



DIEM - University of salerno
Master's degree in Computer Engineering
Situation Awareness

Report

Project 3: E-learning

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Chapter 1

Introduction

The objective of this project is to implement a comprehensive e-learning system designed to assist users in tailoring their learning pathways and enhancing their skill sets. Developed with a strong emphasis on situational awareness, this project is structured into two primary components: the first involves *Goal-Driven Task Analysis* (GDTA), and the second focuses on the implementation of an integrated dashboard.

This system is meticulously crafted with a user-centric approach, ensuring that users can effectively monitor their competencies and track their learning progress. In developing the GDTA, we delineated operational concepts through detailed personas and scenario analysis, ensuring that the system is attuned to the diverse needs and contexts of its users.

For the dashboard implementation, we leveraged *ElasticSearch* as the underlying database and *Kibana* as the visualization tool. The data presented on the dashboard were specifically curated for this project and are stored in multiple .csv files. This setup not only facilitates efficient data retrieval and display but also enhances the overall user experience by providing clear and actionable insights into their learning journey.

Chapter 2

Data Analysis

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