
Distributed Information Systems: Winter Semester 2011/2012
Quiz 1: Overview on Distributed Information Systems

Student Name: _____ Date: 27 Sep 2011
Student ID: _____ Time: 9:50AM to 10:05AM

Total number of questions: 7
Each question has a single answer!

1. Which answer is true: *All information systems...*
 - ☐ use a relational database to manage their data.
 - ☒ implement a conceptual model corresponding to some aspect of reality.
 - ☐ process data from sensor inputs.
 - ☐ require indexing structures for efficient access.
2. The following is an example of data independence:
 - ☒ hiding the access path to data while processing a query.
 - ☐ hiding ones location in order to preserve privacy.
 - ☐ hiding the part of reality that is not modelled in an information system.
3. Which of the following statements about tries is **not** true:
 - ☐ Tries support prefix queries.
 - ☒ Tries are a balanced tree structure.
 - ☐ Tries support indexing of strings.
4. In an heterogeneous information system the primary purpose of an ontology is:
 - ☒ to overcome semantic heterogeneity.
 - ☐ to overcome syntactic heterogeneity.
 - ☐ to ensure data quality.
 - ☐ to reduce query latency.
5. Relational schema normalization is a task that corresponds in the ANSI architecture to the:
 - ☐ conceptual layer
 - ☒ logical layer
 - ☐ physical layer
6. Which of the following information systems use a pull-based approach for information access:
 - ☒ Peer-to-peer file sharing
 - ☐ Twitter
 - ☐ RSS
7. *Distribution–Autonomy–Heterogeneity* correspond to each other like:
 - ☐ semantics–pragmatics–syntax
 - ☒ syntax–pragmatics–semantics
 - ☐ syntax–semantics–pragmatics