



COMPUTER SCIENCE 3A MINIPROJECT

201707367

KR TAMBO

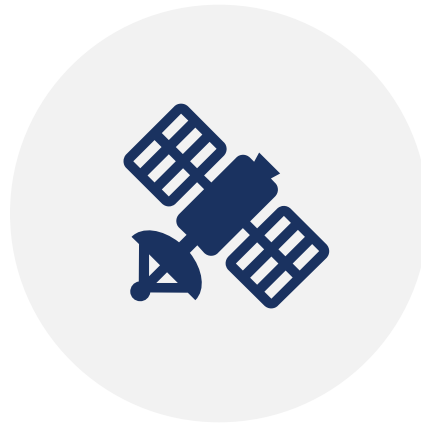
OVERVIEW

- Problem identified
- Proposed project
- Project requirements
- Blockchain application
- Graph ADT application
- Data communication application
- System demonstration
- Conclusion

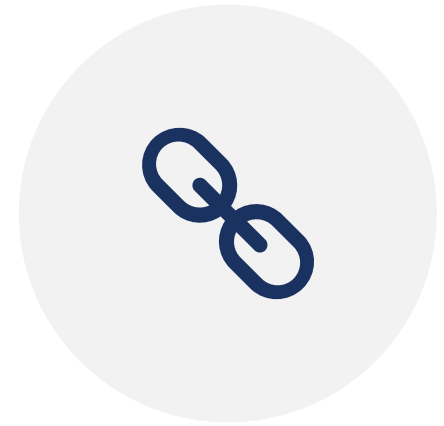
PROJECT REQUIREMENTS



GRAPH ADT USE



DATA
COMMUNICATION



BLOCKCHAIN
TECHNOLOGY

PROBLEM IDENTIFIED



- Logistic value chain includes a lot of manual data entry and paper-based documentation.
- Lack of information transparency.
- Process is very tedious.
- Shortage of automated and digital business processes e.g. financial transactions, custom fees, transfer of ownership, arrival at export and import etc.

PROPOSED SOLUTION

SYSTEM OUTLINE

- Smart logistic information flow system.
- Use of a distributed ledger.
- Information transparency and source of truth to all stakeholders.
- Automated and digital business processes.

TECHNOLOGIES TO BE USED

- Blockchain technology
- Data communication between all stakeholders.
- Information flow using graph ADT approach

SYSTEM IMPLEMENTATION



A vertical list of four components, each preceded by a white circle and connected by a thin line. The components are: Clients, Graph stores copies of the information, Information flow along all clients, and Transaction validation by each client on the chain.

Clients

Graph stores copies of the information

Information flow along all clients

Transaction validation by each client on the chain



SYSTEM DEMONSTRATION