

Assignment No. 2: Relational Modeling

Solutions due 7 July. Please type your solution and upload it to Blackboard as a single pdf file.

Convert the Entity-Relationship design from Homework 1 to a schema for a relational database (you may modify your original design as necessary). List all relation schemas. For each relation schema state the name of the relation, the names of the attributes, the domains of the attributes, the primary keys, the foreign keys and the inclusion constraints.

Again, Indicate which part of the original description you have not been able to represent in your design.

To describe your relational schemas, follow this example:

Relation: Person

Attribute: SSN Domain: digit[9]

Attribute: Name Domain: alpha[30]

Attribute: Year_of_Birth Domain: integer(1900–2010)

Attribute: Citizenship Domain: alpha[20]

Primary key: SSN

Foreign key: Citizenship references attribute Cname in relation Country

An inclusion constraint should be written like foreign key, but with the keyword **Foreign Key** replaced with the keyword **Inclusion**.