

## Developing Model Open Access Journal Department of Information System Universitas Mercu Buana

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### Abstract:

Information technology now has big impact for help human in all activity. Many researches study in information technology and some references said information technology useful for users. With information technology, they could solve the problem quickly. Universitas Mercu Buana is best University in west Jakarta, Indonesia. Universitas Mercu Buana has Department of Information System and many students in there. There are library at Universitas Mercu Buana, and many students want studies or reading books in the library, but many students have problem, they can studies and reading books in there. In this study, proposed developing model open access journal for department of Information System. In developing this model, use UML (Unified Modeling Language) as tools develop this model. With developing this model, we got the results Department of Information System needs system open access journal in order to can help students looking for some references.

*Keywords*– Information Technology, Open Access Journal, UML (Unified Modeling Language)

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### I. INTRODUCTION

Information technology today, gives impact to users in using technology. With technology they can work be effectively. Information technology has big impact in university activities, such as an activity in media digital (library). In university many students needs get references from book or journal. And sometimes they needs room for reading or only study in library. Traditional libraries are places designed to serve all people in a society. The needs of libraries change depending on the sizes of these constructions that include printed books and publications [1]. With the development system library, now students can get information about books which they want borrow. University have been developed libraries system, to the aim helping students if they want access some books or journal before they borrow its.

In this study, there is problem for students, such as students from department of Information System.

They want get some references from journal, because from journal they could study be effectively and efficient. And journal has the aim making the summary from research.

In this study proposes development modeling system, for show this model useful for students from department of Information System. Develop this model, using method OOAD (Object Oriented Analysis Design) and UML (Unified Modeling Language) as tools.

### II. RELATED WORK

Communication is step for build the perspective between people. With communication people can interact to other people and sharing knowledge. Ceydallgaz Büyükbaykal, said communication comes into existence with people and ensures stability in the structure of the society. A society, which transfers its traditions from one generation to the other, becomes long-lasting by way of communication and Media needs of people continuously bring up novelties and developments in the global world. Today information

becomes more significant with the developments in computer and communication technologies [5] and [6] said information becomes more significant with the developments in computer and communication technologies. An **information system (IS)** collects, processes, stores, analyzes, and distributes information for a specific purpose or objective. Concepts are: **Input.** Data and information about business transactions are captured or collected by point-of-sale (POS) scanners and Web sites and received by other input devices. **Processing.** Data is transformed, converted, and analyzed for storage or transfer to an output device. **Output.** Data, information, reports, and so on are distributed to digital screens or hardcopy (paper), sent as audio, or transferred to other ISs via communication networks. **Feedback.** A feedback mechanism monitors and controls operations. The collection of computing systems used by an organization is termed **information technology (IT)**. IT, in its narrow definition, refers to the technological side of an information system. Information technology, library, uml, journal [2]. Information system is very important for development the modeling system, [7] said Building Information System (BIM) is a modern building delivery technology which embarrassed by construction industry globally. BIM is defining and understand by many differently, but the fact still remains it is a digital model full of information for the purpose construction and management of the project throughout its life-cycle. Today, the Internet is one of the basic tools in providing library services. This communication tool plays an important role in exchange of information thus in library services.

Therefore, it is necessary for universities to adopt the concept of e-library and to take electronic librarianship into consideration while

restructuring their services they provide via their libraries [1]. In e-library users could searching for book often searching for the book via provided catalogue. After obtaining preferred book code, they go to designated bookshelf and keep searching for the book until the book is found [3]. The *systems development life cycle* (SDLC) is the process of determining how an information system (IS) can support business needs, designing the system, building it, and delivering it to users. If you have taken a programming class or have programmed on your own, this probably sounds pretty simple [4].

### III. METHOD

In this research used OOAD (Object Oriented Analysis Design, with OOAD we have some steps in this research, these steps are :

- a. Planning  
In planning step focus to project identification (actor or user that used this system) and make structure this project
- b. Analysis  
In analysis step focus to develop analysis strategy (document analysis and use case diagram)
- c. Design  
In design step focus to design architecture, design interface design program)
- d. Implementation  
In implementation step focus to delivery and support of completed system, installed system, maintain system and post implementation system)

In first step is planning, in planning we have to make condition user. This step, have 6 actor in system, they are:

- a. Administrator
- b. Department of Information System
- c. Students

They can use monitoring system, such as:

- a. Administrator, could manage content of system such as:
  1. Manage content journal
  2. Manage category of journal
- b. Department of Information System, they can used this system for:
  1. Verification data of students
  2. Giving Journal to Administrator
  3. Download Journal
- c. Student has activity such as:
  1. Registration
  2. Download Journal

All user (actor) can use this system, they can use anywhere and anytime.

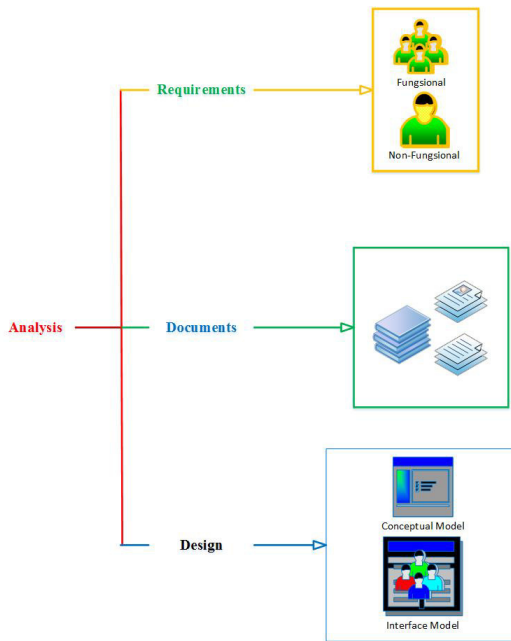


Fig. 1 Scheme of Analysis

In Fig. 1 has 3 steps: Requirements (Fungsional and Non-Fungsional), Documents and Design (Conceptual Model and Interface Model). Analysis in this research focus to develop analysis strategy, analysis strategy used in this research is with use case diagram, This is use case diagram of montiroing system.

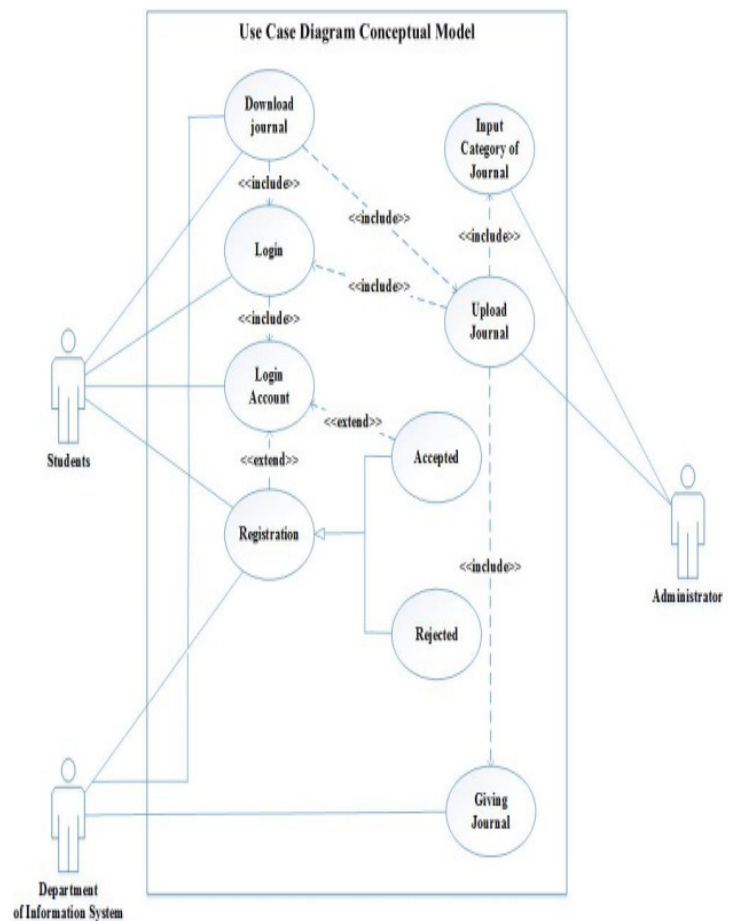


Fig. 2 Use Case Diagram

In Fig 2, there are 3 actors (students, administrator and Department of Information System). Before students download some references, students have to register, register students with input name, id of student, etc. If their register complete, they can get the account for download some references. Department of Information System will check register of students, if register is complete then Department of Information System can give students account for access the system. Students and department of information system could not download references, if administrator not yet uploads references in system. After administrator upload references, then students can download it. In this system have limitation only students inside department of information system could access this system. Because this conceptual system, for show with this conceptual model can help students in department of information system for get references, without come to library and study in there.

#### IV. RESULT AND DISCUSSION

After develop planning, analysis and design and then final step is implementation. In step of implementation we can see result of analysis. In this result of analysis have 6 designs.



Fig. 3 Use Case Diagram

In Fig. 3, actor before using this system, they should be login. Login input username and password. If username and password correct, then they can manage all content inside system, if their username and password un-correct, then they could not manage all content inside system.

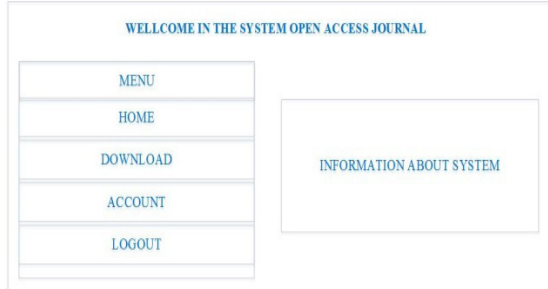


Fig. 4 Home of Students

In Fig. 4, after login of students' success, then students can go to home of students. There students could see some features in system. And they could download some references.

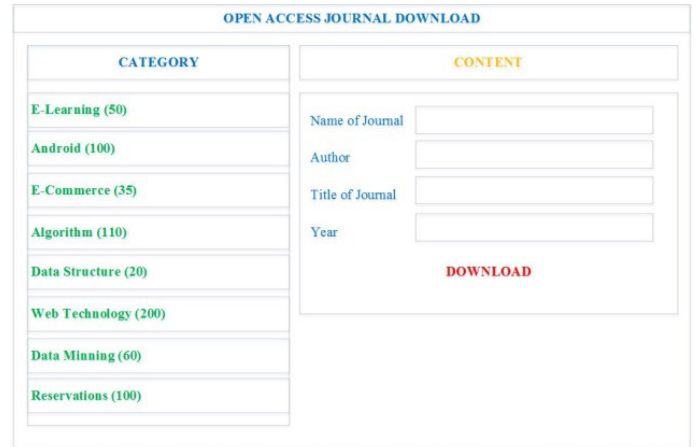


Fig. 5 Home Download References

In Fig. 5, users (Department of Information System and students) could download some references. Before download they could choose category of references, such as e-learning. After choose the category, then they can see all content category of e-learning in system, and they could download references.



Fig. 6 Home Download References

In Fig. 6, this is home of Department of Information System. In this home, Department of Information System could access some features. Such as download journal, view and manage registration data of students.

| VIEW REGISTRATION STUDENTS |                      |          |                      |        |
|----------------------------|----------------------|----------|----------------------|--------|
| Name                       | <input type="text"/> | Username | <input type="text"/> | ACTION |
| Student ID                 | <input type="text"/> | Password | <input type="text"/> | REJECT |
| Photo                      | <input type="text"/> | Faculty  | <input type="text"/> | ACCEPT |
| Department                 | <input type="text"/> | Email    | <input type="text"/> |        |

|            |                      |          |                      |        |
|------------|----------------------|----------|----------------------|--------|
| Name       | <input type="text"/> | Username | <input type="text"/> | ACTION |
| Student ID | <input type="text"/> | Password | <input type="text"/> | REJECT |
| Photo      | <input type="text"/> | Faculty  | <input type="text"/> | ACCEPT |
| Department | <input type="text"/> | Email    | <input type="text"/> |        |

Fig. 7 Home Download References

In Fig. 7, Department of Information System, could manage content data registration of students. If data registration of students complete, then students get account for login (username and password) for using the system.

| OPEN ACCESS JOURNAL UPLOAD |   |
|----------------------------|---|
| CATEGORY                   | CONTENT                                       |
| E-Learning (50)            | Category <input type="text"/>                 |
| Android (100)              | Author <input type="text"/>                   |
| E-Commerce (35)            | Title of Journal <input type="text"/>         |
| Algorithm (110)            | Year <input type="text"/>                     |
| Data Structure (20)        | File Journal <input type="text"/> Browse..... |
| Web Technology (200)       | UPLOAD  |
| Data Mining (60)           |   |
| Reservations (100)         |   |

Fig. 8 Upload Journal

In Fig. 8, administrator could upload some journal after Department of Information giving the softcopy of journal. They could upload journal corresponding category of journal.

## V. CONCLUSION

In this research have conclusions, with developing model of open access journal, could help students for get some references. For next research, will build the system for show the result, which the better developing

system of open access journal or get some references in library.

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