

# Functional Programming with Scala

Project Title: Test Project

Group Name: My Group

Vincent, Robin

IG5.Polytech

November 19, 2024

- **Your Specific Contribution:**

- My role focused on integrating and working with the Neo4j graph database. I was responsible for importing, storing, and querying CVE data (2023 and 2024) in Neo4j. I established relationships between the nodes.

- **Methodology or Approach:**

- Used Spark to filter and load CVE data into Neo4j
- Created nodes for CVE, Description, and ImpactScore with relationships
- Ran Cypher queries to fetch top CVEs by impact score for 2023 and 2024.

- **Challenges Faced and Their Resolutions:**

- Challenge: Ensuring data from Spark loaded properly into Neo4j
- Solution: Used `org.neo4j.spark.DataSource` to handle the connection and data transfer

- **Learning Gained:**

- Gained experience in graph databases and Cypher query language
- Improved skills in integrating Spark with Neo4j

- **Future Improvements:**

- Enhance data filtering for more specific CVE queries