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PERFORMANCE ASSESSMENT SYSTEM NEEDS ANALYSIS OF LP3I BUSINESS COLLEGE LECTURER BANDA ACEH USING The METHOD Of VIEWPOINT ORIENTED REQUIREMENT DEFINITION (VORD)

Muhammad Bayu Wibawa
Universitas Ubudiyah Indonesia Banda Aceh
Email : mbayuw@uui.ac.id

ABSTRAK

The needs of the software must be started from the parties involved in the development of a system to be built. The statement describes the needs of consumers or users of the system, nor the clien stokeholder though. In order to get the system needs to do some activity or activities include: requirement elicitation requirment, analysis and negotiation, requirement documentation, validation requirement. This activity aims to produce a document called document specification. Of some sort of method to analyze the needs of the system, one of the methods that can be applied on requirement engineering is the method of Viewpoint Oriented Requirements Definition (VORD). VORD method is one method used to define needs with an approach viewpoint (point of view) the users of the system. The results of the analysis of the VORD method this will generate requirement specification with the help of a tool i.e. VORD tool. The results of this analysis in the form of a document that describes the system needs to be built.
Keywords: Requirement Engineering, VORD Method

INTRODUCTION

The needs of the software must be started from the parties involved in the development of a system to be built. The statement describes the needs of consumers or users of the system, nor the clien stokeholder though [1].

Software development is not only determined by the definition of needs, but also pay attention to quality issues. Quality software that will improve system performance. Software quality can be achieved using standards that have been issued by an organization or agency, such as the CMMI (Capability Maturity Model Integration)[2].

Definition of needs can be done using the concept of the VORD (Viewpoint Oriented Requirements Definition). VORD is one method used to define needs with the approach of viewpoint (point of view) the users of

the system. On the methods of VORD focus on external entities that will interact with a system.

Conditions that occur at this time in LP3I Business College of Banda Aceh in terms of conducting the evaluation feedback (EUB) conducted by LP3I Student Business College of Banda Aceh is still first manually, i.e. by filling out the questionnaire on a sheet of paper that is shared by the officer.

Another obstacle faced was the officer takes the old relative to be able to produce a report from the student questionnaire, because it must be input in advance into a new worksheet applications are then processed the data.

Based on the existing problems so this research is expected to help LP3I Business College of Banda Aceh in analyzing the needs of software with mapping needs system so hopefully can help improve the quality of teaching performance assessment system in LP3I Business College of Banda Aceh.

REVIEW OF THE LITERATURE

1. Requirement Engineering (RE)
   Requirements Engineering (RE) [3] is the leading edge of the process phase of software engineering (software engineering), where the software requirements (needs) of the user (users) and a customer (customers) are collected, understood and defined. The results of this phase of the engineering requirements documented in the requirement specification. Requirements Specification contains a mutual agreement about the problems that want to be solved between developers and customers, and is the starting point towards the next process design software.
   Sistemasi process negoitation developers and customers in the engineering needs of the divided three major processes:
   - Elisitasi, measures to help the customer define what is needed in the development of an application.
   - The specification, the process of writing the system requirements in the document requirements.
   - Validation, process checks that the requirements actually define the system desired by the customer.

   This formula is known as the Three Dimensions of Requirements Engineering. Process engineering needs this done in iterations with the presence of sikan mengakomoda-feedback from customers.
2. process in Requirement Engineering
   According to the Requirements Engineering process in Sommerville is divided in several stages [4]. Stages of the process can be seen in Figure 1.

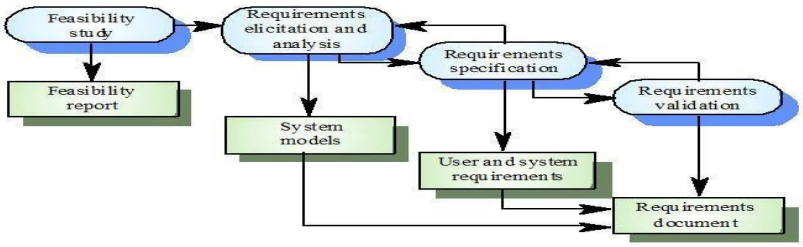


Figure 1. The process of Requirements Engineering
(Sommerville, 2003)

3. Viewpoint Oriented Requirement Definition (VORD)
   VORD (Viewpoint-Oriented Requirements Definition) is one of the methods to analyze the needs of the system by using the approach of viewpoint. This method was developed by Gerald Kotonya and Ian Sommerville in 1996. This method was developed to help process the specification of interaction system. VORD focused on external entities that interact with the system. Therefore the VORD represents the needs of the system based on entity viewpoint [5].
4. VORD Method
   VORD method has four main stages in the do identifkasi need [6]-[7], which are:
   - identification of the point of view
     Identify point of view include discovery point of view based on the services that will be accepted by has point of view. In this stage, the identification of needs with steps as follows:
   - Register all stakeholders that there is in the system software.
   - Identify where in point of view and Service in the system requirements of the software.

   The stages of identification of viewpoint on the method is the same as VORD on 2. Structuring Viewpoint Structuring this viewpoint include grouping viewpoint be 1 (one) of the hierarchy. In this public service structure is depicted at the most high level and inherited by the viewpoint in the lower level. . As for the stages of structuring these VORD on as shown in Figure 2.

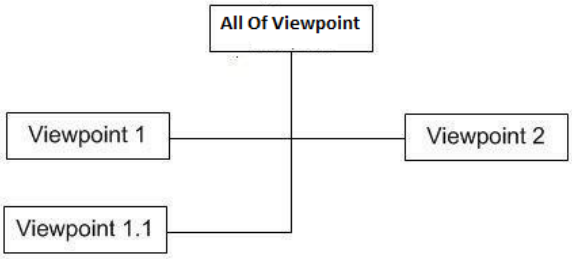


Figure 2: Structuring Viewpoint

The symbol of Figure 2 shows a module with the name of each symbol.

- Documentation Perspective
  The documentation includes point of view how to mendiskripsikan every viewpoint and predetermined services. The purpose of the documentation of this point of view is to map the needs of systems or services to each appropriate point of view de ngan structure point of view. Mapping the needs that include the needs of functional and non-functional system. Results from the point of view of documentation used as a use case creation.
- Mapping point of view
  This stage includes the implementation of the document's point of view into object-oriented design using the information services that are covered in point of view. The following stages of the VORD method shown in Figure 3.

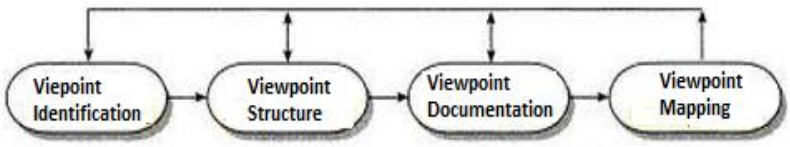


Figure 3. Stages Of The VORD Method

RESEARCH METHODS

In this study there are several stages to the needs of the system, including:

1. Use case, helping to represent the interaction between actors with the system to the needs of the functional on any type of actor.
2. Method of the VORD, this method to analyze the needs of the users of the system with the how to determine the viewpoint and then needs explained point of view into perspective and table service.

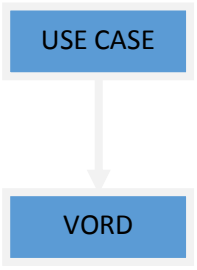


Figure 4. The Stages Of Research Methods

RESULTS AND DISCUSSION

1. Results Implementation of the Mapping into the VORD Method
   a. Identification of point of view
      Identify point of view include discovery point of view based on the services that will be accepted by any point of view. The following list of service (service) on the respective viewpoints (point of view) that the data generated from analysis of proto personas:

Table 1. Viewpoint of Directur

No	Service
1	Receive information from the results of the teaching
2	Can see the profile of teachers

Table 2. Viewpoint of Education Manager

No	Service
1	Receive information from the results of the teaching
2	The input form of teaching evaluation results

Table 3. Viewpoint of HRD Manager

No	Service
1	Receive information from the results of the teaching

Table 4. Viewpoint of Lecture

No	Service
1	Receive information from the results of the teaching
2	Input form, input from teachers
3	Teaching performance assessment charts
4	Teaching schedule information online

Table 5. Viewpoint of Education Staff

No	Service
1	Receive information from the results of the teaching
2	Print the results of a questionnaire
3	Data entry needs questionnaire

Table 6. Viewpoint of Student

No	Service
1	Gets information to schedule charging assessment
2	Fill out a detailed questionnaire assessment of teaching

b. Structuring Viewpoint

Structuring this viewpoint include grouping viewpoint be 1 (one) of the hierarchy. Public service is described on the highest level and inherited by the viewpoint at a lower level. The following Figure 5 structuring viewpoint of teaching performance assessment for the application:

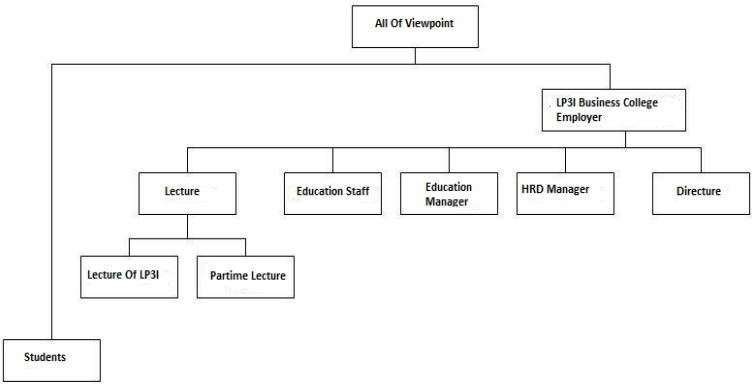
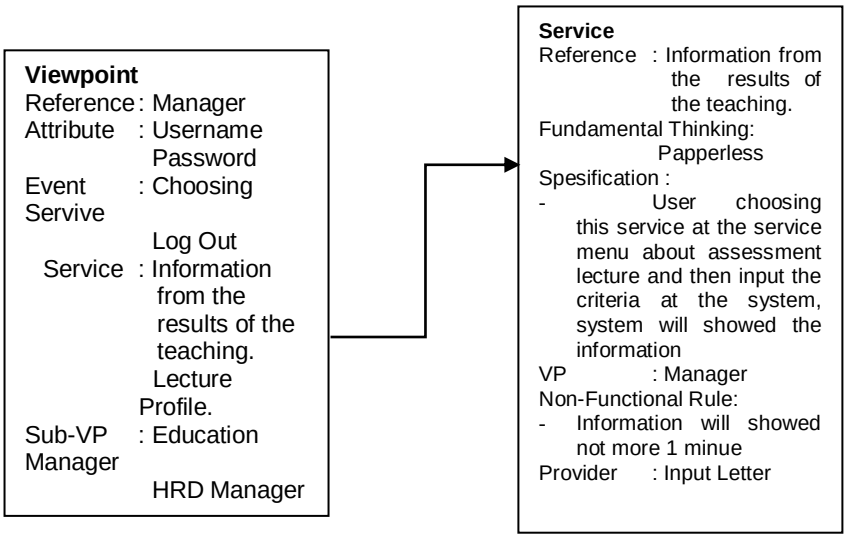


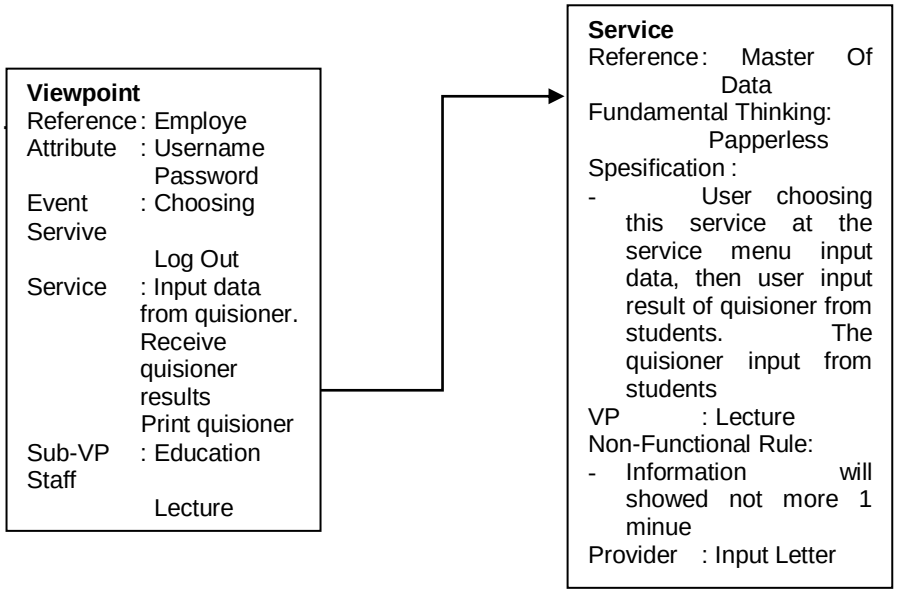
Figure 5. Structure Viewpoint (Point Of View)

c. Documentation Perspective

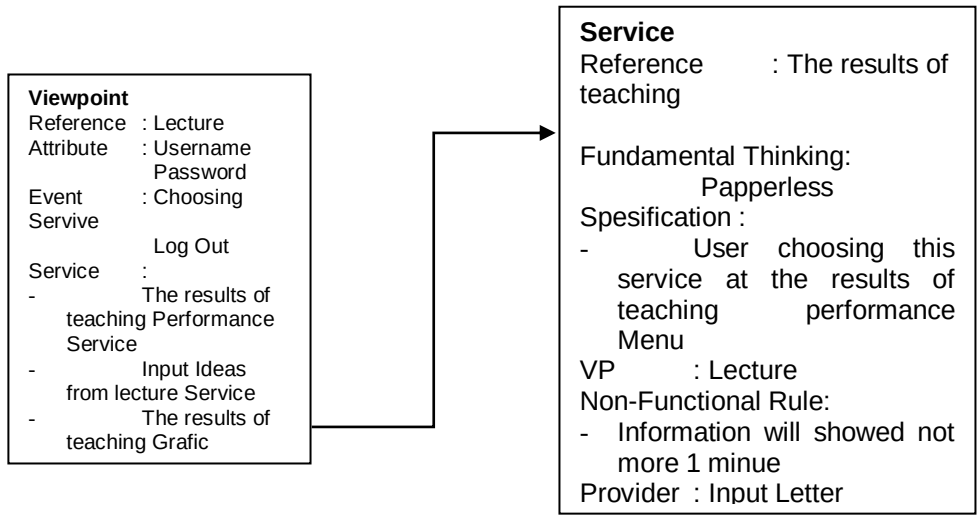
The documentation includes the perspective of how to describe each point of view and a service that has been determined in advance. at this stage the use of templates and template service point of view.
The Manager's point of view and description to linformasi teaching performance assessment results.



The employee's point of view and description to Iinformasi teaching performance assessment results.



The teaching point of view and description to Iinformasi teaching performance assessment results.



d. Event Scenario

There are scenarios in the event scenario used in the VORD to document the behavior of the system if faced with certain events. Every event different interactions, such as entering a username and password to choose the service provided by apli-kasi, may be documented with a different event scenarios. Event scenario includes a description of the data flow and system actions and document the exception that may appear.

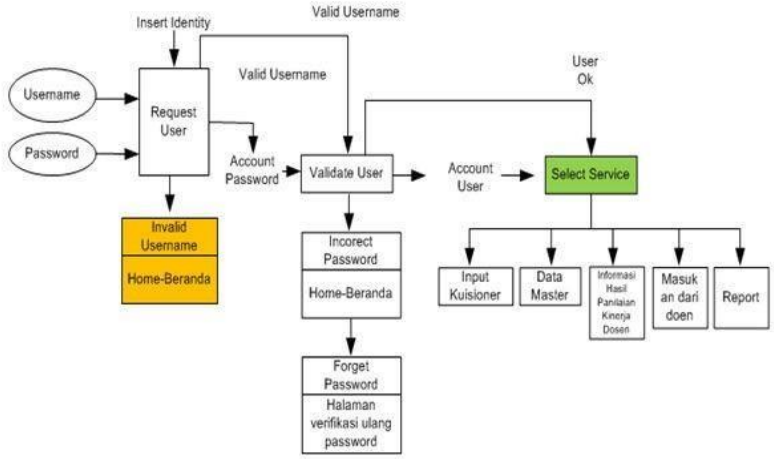


Figure 6. The select event service scenario

e. Use Case Diagram

Use Case diagram below is generated based on the document that has been previously obtained VORD, actors and services based on the results obtained from the proto personas.

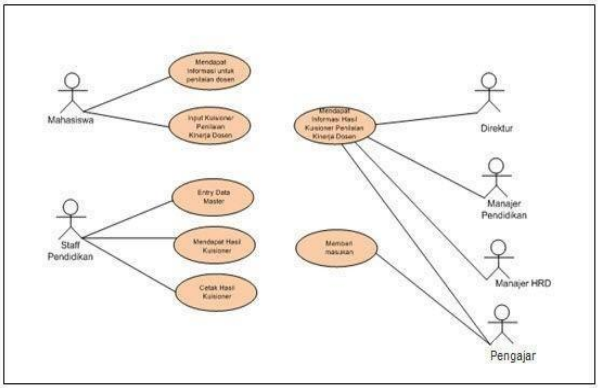


Figure 7. Use Case Diagram teaching performance assessment

f. implementation of the VORD Method into the VORD Tool
This application is designed as a tool to record all data that is associated with the informamasi needs for the system, the recorded data are derived from the results of the analysis. Here are some of the vord applications display tool:

- Early appearance of the Vord Tool

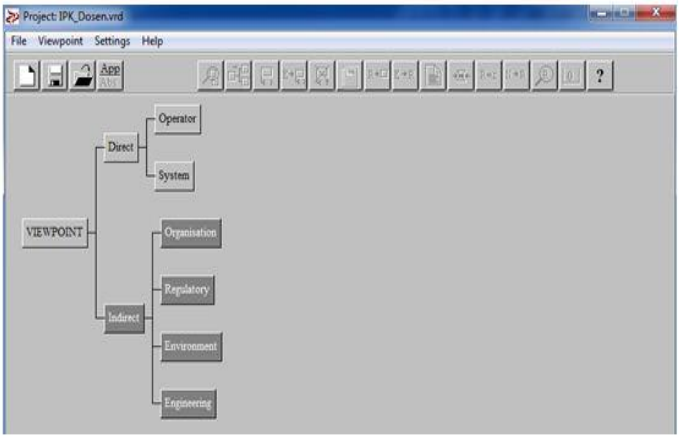


Figure 11. Early appearance of the Vord Tools

- Display form Viewpoint

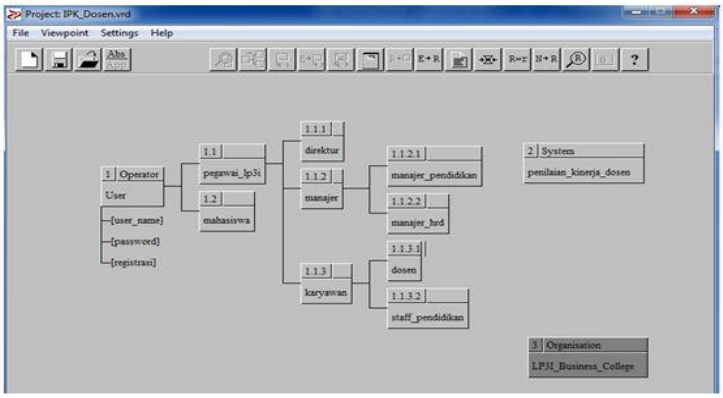


Figure 12. Display Form Viewpoint

- Display The Form Requirement

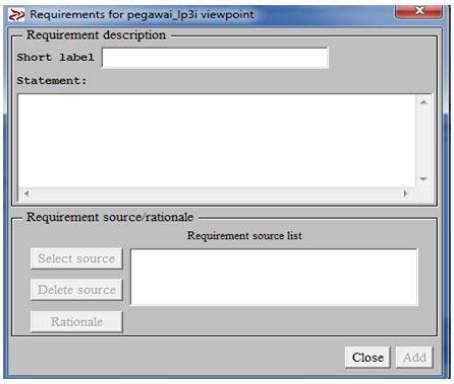


Figure 13. Display The Form Requirement

- Display The Edit Form Requirment

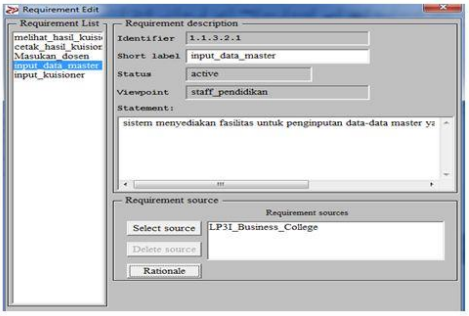


Figure 14. The Edit Form Requirment

- Display Form Requrement Specification

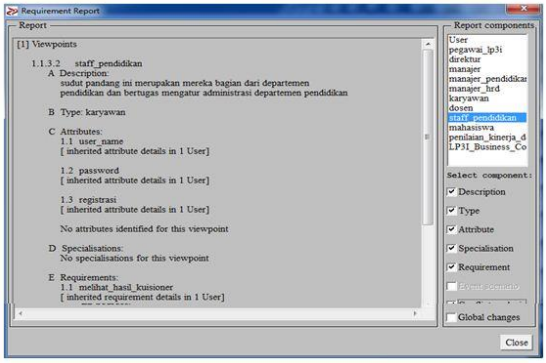


Figure 15. Requrement Specification Form

CONCLUSION

VORD is a method of identifying the needs of the system software using the user's viewing angle/viewpoint system. VORD frameworks in the system still needs identify are too general. In the VORD is not yet there are steps detailed work identifying needs, although this method can be implemented by the developers as tools that can help menaganalisa kebtuhan system.

The results of this mapping in the form requirement specification that the results obtained from the implentasi method into the VORD and VORD tool.

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