# **BINUSMAYA ON ANDROID**

## Renan Prasta Jenie, Hendro Surono, Eripin, Hendra Li, Michael Hansson, BINUS University

Abstract --- Writer make this mobile application to make Binusian easily using Binusmaya website on smartphone. With this application, smartphone user can get faster information from Binusmaya without opening Binusmaya website using browser. In make this application, writer using observation methodology and interview. In observation, writer see directly feature-feature in Binusmaya website, with this method we know what kind of features will be implement into our mobile application. Beside of that, we are using interview method. We are doing the interview with IT Directorate staff about the system and databases of Binusmaya. We do the interview to get visible image of Binusmaya system. We decided to make this Binusmaya mobile application because of the difficulty to get some information from Binusmaya if using browser to access it on smartphone. One of the constraint when accessing Binusmaya website through browser is too slowly when load the whole page of website. This constarint can be handle by only showing the most important information. By doing that, the smartphone will load the content faster. The other constraint is there are so many scroll and click that need to do to get the information that we want. By using this application mobile, writer try to optimize the page navigation that cause scroll and click is minimize. By this solution, this application highly expected to be the solution for smartphone user to get access to Binusmaya website. So user will be get the information from Binusmaya easily and faster.

Manuscript received on Juni 10, 2011. This journal is part of the Department of Computer Science thesis research conducted at the Applied Technology Laboratory, Binus University.

Eripin, Hendra Li and Michael Hansson are a graduate student of Information - Database, Binus University, Jakarta, Indonesia (Phone: 08170929898; E-mail: off\_mr@yahoo.com), (Phone: 08979109969; E-mail: iggydum@gmail.com), (Phone: 087875362975; E-mail: michael\_united\_7@yahoo.com). Eripin, Hendra Li, and Michael Hansson would like to thank Mr. Renan Prasta Jenie, S.T.P., M.T and Hendro Surono. for their guidance during this thesis research.

#### I. INTRODUCTION

Binusmaya website nowadays were used by all of BINUS UNIVERSITY student and lecturer. This website provide the information of lecture, for example the information of lecture schedule, attendance, score, forum and more. Together with the development of technology nowadays, mobile technology is develop rapidly. This case can be seen from there's so many smartphone. Because of this case, we make this Binusmaya mobile application.

This apllication to expected will make smartphone user easily to get some information in Binusmaya without open it through the browser. On behalf of the constraints said before, we are trying to make special application for smartphone that:

- Using simple scroll and click concept
- Application that using less typing
- Display the most important information in the main menu
- Make user friendly interface
- Cutting down the information-information that not too important so it will load faster.

Binusmaya is a system based on web that using for manage and hand over the materi by online to user, especially for student of BINUS UNIVERSITY. The problem that appear when accessing Binusmaya from browser in mobile phone is there are some not important information but still load by the browser so it make slower.

The example of information-information or menu-menu that not to important is

• Menu Language Center

Renan Prasta Jenie is with the Bina Nusantara University, Indonesia (phone : 0812 919 3554; email:rjenie@binus.edu).

- Menu Questionnaire
- Menu E-Certificate
- Menu Binus Square
- Menu Binus Media
- Menu Binus Social Media
- Menu Student Admission Information

It said not to important because of it accessing from mobile phone so it's reputed not to important to show it on mobile Binusmaya application.

## **Objectives:**

- Make user of the Binusmaya mobile appication easily using it
- System that more effective because it more focus

## **Benefits:**

- Easier to get information from Binusmaya for application mobile user
- Make student more flexibel to accessing Biinusmaya website

## **Problems faced:**

- The loading to access a Binusmaya website is too slow if it is accessing from browser in smartphone.
- Scroll and zoom is needed to see the full content of Binusmaya website if it open from browser in smartphone..
- There is so much unimportant information that show when accessed from smartphone.

## II. METHOD

The study begins by collecting data by:

## 1. Analysis Method

1. *System/Information Engineering and Modeling.* Writer get the need of Binusmaya database from webservice that given so can be used and we can transform it into mobile application.

2. Software Requirement Analysis.

The requirement that we used is a opensource software name eclipse and andriod jdk that can be easily to get. Writer choose using eclipse because this programming language using java and writer using IDE eclipse to do coding.

## 3. Design

In the process, writer get the desain that desained by IT Directorate BINUS UNIVERSITY and ready to be translateed into programming language

## 4. Coding

Coding progress is doing based on java and using webservice to get the data from the Binusmaya website. By doing this method, we can get it's in real and appropriate with the data that used on Binusmaya website.

- 5. Testing Verification
- 6. Maintenance

## 2. Design Methods

a. Making *Data Flow Diagram* (*DFD*) [1] DFD Level 0

In this DFD level 0, first, user request for the information that he/she want to the system. Then, system get the requested information from webservice. After that, system give back the information that requested before.



Bagan 1: DFD Level 0

In this DFD level 1, it explain more detail. First, user must fill the username and password to do login. Then system check the username and password using webservice. If it's wrong, system will give back to user to do relogin. If it's true, user will be redirect into main menu.



#### Bagan 2: DFD Level 1

#### DFD Level 2

In this DFD level 2, it explain more complex into the system. User after login can access all of the menu. In this case, user can do view inbox to check inbox. System will connect into webservice to get inbox information than show it to user. As well with create message and delete message, system will consume webservice to generete command. Another case in view my class. User request the information to view class, then system will respond by consume webservice to get information needed by user. After get the information, system give back the requested information to the user.



Bagan 3: DFD Level 2

# b. Making Use Case Diagram [1]

This is the use case diagram that represent all of menu in this application. There are two subject here, student and lecture. Both of them can access the menus. The menus are login, create message, view message, delete message, view class list, view class detail, view class topic, view class topic detail, view class task, download task, upload task and upload answer.



**Bagan 4: Use Case Diagram** 

## III. RESULT

This mobile application can be run from Android smartphone.

# IV. CONCLUSIONS

The conclusion of this journal cannot be reach because of this application is still in developing progress and cannot be done by this period. In this period, writer already make the user interface of login menu and class menu. And the testing is already run, and it's run well. For the future, writer will continue this application as thesis topic.

## ACKNOWLEDGMENT

Praise we prayed to the Almighty God of love, inclusion and His protection during the preparation of this essay as one of the requirements for a bachelor degree at the Department of Information Education, so that we can finish this thesis on time.

On this occasion we want to thank the various parties who have given our support in the preparation of this thesis. Either directly or indirectly, has guided us and participate in the preparation of this thesis.

We express our gratitude to: :

- Rector, Department Head, Department Secretary, and Project Coordinator who has given permission to our thesis.
- Supervising the project which has provided guidance and project execution solutions.
- Academic mentors who have provided advice and direction to the preparation of project thesis to this paper can be resolved.
- Managers, administrators, and Bina Nusantara University employees who have given us the opportunity and assistance in conducting the analysis and data collection up to this thesis can be resolved.
- All the lecturers who have given stock of knowledge and knowledge so that this paper can we put it well.

- The entire library staff Bina Nusantara University who helped us in the lending book, as one source of writing of this library.
- Parents and all our family who have given maximum support to us.
- Friends friends and all other parties that we can not mention one - by one who has provided support, suggestions and criticism in completing this thesis.

We realize that we put this thesis is not possible mistakes and shortcomings, and we expect any input suggestions and constructive criticism in order to improve this paper. We hope, we put this thesis can be useful for readers and all who read this paper.

#### REFERENCES

[1]Pressman, Roger S. (2006). *Software Engineering a Practitioner's Approach*. 6th Edition. New York : McGraw-Hill.

Eripin born in 1991 April 22nd in Jambi, Indonesia. Eripin currently completing undergraduate degree.

Hendra Li born in 1990 September 9th in Jambi, Indonesia. Hendra currently completing undergraduate degree.

Michael Hansson born in 1990 May 23rd in Jambi, Indonesia. Michael currently completing undergraduate degree.