E-Counseling For University Alumni Career

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Abstract—One of the many alumni problems that occur after graduation is a lack of knowledge about the working world and careers that they can take. There are still many universities that do not have career counseling for managing their students’ career. This problem happens because of the lack of students’ awareness to come to the career center to take part in career counseling. The purpose of this study is to create a web-based student forum that contains career counseling with alumni. This forum is expected to be useful for alumni who need information about the working world. The methodology used in this study is the Unified Software Development Process whose stages are analysis model, design model, implementation model, deployment model, and testing model. Furthermore, it is modeled by using the Unified Modeling Language diagram, in the form of use case diagrams, activities, sequences, and class diagrams. This study took a sample from the Career Development Center of Sekolah Tinggi Teknologi Garut (Garut College of Technology). The result of this study is the existence of a web-based career counseling forum that can help students and alumni interact with each other to share information and knowledge about the working world. Additionally, this career counseling is expected to help students and alumni to better understand their working world.

Index Terms—Alumni, Career, Counseling, Forum, Universities

1 INTRODUCTION

Career development is a condition that shows an increase in the level or status of a person in his work, things that encourage a person to choose career development as an entrepreneur, can be known through personality assessment, especially his experience and background [1][2], and counseling is a form of human relationship that is helpful in that it is an effort to help others so that they are able to solve the problems they face [3][4]. The forum is a container that is used to interact with users, where users are more facilitated in finding information in accordance with the categories in the forum. This career counseling forum was created so that alumni and students can interact directly to find out how the conditions of the world of work, as well as the career direction that will be taken.

Some of the studies related in this study are the first studies on a forum that facilitates young people who have problems in food [5], the second study is about a forum that is linked to the EUPOC 2016 conference, which is focused on block copolymers self-assembling to fabricate functional nanostructured materials [6], third research on Career and Individual Development Under the Reform of College Examination Entrance in China [7], fourth research on career counseling at school [8], the fifth study on frameworks in 4 tenets that have particular relevance for career counseling practice [9], the fifth research on the concept of geographic information system tracer study by using the unified software development process methodology [10], recent research on career guidance and career counseling in Shanghai China [11].

The analysis gap from these studies is that there are still limited forums for career counseling in universities in Indonesia, this is related to many universities that do not yet have a career center as a place for career development for students. This research was conducted to design a career counseling forum for universities. The purpose of this study is to create a web-based student forum that contains career counseling with alumni.

2 METHODOLOGY

The methodology used is the Unified Software Development Process [12][13]. The stages of this research methodology are described in the Work Breakdown Structure (WBS), and this research is limited to the stages of the design model. The picture below is the WBS:

![Work Breakdown Structure](image)

**Figure 1. Work Breakdown Structure**

The stages of the work breakdown structure are carried out:

1. Stages of the analysis model. At this stage, it is carried out to determine the needs needed for the career counseling forum for university. The process of data collection is done using the interview method.

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2. Stages of the design model. At this stage is done by processing from the data from the previous stages by drawing any conclusions that can fulfill a system, modeling using a unified model language.

3 RESULT

3.1 Model Analysis

The analysis model stage produces Preliminary analysis and use case diagrams on the system to be built. After the analysis phase is carried out then it is modeled with the identified actor so that it will support the running of the designed system [10]. Future system facilities needed :

1. Registration facility for special forum registration for students and alumni
2. Facilities Login to enter the forum
3. Facilities search for information search in the forum
4. Advance search facility to find information on alumni and student data
5. Trending topic facility to see what topics are currently in the forum
6. Facilities admin page for processing data and updating informationIdentification Actor and UseCase
7. Alumni page facilities and students to input alumni and student data
8. Post facilities for posting in forums
9. Facility comments to make comments in the forum
10. Upload facilities to upload images, docs and more
11. Facilities for job vacancy information pages filled in by alumni if job vacancies are available at the place of alumni who have worked
12. Facilities tags to make tags in the forum
13. Counseling facilities to conduct career counseling privately to admins, alumni and students

Actors involved in future systems Admin :

1. Alumni
   a. Provide personal data information to the system (Sign Up).
   b. Sign In.
   c. Make a Post and Comment.
   d. Uploading Files
   e. See the trending topic in the forum
   f. Fill out job vacancies where there are job openings
2. College Student
   a. Provide personal data information to the system (Sign Up).
   b. Sign In.
   c. Make a Post and Comment.
   d. Uploading Files
   e. See the trending topic in the forum
   f. See job openings
3. Admin
   a. Manage sign in
   b. Manage alumni and college student data
   c. Manage admin data

The following is the use case diagram of the career counseling forum [14][15]:.

3.2 Design Model

The design model is the modeling design stage by using the Unified Modeling Language which consists of Activity diagrams, sequence diagrams and class diagrams and the design of the application interface tailored to the needs identified in the usecase diagram.

1. Activity Diagram

Next in Figure 3 activity Diagram of career counseling login. Here is the picture of the activity diagram:
to manage the application, after logging in the system validates whether the username and password are appropriate, if not then log in again and if appropriate, then proceed to the next process of posting, tagging, doing counseling with students and alumni.

2. **Sequence Diagram**

In figure 4. Sequence login diagram, students will register first in order to have an account after which students log in first into the system.

![Sequence Login Diagram](image)

3. **Interface Design**

By paying attention to the stages of design that have been carried out, the application interface display design will be generated which will be built with features and functions provided following the previous stages. The design of the counseling application interface is as follows:

![Interface Design](image)

Figure 5 is a draft for the main page of the career counseling forum. In the main page there is a log menu, for students and alumni must register to get an account to log in, then there are also posts from students, alumni and admin, contact person, features about about career counseling forums, massage features to chat in real time with alumni, students and admin, notification feature when there are new incoming and post messages and the latest comments, job vacancy feature to see job postings posted by alumni or admin, and trending features to see what posts are trending in the forum.

4 **Conclusion**

Analysis and design resulted in a career counseling forum design, in which this article focuses on Admin features, students and alumni can post about lectures, learning, and the whole world of work. Students can find out information about the world of work from alumni and alumni can advise students regarding the career they will take. Alumni can post job vacancies available at their workplace. The massage feature is real-time and can be used for personal counseling to the intended person and is supervised by the admin.

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**REFERENCES**


