Data Design and Modeling

Università della Svizzera italiana

Project Work

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Project Work

- Group work
- No team changes allowed
- Subsequent assignments
- Maximum 3 points on the final mark
- passed with minimum 1.5 points out of 3

total sufficient mark including written exam = 6 points

minimum on written exam = 4 points

Project work - part 2

- Design, store and query graph data on NoSQL DBs
- Certification app for COVID-19
- People and information about their tests and vaccination status
- Suppose you want to record in a document-based storage the certificate of vaccination /testing and the authorized bodies that can deliver them

Project work - part 2

The certificate should include:

- who is vaccinated when and where (first and second doses, with which type of vaccine)
- The kind of vaccine issued (brand, type, lot, production date)
- The list of tests taken, when and where, and the respective results
- doctors and nurses attending the vaccination/tests
- demographic details of the vaccinated person
- Emergency contact person and details

The location is fully described as an entity with all the relevant details (including but not limited to: GPS position, hospital or other health service name, department issuing the vaccine, address, ...).

Project work - part 2

- Write the specification and hypotheses of the problem and solution
- Design conceptual model (ER or similar)
- Store the data in MongoDB
- Write basic Queries and Commands useful for typical usage scenarios
- Prepare a short report describing the above aspects

Project work - part 2

- 3 randomly selected groups will present their work in class
- Optional: if you want you can actually implement also some application / UI or similar (a bonus on the mark will apply)

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