Modern Education Society's Wadia College of Engineering Pune-01 <u>Department of Computer Engineering</u>

Name of Student:	Class:
Semester/Year:	Roll No:
Date of Performance:	Date of Submission:
Examined By:	Assignment No: 5

Laboratory Practice – III (Blockchain Technology) ASSIGNMENT NO: 05

AIM: Write a survey report on types of Blockchains and its real time use cases.

OBJECTIVES: To help students understand and apply blockchain real time application and understand technology that can be implemented within an organization and what limitations such organizations expect in adopting it.

THEORY:

A block chain survey report is a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. Blockchain has the potential to be a disruptive technology across industries, with varying impacts on finance. While many applications are still at the exploration stage, there are plenty of examples demonstrating how the technology could be used. The current lack of long-term experience with the Blockchain is aggravated by the fact that the technology is not yet mature, and therefore still under development.

Blockchain use cases as a key challenge. A well-structured research agenda that encourages the systematic and comprehensive documentation of the findings of Blockchain case studies is therefore needed to ensure the cumulative compilation of knowledge and to provide guidance for the industry. Ideally, such a research agenda builds on previous research and allows for the comparability and straightforward integration of new findings.

Types of Blockchains

There are four types of blockchain structures:

- 1. Public Blockchains
- 2. Private (or Managed) Blockchains
- 3. Consortium Blockchains
- 4. Hybrid blockchains

Drafting the Case

Once you have gathered the necessary information, a draft of your analysis should include these general sections, but these may differ depending on your assignment directions or your specific case study:

Introduction:

- 1. Identify the key problems and issues in the case study.
- 2. Formulate and include a thesis statement, summarizing the outcome of your analysis in 1–2 sentences.

Background:

- 1. Set the scene: background information, relevant facts, and the most important issues.
- 2. Demonstrate that you have researched the problems in this case study.

Evaluation of the Case:

- 1. Outline the various pieces of the case study that you are focusing on.
- 2. Evaluate these pieces by discussing what is working and what is not working.
- 3. State why these parts of the case study are or are not working well.

Proposed Solution/Changes:

- 1. Provide specific and realistic solution(s) or changes needed.
- 2. Explain why this solution was chosen.
- 3. Support this solution with solid evidence, such as:

Concepts (text readings, discussions, lectures)

Outside research

Personal experience (anecdotes)

Recommendations:

- 1. Determine and discuss specific strategies for accomplishing the proposed solution.
- 2. If applicable, recommend further action to resolve some of the issues.
- 3. What should be done and who should do it?

Finalizing the Case study:

After you have composed the first draft of your case study analysis, read through it to check for any gaps or inconsistencies in content or structure:

- 1. Is your thesis statement clear and direct?
- 2. Have you provided solid evidence?
- 3. Is any component from the analysis missing?

CONCLUSION:

Survey report and real time case study on blockchain technology solution is completed successfully.

QUESTIONS:

- 1. Outline the variety of possible solutions for problem you identified in your case study.
- 2. What are the challenges in applying block-chain to existing real time application that you discussed?
- 3. Enlist the benefits of using block-chain technology for your case study real world application.
- 4. Is it permissioned or permission less block-chain application you discussed in your case study? Justify you answer.
- 5. On which platform your block-chain application is built and why? (Ethereum, BigchainDB, Corda, Hyperledger, Multichain, Quorum etc)