

CCST 9080 Semester 2, 2024-25  
Tutorial 4 (3/4 March, 2025)

**1. Grouping (5 min)**

Divide yourselves into smaller group (about 3 per group)

**2. Discussion on applications and use cases in Web 3 (20 min)**

- (a) TA will give each sub-group a specific application
- (b) Group members try to discuss among themselves why the given application should be or should not be implemented in Web 3 and how Web 3 plays an important role in FinTech.
- (c) Select a representative to present the findings

**3. Presentation by each group (20 min)**

Each group will present their findings based on the application given by the TA

**4. TA comments on the findings (5 min)**

Note that TA will observe how your group conducts the discussion and give individual mark to each student.

[Confidential to TAs, do NOT release this to the students before the tutorial]

These questions are related to guest lecture given by Paul Li. Feel free to add more questions.

Please well-prepare before you go to the tutorials, probably you need to write down different applications (and some details) for each sub-group and pass them to each group during the tutorial. And you also need to think about some model answers for it according to my lecture slides. Thank you very much.

\*\*\* Remember to mark down individual marks for students in the Excel file \*\*\*

1. What is Web 3 and what role(s) is it playing in FinTech?
2. What are the commons and differences between Web 3 and Web 3.0?
3. According to the second guest talk, FinTech originally referred to peer-to-peer lending. What are the relations and the differences between the two concepts nowadays?
4. Banking is essential while banks are not. Why?
5. What breakthroughs were made from FinTech 1.0, 2.0 to Fintech 3.0?
6. Are there some interesting applications in Web 3?
7. Can FinTech solve moral issues? Why?
8. How can Web 3 improve security and privacy?
9. Some scholars suggest that web 3 can promote FinTech into the next important stage of development. Why?
10. Normally, dark industries like public opinion guidance based on mobile group control do not count for GDP. What impact will these issues have on FinTech?
11. What is a smart contract? Why is that smart?
12. In real life, very few problems are truly worth using blockchain solutions for. However, it is still very important to use these solutions in some specific cases. Why?
13. What is "double spending"? How do blockchains solve this issue?
14. In finance, "T+N" refers to settlement in N working day(s) after a financial transaction (T). Nowadays, some countries are trying to reduce the variable N. For example, the US shifted from "T+3" to "T+2" from May 2024. How do blockchains help with this?
15. What are the pain points in cross-border payments? Are there any solutions?
16. What are CBDC and stablecoin? Please provide some examples for stablecoin.
17. If securities trading and settlement are fully executed on a blockchain, what will this mean for the providers that are currently offering Business Process Outsourcing in the Transaction Banking Context?
18. What are programmable assets? What is "Programmability" in blockchains?
19. To provide a digital or crypto currency, we typically need a distributed ledger. Please explain the general idea behind a distributed ledger and work out the major differences between a distributed ledger and the usual bank account-based booking.
20. According to Paul, attacks and defenses in banking are particularly technical. Do you think these confrontations will ever cease if blockchains are used? Why?