

Foundations of Databases A.Y. 2021-2022
Homework 2 – Conceptual and Logical Design

Master Degree in Computer Engineering
Master Degree in Cybersecurity
Master Degree in ICT for Internet and Multimedia

Deadline: November 26, 2021

Group Group name	Project Inventory Management System	
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Conceptual Design

Variations to the Requirement Analysis

Entity-Relationship Schema

Data Dictionary

Entities Table

Entity	Description	Attributes	Identifier
Entity_name		<ul style="list-style-type: none">• attribute 1• attribute 2	identifying attribute(s)
Entity_name		<ul style="list-style-type: none">• attribute 1• attribute 2• attribute 3	identifying attribute(s)

Relationships Table

Relationship	Description	Component Entities	Attributes
Relationship_name		<ul style="list-style-type: none">• E1 (min, MAX)• E2 (min, MAX)	—
Relationship_name		<ul style="list-style-type: none">• E1 (min, MAX)• E2 (min, MAX)• E3 (min, MAX)	Relation Attributes

External Constraints

Functional Requirements Satisfaction Check

Logical Design

Transformation of the Entity-Relationship Schema

Redundancy Analysis

Choice of Principal Identifiers

Analysis of Database Load

Relational Schema

Data Dictionary

Relation	Attribute	Description	Domain	Constraints
Relation 1				
Relation 1				

External Constraints