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Graduation Thesis

To obtain the diploma of **Engineering Degree**

Field of Study: **Computer Science**

Specialization: **Système d'Information et Web (SIW)**

Theme

Application for Analyzing and Managing Production Well Data

Presented by
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In front of the jury composed of

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Abstract

This project was developed as part of the end-of-study internship at Sonatrach. It aims to improve the way production data is managed and analyzed. In the industrial oil and gaz field, well monitoring is very important to maintain production performance and avoid technical issues. However, we noticed that the data was scattered, difficult to access, and not used effectively for decision making.

To solve these problems, we developed a web application that centralizes production data in a single platform. It allows users to visualize real-time indicators like pressure, flow rate, and gaz through an interactive dashboard. The application also offers tools to generate reports, providing valuable insights that help teams take preventive actions and plan maintenance.

The solution brings better productivity, easier monitoring, and supports smarter decisions in the field, especially for technical and operational teams.