

**Lecture 3 Discussion**

1. What is the difference between authorization and authentication?
  - a. What is embedded as meta-data within an installation package?
  - b. There are two types of activation. First time and Normal. What is the difference?
2. It has been stated that during the activation step the software system should ideally check for run-time system integrity before execution.
  - a. Is this necessary for all software systems?
  - b. Should the following software systems perform such a check?
    - i. Notepad,
    - ii. Web Browser,
    - iii. PDF Reader,
    - iv. Student enrolment system
  - c. What is the method you have used to arrive at your answer?
3. Software systems routinely acquire locks on certain resources. However, in the event of a sudden crash these locks may not be released.
  - a. How should such a scenario be handled by a Web Browser that has locked the cache and then crashed?
  - b. Should all locks acquired be documented in the deployment guide?
  - c. Is the cost of updating and maintaining this information in the deployment guide worth it?
  - d. Would you provide this information to your support staff?
  - e. Should the application be able to unlock old resources during activation?
  - f. Are there any design issues?
4. Does the Carzaniga deployment model presented imply automation?
  - a. That is, does it require a tool like Windows Installer or RPM for the model to be useful?
5. Assume a choice was made to use scripts to copy data from the old schema to the new as part of the data migration during deployment. One of the existing tables has been modified to have a new column. Illustrate with an example any issues that needs to be considered and how you will resolve them.