



CST4025

Blockchain Development

Week 8

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1 Introduction

Consensus Engineering is an important component of decentralised applications and is often overlooked. Deploying the right consensus algorithm is important to the success of your application.

2 Consensus & Untrustworthy

The “Untrusted University” has been investigated for given fraudulent degrees, and awarding graduates first class honour, when their results show otherwise. The Vice-Chancellor has given this task to the Deans to solve. The Dean for the Faculty of Humanities suggest trying consensus. As a group we are going to try this and see if it works.

- In groups of three
- one of you is a primary node
- one of you is a trustworthy client node
- one of you is an untrustworthy client node

- Distribute the message that client S005 received a grade of 43. Follow the PBFT algorithm and determine if this result can be ratified by consensus using three nodes

3 Cosensus & Trustworthy

- In groups of four
- one of you is a primary node
- one of you is a trustworthy client node
- one of you is an untrustworthy client node
- Distribute the message that client S005 received a grade of 43. Follow the PBFT algorithm and determine if this result can be ratified by consensus using four nodes

4 Consensus