Department of Computer Science and Business systems

Academic Year 2024-2025 (Even Semester)

Degree, Semester & Branch: VI Semester B.Tech -CSBS
Course Code & Title: CCS339-Cryptocurrency and Blockchain Technologies
Name of the Faculty member (s): Mrs. B.Yazhini

Innovative Practice Description

Unit / Topic: UNIT III /BITCOIN CONSENSUS/ Proof of Stake, Proof of Burn, Proof of Elapsed Time
Course Outcome: CO 3
Learning Outcome: 3a,3b
Activity Chosen: Think Pair Share

- **Justification:**
  - ✓ Think pair share activity involves the students to think individually and to share the knowledge with classmates.
  - ✓ In python, control flow helps to help the order of an execution of program based on the values and logic.
  - ✓ The student's individual solving capability can be tested and the gained ideas can be shared by think-pair-share activity
- **Time Allotted for the Activity:** 30 Minutes

- **Details of the Implementation:**
  A Collaborative, active learning strategy, in which students work on a question posed by instructor, first individually (Think), Write in a paper, then work in pairs or groups (Pair) to solve the problem, and finally share their solution with the entire class (Share).

  • **Think –** Write- Students were provided with questions on generic methods. The student has to think individually and write the answer in a paper.
  • **Pair-** After writing the answers, the students were allowed to discuss with neighbor and justify the resultant answer to each other. The pair with neighbor was shown in Fig.2
  • **Share -** Once the conclusion is made between the pair, then it is to be shared among the whole class by any of the student from the team and it is shown in the Fig 2.

CO — PO / PSO mapping:

CO	PO I	P0 2	P03	P04	P05	P03	PSOI	PSO 3
CO 3	3	3	2	2	1	1	3	1

Innovative practice	POI	PO2	PO3	PO4	PO4	PO5
	2	1	1	1	1	1
Justification for correlation	Students will acquire in-depth knowledge of the abstract models of blockchain technology by applying engineering fundamentals	Students will analyze blockchain use cases and scenarios using engineering sciences	Students will design and develop blockchain based solutions by implementing smart contracts and decentralized applications	Students will investigate complex problems related to abstract blockchain models, exploring potential improvements and innovative approaches.	**S**tudents will investigate complex problems related to abstract blockchain models, exploring potential improvements and innovative approaches.	Students will effectively use blockchain development tools and platforms to implement and gain hands-on experience in blockchain technology.

PO mapped:

PSO mapped:

Innovative practice	PSOI	PSO3
	3	1
Justification for correlation	To apply analytic technologies to arrive at actionable foresight, Insight, hindsight from data for solving business and engineering problems	To enrich the critical thinking skills in emerging technologies such as Hybrid Mobile application development, cloud technology stack, and cyber-physical systems with mathematical aid to foresee the research findings and provide the solutions

- **Images / Screenshot of the practice:**

Figure 1 & 2 THINK PAIR SHARE Sample Screen shots

Reflective Critique:

- **Feedback of practice from students and other stakeholders:**
    - Some of the students write answers for the questions easily and share their ideas with others.
    - Some of them need more explanation and examples to get clarity on the generic methods.
- **Benefit of the practice:** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)

  It helps the students to share ideas with classmates and builds oral communication skills. They completed the task by coordinating with each other and get more confidence, clear understanding in this topic when discussing with their peers.
- **Challenges faced in implementation:**
    - The students who didn't understand the concept clearly is not able to complete it within time.
    - Making all the students to involve and present actively in this activity is a challenging.

References:

- https://www.ritrjpm.ac.in/images/computer-science/14_CS8392_TPS.pdf
- https://www.ritrjpm.ac.in/images/computer-science/2022-2023/3_GM_CS3353_Evaluation_Expression_TPS.pdf
- https://www.ritrjpm.ac.in/images/computer-science/CS8451-Think-Pair-Share_PJT.pdf

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