Assignment 2

1. "Personalization is what merchants and publishers want to do to tailor the Web site or advertisement and product promotion to a customer based on his past behavior and inference from other like-minded people," wrote Philip S. Yu at IBM. In the article titled "The Art of Mass Personalization - Aug 5th, 2005," JantschJohn at HP said, "smart marketers are preparing multiple versions of marketing materials, tailored to specific industry niches or service offerings and then matching those materials to specific target market situations."

    These ideas are currently prevalent. What do you think would be the next in the future? Explain it.

2. In Lamport's algorithm for granting a single resource to processes, one at a time (mutual-exclusively), in the order they made requests for it [Lamport78], how can the assumption of in-order delivery be avoided?

    Write a whole algorithm that is not based on this assumption, and explain how this algorithm works.

3. Is it possible that the global state recorded by the 'snapshot' algorithm of Chandy and Lamport [Chandy85] is not identical to any of the global states that occurred in the actual computation? Of what use is the algorithm if the recorded global state never occurred? Support your claim.

4. State the names of the consistency models not using synchronization operations in order of decreasing restrictiveness. For these models, illustrate using the 'R(x)a' and 'W(x)a' notations

event sequences that are valid for one model, but not for one-level (in the restrictiveness order) more restrictive model.

※ **Writing in Korean is ok, but writing in English is preferred.**

※ **Submission**

- Submit your homework file(.docx / .pdf) to the TA(Jeesoo Min: jsmin@dcslab.snu.ac.kr) until Oct. 27th 11:59pm

- The email title should be "[DIP] HW2_studentNo_name".