# Implementasi E-Service Pada Admisi Online Dinamis BINUS UNIVERSITY

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Abstract — Binus Group as an educational institution comprising among others: BINUS UNIVERSITY, BINUS ONLINE LEARNING, INTERNATIONAL BINUS, and High School Enrichment Program (HSEP) has held a registration system dynamically at the moment, in which the system is running now is done online. This is because prospective students from Binus University, BINUS ONLINE LEARNING, BINUS INTERNATIONAL, as well as High School Enrichment Program (HSEP) which from year to year increasing in number. It is inevitable, online registration has given a fairly rapid impact, especially in the field of marketing / marketing Binus Group itself. Party admission is as a regulator of the flow of registration for some Binus agency itself.

#### Keyword

Development, Admission, Registration, Form, Application.

## I. INTRODUCTION

Registration procedure that exists now is the registrant can do manual or online registration. Manual registration is that the registrant buy the registration form in admission or with the agency in regions in Indonesia that sells the form. Online registration at http://payment.binus.edu. The registrant can choose Binus University instance that they want to register.

Online admission in Binus has already started in 2008. Problem that appear in this online registration that is the form has a lot field to be filled. Binus University registration form consists of recomendation form, first form (location, candidate, buyer), second form, and third form (parents and guardian identity form). Technically, registration form must be made again if there are new registration from Binus University instance.

People that involve in online admission that are candidate registration and admission administrator. Writer customizes and optimizes the old registration that are update the new way to add new binus intance to become more effective by adding the instance from back-end without hard

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code in the source program, split half of the biodata to the after login.

Our goals are making the new instance registration simpler, more effective system (sort time form filling and faster data transfer). The benefit that we hope is make candidate simply fill the registration form and faster data processing.

## **Objectives:**

- 1.Develop a database [4] to adjust the registration of new student form [2].
- 2. Designing and implementing data migration scheme to suit the registration of new student form.
- 3. Developing back end of online admission to generate arrangement of new form based on Content Management System (CMS).
- 4. Developing new experience user interface after login for new registrant with drag and drop personalized layout.
- 5. Designing a shorter application form for new registrant.

#### **Benefits:**

- Easing the process of form filling. At present, form filling does have a wide range of filling procedures associated with their respective agencies. Binus University who already has an online registration form will be further developed on procedures for filling the form, and is expected to become a place of simple and dynamic form filling in order to simplify the charging process by the registrant.
- 2. Faster data processing at form filling. Enrolment forms are already available online, if we viewed from the process of data moving or loading, it still requires stream a few seconds and the retrieval of data to a server has no loading bar. This sometimes can create misunderstanding form filler where the application is loading, they interpret that the application has finished retrieving data in a matter of milliseconds. It is expected to form filling procedure that is developed, will make data processing more quickly, of course, also with the loading bar image that facilitate communication between the application and fillers.

#### **Problems faced:**

Based on the analysis of the issue above, so we can find problems with the system running, among others:

- 1. Addition BINUS agencies should be done by recoding when the difference between one agency and other agencies is not too far away.
- 2. Display of the registrant after login which was static because it can not customize their own.
- 3. The process of transfer of data during the form filling is still slow. This can be seen at the time of selecting faculty and the department is quite time-consuming.
- 4. Filling in forms that are too much and not effective.

#### II. METHOD

The study begins by collecting data by:

## 1. Research Stage

1. System/ information engineering and modeling
The authors obtain the overall needs of the onlineadmission system that will be applied from

the IT Directorate interview Binus University and observations directly related to existing systems

## 2. Software Requirement Analysis

Needs of the online admission application processfocused on the prospective new students and Content Management System (CMS) form the prospective applicants to all institutions Binus

#### 3. Design

In this process, the authors make several prototypes of pages to be changed from a system that is running now. Prototype that created aregistration form that is shorter than the form thatruns now, views registrant after logging in, and view of the CMS form prospective applicants to all institutions Binus

## 4.Coding

Programming language used for online admission system is ASP.NET 3.5 and Microsoft SQLServer 2005 database

# 5. Testing/ Verification

At this stage of testing / verification, only a few modules that do the testing. For example, such asback-end of the admission of login, where admission is one of the admins of the existing Binus agency for registration: BINUS UNIVERSITY, BINUS INTERNATIONAL, BINUS BUSINESS SCHOOL, BINUS Online Learning, and HSEP

- c. Making Context Diagram [4]
- d. Making Data Flow Diagram (DFD) [4]
- e. Making Class Diagram [4]
- f. Making Entity Relationship Diagram (ERD) [4]

# 3. Methods Study Library

The methodology of collecting data obtained from literature by reading literature books and browsing other articles related to existing problems from internet.

## 4. University Internal Document Search

The methodology of collecting data obtained by asking some people of IT Directorate that relevant with online admission system. The goal is to produce the system needs and problems experienced in previous systems.

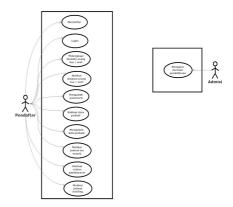


Figure 1 Use Case Diagram

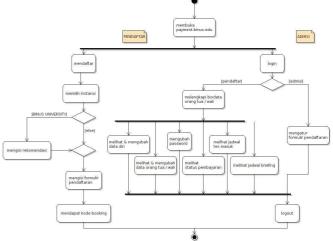


Figure 2 Activity Diagram

#### 2. Design Methods

- a. Making Use Case Diagram [4]
- b. Making Activity Diagram [4]

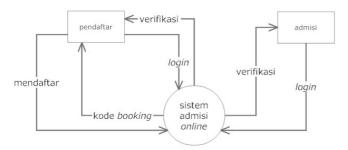


Figure 3 Context Diagram

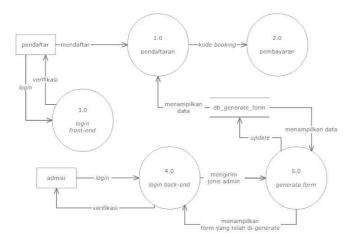
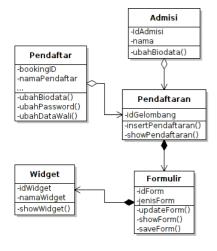


Figure 4 Data Flow Diagram (DFD)



Class Diagram

Figure 5



Figure 6 ERD

#### III. RESULT

Online Admission Registration applications that we develop is still on prototyping stage. At this stage, we create new user interface for registration form, new user interface for after login registrant, and Widget Management menu at Content Management System for back end.

#### IV. CONCLUSIONS

The conclusions can not be drawn yet because of the development of this online admission can not be resolved within this period of "Kerja Praktek". Until now, we have conducted the analysis and design and a prototyping system of online admission. Currently, we are at coding stage and after the completion of the coding, we will do the testing.

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