Functional Programming with Scala

Project Title: Test Project

Group Name: Group 2

COSTES Nathanaël

 $IG5_Polytech$

November 19, 2024

About the Project

• Your Specific Contribution:

- Developed a Scala application to connect to MongoDB Atlas using the Spark Connector.
- Configured MongoDB connection URI and implemented Spark session initialization.
- Created a sample DataFrame and successfully wrote data to MongoDB.

• Methodology or Approach:

- Utilized Apache Spark for distributed data processing.
- Used the MongoDB Spark Connector for seamless database integration.
- Implemented the application using functional programming principles in Scala.

Challenges and Learning

• Challenges Faced and Their Resolutions:

- Encountered an error: Failed looking up SRV record for '_mongodb._tcp.cluster0.mongodb.net'.
- Tried to resolve the issue by ensuring proper DNS settings and validating the MongoDB URI.

• Learning Gained:

- Gained hands-on experience with Apache Spark and MongoDB integration.
- Improved understanding of functional programming practices in Scala.

• Future Improvements:

- Implement error-handling mechanisms to address connection issues gracefully.
- Optimize Spark configurations for large-scale data processing.
- Explore additional features of MongoDB for advanced data storage and querying.