)

2   AWS SERVICES

In this section we describe all AWS Services applied in this project.

AWS Services are generally grouped into several broad classes (or categories), depending on the role they play in the project.

Heres a table with the AWS Services applied in this project and its class of service:

List of AWS Services Applied

Code	Name	Class of Service
EC2	Amazon Elastic Compute Cloud (Amazon EC2)	Compute
RDS	Amazon Relational Database Service (Amazon RDS)	Relational Database
ASG	Auto Scaling Group	Automatic Scaling
ELB	Elastic Load Balancing	
S3	Amazon Simple Storage Service (S3)	Storage
CDN	Amazon CloudFront	Content Delivery Network
R53	Amazon Route 53	DNS Service
ACM	AWS Certificate Manager	SSL/TLS Certificates
WAF	AWS Web Application Firewall	
CDW	Amazon CloudWatch	Monitoring and Alerts
ACM	AWS Certificate Manager	SSL/TLS Certificates

3 TESTES E RESULTADOS OBTIDOS

3.1 Método de Avaliação de Desempenho dos Algoritmos.

A métrica adotada para a avaliação dos algoritmos de classificação em geral, e do desempenho do algoritmo de segmentação desenvolvido neste estudo, em particular, utiliza cinco índices estatísticos, abaixo descritos (**??**) e (**??**):

4 CONSIDERAÇÕES FINAIS E TRABALHOS FUTUROS

A segmentação de disco ótico e dos vasos sanguíneos em imagens retinais é fundamental no desenvolvimento de aplicações automáticas ou semi-automáticas com o propósito do diagnóstico e tratamento precoces de várias doenças, tais como aterosclerose, hipercolesterolemia, hipertensão arterial e diabete mellitus, para citar algumas. Neste estudo, demonstramos a construção de um algoritmo para localizar e segmentar o disco ótico e para segmentar a estrutura vascular na retina.

REFERENCES

AWS. *Amazon Web Services*. 2025. Disponível em: <https://tinyurl.com/3ssmjbyk>.