From Grapes to Clicks : A Cloud-Based Wine-Selling Solution for Single Vendors

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Abstract: *This document outlines the design and creation of a robust wine vending application for a single vendor, which combines a web platform, an Android mobile app, and a cloud-based framework. This solution addresses the increasing demand for online wine sales while delivering a smooth, secure, and adaptable shopping experience. Essential features of the system include an intuitive web interface and an application focused on effective product searching, ordering, and payment processing. Cloud infrastructure is implemented to guarantee high availability, scalability, and secure data management. The paper discusses various architectural alternatives, such as utilizing cloud services for load balancing, data handling, and disaster recovery. It also emphasizes the necessity of strong security protocols, including encryption, user authentication, and adherence to industry standards for online transactions. Additionally, the document addresses challenges related to regulatory compliance, including age verification mandates and data protection laws. Lastly, it explores strategies for performance enhancement, improvements to user experience, and potential avenues for future expansion. The proposed solution aims to deliver a dependable, secure, and scalable platform tailored to the requirements of individual wine retailers while accommodating future growth.*

Keywords: Wine-selling application, Cloud architecture, Android application, Scalability, Security, User authentication