

## WEB-BASED PERSONALIZED STAMP ALBUM

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### Introduction

Stamp collecting, or philately, has a rich history and a passionate global following. Collectors are drawn to this hobby not only for its aesthetic appeal but also for the opportunity it presents to explore the historical, cultural, and artistic aspects of different countries through postage stamps (Libera, 2020; Brennan, 2018). Each stamp is a miniature masterpiece, often telling a unique story about the place and time it represents. For generations, collectors have used physical stamp albums and catalogues to organize and learn about their collections. However, the digital era has brought both challenges and opportunities to this beloved pastime. In the age of Information and Communication Technology (ICT), stamp collectors now have access to groundbreaking tools that revolutionize their hobby (Hirwade and Nawlakhe, 2012). This article introduces the concept of web-based personalized stamp album applications, offering a transformative approach to how collectors engage with their collections. These applications harness the potential of ICT to provide collectors with a user-friendly, efficient, and easily accessible platform for managing and showcasing their stamps. This digital personalized stamp album transcends the constraints of physical counterparts, granting collectors a virtual canvas to curate, explore, and reference their collections seamlessly, regardless of their location, as long as they have an internet connection. This tool enhances accessibility, organization, and knowledge sharing among collectors, preserving the essence of philately while harnessing the advantages of modern technology. Stamp collectors now have the best of both worlds, allowing them to continue their exploration of history, culture, and artistry through the timeless charm of postage stamps, enhanced by the convenience and efficiency of the personalized digital stamp album.

**Keywords:** Philately, Stamp collecting, Web-based, Personalized, ICT (Information and Communication Technology)

### Methodology

In the context of developing a web-based personalized stamp album, an iterative model for software development is integral to the creation of a dynamic and user-friendly platform. The iterative process begins with thorough planning, defining the scope and features of the application, such as stamp organization, customization options, and user authentication. Design focuses on creating an intuitive user interface and structuring the database for efficient stamp management. During the coding phase, developers implement these features, followed by rigorous testing and evaluation to ensure functionality and user satisfaction. The usability evaluation engaged 30 voluntary participants who were randomly selected to take part in the assessment. Feedback from users informs refinements in subsequent iterations, enabling the

application to evolve, adapt, and ultimately provide collectors with an efficient and personalized stamp collecting experience.

**Result & Discussion**

Figure 1 depicts the use case diagram for stamp album, illustrating the interactions and communications among various use cases and actors involved in creating and managing a digital stamp album. The system encompasses five primary use cases: Register Account, Login Account, Manage the Stamp Album, Search Keyword for Collecting Stamp, and View Stamp Album. Within the Login Account use case, additional functionalities include password recovery through One-Time Password (OTP) validation and user authentication, ensuring secure access to the application. The Manage the Stamp Album use case extends its capabilities to encompass features like uploading stamp details, modifying existing stamp information, and removing stamps from the album as needed. Figure 2 and Figure 3 shows selected interfaces of the stamp album. Upon examining the demographic data of the respondents, it emerged that 7 individuals (comprising 23.3% of the sample) identified as stamp collectors and actively engaged with the web-based application, while the remaining 23 respondents (or 76.7%) did not share this interest. In terms of gender distribution, 18 respondents (60% of the total) were female, and the remaining 12 respondents (40% of the total) were male. The evaluation findings underscored the utility and user-friendliness of stamp album. Respondents expressed satisfaction with the application's ability to facilitate the creation and management of stamp albums, noting its potential for streamlining tasks such as compiling shopping lists, ultimately saving time. They also appreciated the application's intuitiveness, which required no extensive written instructions, making it easy to navigate and utilize. Moreover, respondents were pleased with the application's aesthetics and expressed their intent to recommend it to others, highlighting their positive experience and willingness to share application with a wider audience.

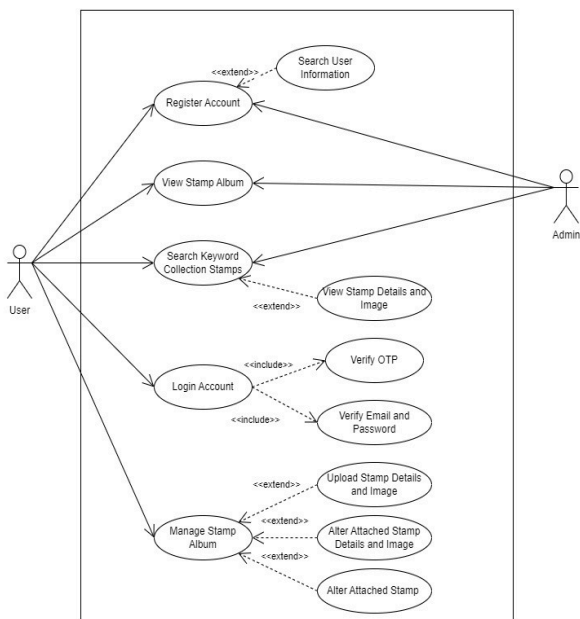


Figure 1: Use Case Diagram

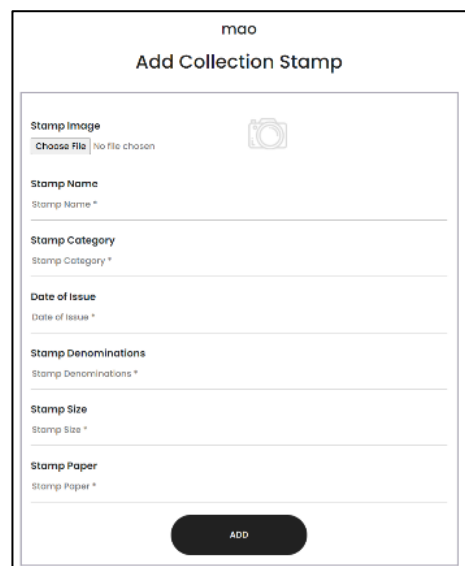


Figure 2: Interface Example 1 - Add New Stamp Information

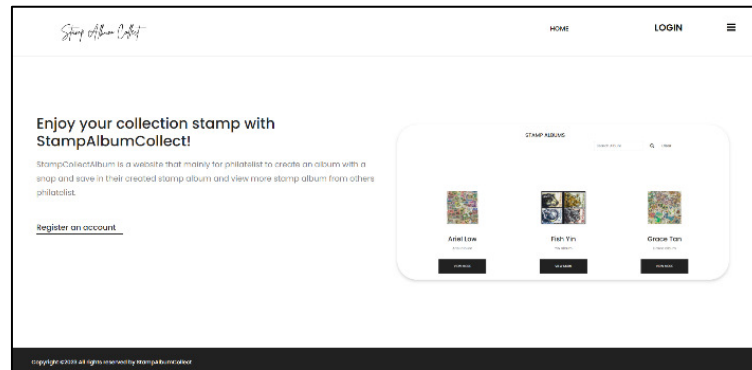


Figure 3: Interface Example 2 – Main User Page

### Contribution to Society

These digital platforms not only preserve and celebrate cultural heritage by facilitating stamp collecting but also promote inclusivity by making the hobby accessible to a diverse audience. Furthermore, they offer valuable educational resources, streamline the stamp collection management process, contribute to environmental sustainability, foster a global community of collectors, and enhance individual well-being by encouraging creative and recreational pursuits. Thus, web-based stamp albums enrich society by combining heritage preservation, accessibility, education, efficiency, sustainability, community building, and personal fulfillment.

### Conclusion

In conclusion, ICT is widely recognized as a valuable tool across various domains, particularly in the realms of education (Jan et al., 2019) and marketing (Yamin et al., 2021). Furthermore, when integrated with Internet technology, ICT facilitates the creation of digital repositories capable of storing and retrieving digital records seamlessly, irrespective of time or location (Sakri and Ishak, 2023). The integration of ICT into stamp collecting not only revitalizes the hobby but also aligns it with the digital age, ensuring its continued relevance and appeal. The development of web-based personalized stamp album applications, marks a significant advancement in the world of stamp collecting (Hirwade and Nawlakhe, 2012). These digital platforms not only modernize and streamline the hobby but also contribute to the preservation of cultural heritage (Libera, 2020), making it accessible to a wider and more diverse audience (Hirwade and Nawlakhe, 2012). Additionally, they offer educational value, enhance efficiency, promote environmental sustainability, foster a global community of collectors, and contribute to individual well-being by encouraging creative and recreational pursuits. As stamp collectors embark on their digital journey with these web-based albums, they not only celebrate the past but also contribute to the future of a cherished hobby.

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