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# WEB-BASED LIBRARY INFORMATION SYSTEM DESIGN

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An information system is a system that can b defined by collecting, processing, storing, analyzing, disseminating information for a specific purpose. Libraries are a form of progress in the field of information technology. The Agam Regency library still uses a manual system, be it in book lending activities, writing reports on borrowing and returning books or the process of finding available books. Therefore, the author provides a solution using a website program to help library activities faster in a more effective and efficient computerized manner. The application to be designed, implemented using the PHP programming language and the MySQL databases US a tool for its creation.

Keywords: Information Systems, Libraries, Websites, Books

# **INTRODUCTION**

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Development technology information which the more complex gives the impact or change that very significant in world technology, so that gave rise to various digital technologies which at the moment that often called with era digital [1]. System is one component that is always related with bunch when carry out a activity for reach the goal [2]. Information is gathering data which processed so that produce something information which could increase one's knowledge. Information too could said as data which has processed so that could useful for recipient and useful in decision making [3]. System information is system which could defined with gather, process, keep,

analyze, spread information for purpose certain. As system other, a system information consists on inputs and output. System Information can also be interpreted as a set of components which each other related, which work for gather and keep data as well as process it into information for use [4]. Library in a manner general in interpret as something units work which form the place gather, keep and look collection References book or reading other which in set and administered with method certain for give convenience used by the user as information [5]. Based on observation which writer do, a number of problem which moment this still experienced by officer Library Regency Religion form how difficult do checking book which already returned or not yet by borrower, officer relatively need more many time for recap data borrower and look list availability of books and the difficulty of finding borrower data or look for information is book which want to borrowed still available or no. So from that The Agam District Library needs a system information library which can used for help officer library for store data on

borrowing and returning books, Check the inventory of books in the library and perform a data search for book borrowers, as well make it easy visitors for look for information about which book available in library.

#### METHOD

There is even method study which used depicted on picture framework study whichcould seen on Picture 1 under this.

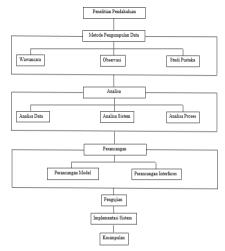


Figure 1. Framework Research

Study preliminary is step beginning in do study. In Step this containing background behind, benefit writing, purpose study, general purpose of the company, company history, structure organization, along with a description of the duties of each each part of the company and identify which problem. The analysis required is system analysis, analysis process, and analysis system, analysis which got based on data which already in could During data collection that needs to be observed to proceed to next stage.

Data analysis was carried out based on the method will used in a study. Data got from Library Regency religion, after the data has been successfully collected, then step next is do analysis to those data. Data analysis is a business for Recite and process data which has collected so that obtained something conclusion which beneficial corresponding with purpose study.

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#### RESULT

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Figure 2. Appearance Page Menu Main

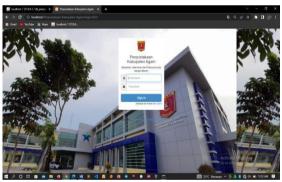


Figure 3. Appearance Page Login



Figure 4. Appearance Dashboards

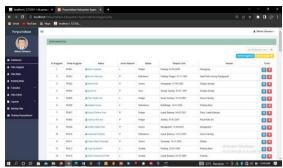


Figure 5. Appearance Page Data Member

Page plus data member this useful for add member data by admin and officers, can conducted with method click button action plus members, then add member data after that clickbutton save.

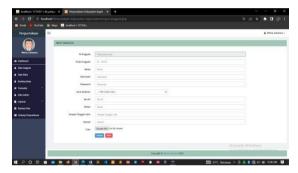


Figure 6. Appearance Page Plus Member

Page data book is page which containing information data book library .

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# Figure 8. Appearance Page Data booking Book

Page plus booking this useful for adding booking data by members, can be done with method click button action booking, then plus data booking after that click button save.

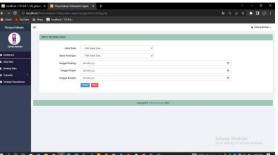


Figure 8. Appearance Page Plus booking

Page data transaction loan is page which containing information data transaction loan library.

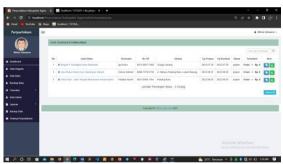


Figure 9. Display of Transaction Data Pages Loan

Page this is page data transaction returns that contain transaction data information return book library.

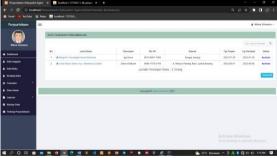


Figure 10. Appearance Transaction Page Return Book

Page inputs transaction borrow this useful for add data transaction borrow by admin and officers, can be done by clicking the action button inputs transaction borrow, then plus data transaction borrow after that click button save.

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Figure 11. Appearance Page Inputs TransactionBorrow

Page data admin is page which containing information data admin library.

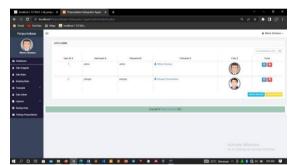


Figure 12. Appearance Page Data Admin

The add admin page is useful for adding admin data by admin, can be done in a way click button action plus admin, then plus admin, then click the save button.



Figure 13. Appearance Page Plus Admin

The display of the member report page contains member data which It is in Library Regency Religion.

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Figure 14. Appearance Page Report Member

Appearance page report book containing data book Agam District Library conducted by admin.

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Figure 15. Appearance Page Report Book

Appearance page report loan book containing data on borrowing books at the District Library Religion.

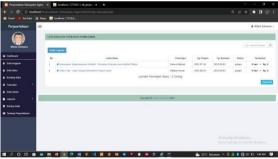


Figure 16. Appearance Page ReportLoan Book

The display of the book return report page contains data return book Library Regency Religion.

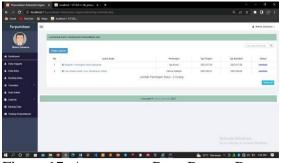


Figure 17. Appearance Page Report Return

Appearance page backups data used for do backups data which there is in library Regency Religion.

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Figure 18. Appearance Page Backups Data

Appearance about library this used forlook information about library Regency Religion.



Figure 19. About page displayLibrary

# CONCLUSION

Based on results observation and analysis planning system which has conducted on library at the Agam Regency Library then could taken some conclusions are:

- 1. With exists system this could make it easy officer library in manage data library so that more efficient and practical in implementation.
- 2. With exists planning system as this data will saved in the a databases, so that the data is more structured and neatly arranged, also increase to accuracy data in processing. Databases which used could accommodate millions data and possible user more save paper which Previously data collection was only through documentation bookkeeping in a manner manuals.
- 3. With exists system this will provide search engine which is a search engine information which useful for student for Simplify and speed up searching book.

# REFERENCE

- [1] Muliono, R. (2021). Web-Based Library Information System Design at SDN 056004 Basilam. Journal of Research Computer Science, 1(1), 14-26.
- [2] Li, L. (2006). Leveraging quality web-based library user services in the digital age. Library management, 27(6/7), 390-400.
- [3] Kiran, K., & Diljit, S. (2012). Modeling web-based library service quality. Library & Information Science Research, 34(3), 184-196.
- [4] Muliono, R. (2021). Web-Based Library Information System Design at SDN 056004 Basilam. Journal of

Research Computer Science, 1(1), 14-26.

- [5] Suri, G. P., & Arifin, N. Y. (2020). PENGEMBANGAN DAN IMPLEMENTASI APLIKASI PERPUSTAKAAN BERBASIS
  WEB: DEVELOPMENT AND IMPLEMENTATION OF WEB-BASED LIBRARY APPLICATIONS. Engineering and Technology International Journal, 2(01), 21-28.
- [6] Cooper, M. D. (2001). Usage patterns of a web-based library catalog. Journal of the American Society for Information Science and Technology, 52(2), 137-148.
- [7] Maness, J. M. (2006). Library 2.0: The next generation of Web-based library services. *Logos*, *17*(3), 139-145.
- [8] Madhusudhan, M., & Nagabhushanam, V. (2012). Webbased library services in university libraries in India: an analysis of librarians' perspective. The Electronic Library.
- [9] Schwartz, A., & Millam, G. (2006). A web-based library consult service for evidence-based medicine: Technical development. BMC Medical Informatics and Decision Making, 6(1), 1-12.
- [10] Islam, M. M. R. (2012). Present status of library cooperation, networking, and resource sharing in Bangladesh: web-based library cooperation for access to world-wide information. Library Philosophy and Practice, 2012, 1-10.