

## 7CCSMDLC TUTORIAL QUESTIONS

### TOPICS 9 & 10: Smart Contracts and Case Studies

#### TUTORIALS WEEK 10

Q1: You are invited to join a start-up which is developing a global Distributed Ledger consortium called Emeraldoi to support the global trade in emeralds and similar precious stones. In some parts of the world, these jewels are mined using slave labour or indentured workers, and the founders of the start-up plan to use the Emeraldoi Distributed Ledger to stop this. The partners in the Emeraldoi Consortium include all the major companies in the supply chain for emeralds and rubies, including mining companies, shipping companies, jewellery manufacturers, wholesalers, distributors, and retail stores.

- a) Do you think a Distributed Ledger could help stop the use of slave labour? Why or why not?
- b) Given that the Emeraldoi Consortium includes companies along the supply chain, what is another key commercial benefit of this DL platform likely to be? Why?
- c) The Emeraldoi Consortium has decided to adopt a generic DL platform and modify this platform for its own specific requirements. Name three generic DL platforms that Emeraldoi could adopt and write one sentence describing something relevant about each platform.
- d) What do you think the main technical challenges for the venture would be? Why?
- e) What do you think the main regulatory or legal challenges for the venture would be? Why?

Q2. Suppose the Emeraldoi platform has now been built and is successful in tracking emeralds and other precious stones through the platform. A jewellery company approaches you with a business proposition. The company specializes in making unique items of jewellery with precious stones embedded in them – for example, bracelets, necklaces, broaches, watches, tie clips, writing pens, etc. The company wants to create an NFT over each unique item they create.

- (a) Explain what is meant by this.
- (b) What do you think are the technical challenges?
- (c) What do you think the business purpose of this project would be?
- (d) Does it matter if the jewellery items are unique or mass-produced products?