

**Mashwerna**

By

**Nancy Dayekh**

**Mhmd-mahdi alali**

**Graduation Project Report**

**Submitted in Partial Fulfillment of the Requirements for the Degree of**

**Bachelor of Science in Computer Science**

**Department of Computer Science**

**Faculty of Sciences & Arts**

2023-2024



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**Supervised by:**

**Dr.Ali Abo Molhem**

**Prof. /Dr**………………………

Position and title

2023-2024



**The Report Defense Committee for Nancy Dayekh & Mhmd-mahdi alali Certifies**

**that this is the approved version of the following report**

**Mashwerna**

**APPROVED BY:**

**Supervisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Acknowledgments**

We would like to express our deepest gratitude to the Islamic University of Lebanon administration and the Faculty of Sciences and Arts, represented by Dean Dr. Ali Raad. We wish to express our sincere gratitude to our project supervisor, Dr. Ali Abo Molhem, for his invaluable guidance, support, and encouragement throughout the completion of our final year project. Our completion of this project could not have been accomplished without the support of Dr. Ali Abo Molhem. We extend our warmest thanks to Dr. Ali for his generosity in sharing his resources, insights, knowledge, and expertise in programming and development methodologies. His guidance proved to be essential in navigating the project's challenges.

**Abstract**

**Title of Report Centered and Double-Spaced**

Indent and begin abstract here. It should be a concise statement of the nature and content of the report. The text must be 1.5-spaced. Abstracts should be limited to 400 words. The abstract paragraphs should include: the motivation (why do we care about the problem?). The problem statement (what problem are you trying to solve?). Approach (how did you go about solving or making progress on the problem?). Results (What's the answer?). Conclusions (What are the implications of your answer?)

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**General Introduction**

The background of this project lies in the need for a centralized and interactive platform that enhances the tourism experience in Lebanon. The increasing popularity of online communities and the digital age necessitate a space where tourists and locals can engage with one another, exchange recommendations, and participate in meaningful discussions about the best places to visit, eat, and explore. The project focuses on developing an online platform called Mashwerna . Additionally, the website includes an admin panel with various administrative functionalities to ensure content quality and user management.

The problem being addressed in this project is the lack of a comprehensive and user-friendly platform that caters to the needs of tourists and locals looking to explore Lebanon. Existing platforms often lack features such as centralized posts about tourist activities, efficient communication channels, and adequate moderation mechanisms. This project aims to fill that gap by creating a platform that not only allows users to connect and share recommendations but also provides robust administrative control to maintain content quality and user behavior.

The development process for this project follows a systematic approach. It begins with requirement gathering, where the needs and preferences of potential users are identified. This process includes establishing the features and functionalities of the website and mobile app, as well as defining the administrative capabilities for the admin panel. Once the requirements are gathered, the design and development phase commences, involving the creation of a user-friendly interface, seamless navigation, and the incorporation of search and moderation functionalities. The testing and evaluation phase ensures the quality and usability of the platform, followed by user feedback incorporation and iterative improvements. The project concludes with a comprehensive evaluation of the outcomes, implications, and recommendations for future enhancement

**Summary of Chapters Included in the Report:**

**1-System Planning:** Chapter 1 provides a comprehensive overview of the project's aim, objectives, scope, subsystems, and development environment. It sets the foundation for the subsequent chapters, laying out the groundwork for the successful implementation of the Lebanon Tourist Hub.

**2-Related Work:**

**3-Requirements Analysis:**

Chapter 3, "Requirements Analysis," is dedicated to gathering and analyzing the essential requirements for our Lebanon Tourist Hub project. It emphasizes the significance of this process in driving the design and development of a high-quality system. Through techniques like research and observation, we gain valuable insights into the project's needs and complexities. The chapter also introduces visual representations such as use case diagrams, class diagrams, and DFDs to aid in requirements validation and communication. By prioritizing requirements analysis, we ensure the alignment of our solution with the client's vision and objectives, setting the stage for successful system design and development.

**4-System Design** :

Chapter 4 delves into the system design aspect of the project. It outlines the process of defining the system's architecture, components, modules, interfaces, and data to meet the specified requirements. The chapter provides an overview of the data dictionary, which showcases the database structure, including field names, data types, descriptions, keys, and references. Furthermore, the chapter presents the Entity-Relationship (ER) diagrams for both the website and the mobile app. These diagrams illustrate the flow of data and depict the relationships between the various tables in the system. The ER diagrams highlight the connections, such as one-to-one, one-to-many, and many-to-many relationships, which are determined based on specific project requirements. The chapter concludes by showcasing the ER diagrams for the website and the mobile app, providing a visual representation of the data structure and table relationships. In summary, Chapter 4 provides a comprehensive understanding of the system design process, including the data dictionary, ER diagrams for the website and mobile app, and the overall architecture of the project.

**5- Implementation** :

Chapter 5 focuses on the implementation of the Mashwerna project, detailing the tools, techniques, and languages used for website and mobile app development. This chapter highlights the importance of selecting appropriate tools for a seamless user experience. The website backend is built using Laravel, with React for creating interactive interfaces. HTML and CSS are employed for structure and design, while SQL is used for efficient data management. Security measures, such as hashed passwords and authentication/authorization mechanisms, are implemented to ensure user data protection. For the mobile app, Flutter is used for both Android and iOS development, utilizing APIs hosted on 000webhost and built with Laravel for backend functionality. Similar to the website, the app includes authentication and authorization mechanisms. The chapter also discusses the languages and technologies employed: HTML, CSS, Laravel, Flutter, and React for the website's frontend, with Laravel handling server-side logic. The mobile app is developed using Flutter with Dart language and XML for data structuring. Additionally, the chapter includes code snippets and explanations demonstrating database procedures such as user registration and data retrieval, offering insight into the project's functionality. Overall, Chapter 5 provides a concise overview of the implementation process, highlighting the tools, techniques, languages, and database procedures used to create a secure and user-friendly Mashwerna.

**6**- **Testing and Results:**

Chapter 6 of this project focuses on Testing and Results. It includes User's Tests conducted on both the website and the mobile app. The website's User's Test covers various tested pages and their performance. In the User's Test section of the mobile app, we evaluated the various activities and features of the app. We examined how users interacted with the app and their experience in navigating through different screens. Additionally, the Admin Test examines the admin panel pages of the website. Overall, this chapter provides valuable insights into the functionality, usability, and user experience of the website and mobile app, aiding in further improvements if needed

**Chapter: 1 System**

**Planning**

**1.1 Introduction**

This chapter serves as an introduction to the project's aims, objectives, and scope. It provides an overview of the project's modules.

**Chapter One:**

**1.1. Title 1**

* + 1. **subtitle 1 …………………..**

**1.1.2 subtitle 2 …………………..**

**1.1.2.1 *title ………….***

**1.1.2.2 *title*** …………..

**1.2. Title 2**

…….

**Chapter Two:**

**Chapter Three:**

**General Conclusion and Future Recommendations**

Summarize the problem you set out to solve, refer back to the problems you encountered and how you overcame them. The conclusion section shouldn’t contain detailed descriptions of the problems and solution. Discuss potential future recommendations.

**Appendices**

Typical contents of appendices include: code listing, detailed analysis and design models, maps, diagrams, user manual (Screen shots), or any similar data that are not contained in the body of the report and should be provided in the logical order they are mentioned in the main body.

**References**

**For an article in a journal:**

**Basic Format:**

[1] J. K. (Author), “Name of paper,” Abbrev. Title of Periodical, vol. x, no. x, pp. xxx-xxx, Abbrev. Month, year.

**Examples:**

[1] R. E. K alman, “New results in linear filtering and prediction theory,” J. Basic Eng., ser. D, vol. 83, pp. 95-108, Mar. 1961.

[2] J. U. Buncombe, “Infrared navigation - Part I: Theory,” IEEE Trans. Aerosp. Electron. Syst., vol. 4, pp. 352– 377, Sept. 1944.

**For a chapter in a book:**

**Basic Format:**

[1] J. K. Author, “Title of chapter in the book,” in Title of His Published Book, xth ed. City of Publisher, Country if not USA: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx–xxx.

**Examples:**

[1] B. Klaus and P. Horn, Robot Vision. Cambridge, MA: MIT Press, 1986.

[2] L. Stein, “Random patterns,” in Computers and You, J. S. Brake, Ed. New York: Wiley, 1994, pp. 55-70.

**For a web page:**

***Author, A. A., & Author, B. B. (Date of Publication or Revision). Title of full work [online]. Retrieved month, day, year, from source Web site: URL.***

**Example:** Chou, L., McClintock, R., Moretti, F. & Nix, D. H. (1993.) Technologyand education: New wine in new bottles: Choosing pasts and imagining educational futures. Retrieved August 24, 2000, from Columbia University Institute for Learning Technologies Web site:  [http://www.ilt.columbia.edu/publications/papers/newwine1.htm](http://www.ilt.columbia.edu/publications/papers/newwine1.html)l

**For an online journal:**

***Author, A. A., & Author, B. B. (Date of Publication). Title of article. Title of periodical, xx, xxx-xxx. Retrieved month, day, year, from URL.***

**Example:** Frederickson, B. L. (2000, March 7). Cultivating positive emotions tooptimize health and well-being. Prevention &Treatment, 3 Article 001a. Retrieved November 20, 2000, from  [http://journals.apa.org/prevention/volume3/pre0030001a.htm](http://journals.apa.org/prevention/volume3/pre0030001a.html)l