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Digital Marketplace for Babcock University

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Abstract: *Technology has transformed commerce through the rise of e-commerce and digital marketplaces. However, many academic institutions, including Babcock University, lack structured platforms, forcing students and vendors to rely on fragmented and inefficient channels. This study addresses this gap by developing a digital marketplace tailored to the university community. The existing system was analyzed using direct observation, and the new system was designed with UML diagrams. The incremental process model guided development, enabling flexibility and continuous improvement. Implementation utilized HTML, CSS, JavaScript, PHP, and MySQL. Results indicate that the platform streamlines on-campus commerce, supports student entrepreneurship, and enhances the buying and selling experience. SHA-512 cryptographic hashing ensures data security, while service scheduling and real-time notifications improve efficiency and communication. User feedback highlighted the platform's intuitive interface, convenience, and reliability, and performance assessments confirmed its effectiveness. Future enhancements should incorporate AI-driven features and expanded payment options to further optimize the user experience.*

Keywords: Digital Marketplace, eCommerce, Unified Modeling Language (UML), Incremental Process Model, Babcock University

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