## **ABSTRACT**

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## (RESEARCH AND MANUFACTURE OF SITE CRUD SYSTEMS AND LOCATION API TESTING TO MONITOR AMBIENT AIR QUALITY IN PT MANUNGGALING RIZKI KARYATAMA TELNICS

(This report discusses the implementation of Professional Work (KP) at PT. Manunggaling Rizky Karyatama Telnics (MARKTEL) in Bandung. The background is based on the importance of preparing students before entering the competitive job market. The objective of KP is to help students prepare themselves, identify adaptation aspects, train skills, and provide practical experience in the industry. MARKTEL, a technology company, focuses on the development of electronic control devices, telecommunications, and information technology. The KP project involves the development of an air quality monitoring system at the intersections of Medan City using HCD6818 sensors. The implementation process involves literacy and research according to the project, research on sensors, and the creation and management of a database for air quality monitoring locations. Practitioners are involved in CRUD (Create, Read, Update, Delete) activities for location data using the Postman API. Challenges faced include the limited knowledge of practitioners in the field of air pollution and the delayed delivery of HCD6818 sensors. These challenges were overcome by conducting further research, daily coordination, and adjustments to changes in the situation. The lessons learned involve direct experience in the industrial world, improvement of discipline, time management, initiative, and mastery of knowledge beyond the field of informatics. This project provides new insights and prepares students to face the challenges of the complex world of work.)

Keywords: CRUD (Create, Read, Update and Delete), riset, HCD6818 sensor.