

**Web Based VDR Application Development for Oil and  
Gas Data Visualization  
FRONTEND DEVELOPMENT**

**Thesis  
Project**

*by*

*Vicky Vanessa*

*2201807791*



**BINUS INTERNATIONAL  
BINUS UNIVERSITY  
JAKARTA  
2022**

**Web Based VDR Application Development for Oil and  
Gas Data Visualization  
FRONTEND DEVELOPMENT**

**THESIS**

**Proposed as a requirement for obtaining  
Sarjana degree at  
Program Computer Science  
Education Level Strata-1 (Sarjana/Bachelor)**

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# **Web Based VDR Application Development for Oil and Gas Data Visualization FRONTEND DEVELOPMENT**

## **THESIS**

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We, the members of the Board of Examiners for the  
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Successfully passed the S-1 Thesis Defense Examination  
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Dengan ini, saya,

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**Web Based VDR Application Development for Oil and Gas Data Visualization –  
Frontend Development**

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**ABSTRACT**

VDR website application is aimed at aiding the oil and gas industry in Indonesia. Aside from the normal concept of VDR, the website application is fully integrated with petrotechnical solutions. The author's team hopes to solve the problem encountered by the client and wish to fulfill their roles to complete the expectation of the client for the prototype. This project is under the supervision and suggestion of both the client and the product owner. The main feature of this website application would be visualizing the oil and gas data, map and data showcase, prediction of oil and gas production value, and file management. The author is responsible for developing the frontend of the website application, by using Vue JS as the frontend framework and Vuetify as the UI library. Moreover, the frontend will be using state management and router provided by Vue official library, the Vuex and Vue-router respectively. The frontend will be connected to API endpoints which would require the access token provided by Oauth2 through the login endpoint to access them. The task of the team will be managed with Jira as an agile team and complete the work in sprints. By the end of the development, both the client and product owner approved of the completion of the project.

**Keywords:**

VDR, website application, frontend, visualization, file management, vue.

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- family and friends who are waiting and wishing for the author to successfully graduate,
- the author's team, Chan Elizabeth and Kotrakona Harinatha Sreeya Reddy, who has been accompanying each other during the development of the project helping each other both emotionally and mentally,
- the author's supervisors, Ida Bagus Kerthyayana Manuaba, S.T., Ph.D. and Ardimas Andi Puwrita for helping the author to create a better thesis and giving insightful suggestions,
- and others who are giving their support in any kind of form.

This project still has its flaws, but the author's team hope that it will help the people who will use it in the future. As well as giving a starting point for those who continues in developing the project.