## BOĞAZİÇİ UNIVERSITY

## CMPE 321 DATABASE SYSTEMS

# SHELTER MANAGEMENT PLATFORM PROJECT 3

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#### 1 Introduction

In the third project, we are asked to implement a shelter management platform which operates on a local host. In the platform, there exists 4 tables interacting each other which are Shelter Manager, Caretaker, Animal, and Sponsor. The local host has been created via mysql server which has been provided by xampp. HTML, PHP, and SQL have been used for the implementation of the database system.

### 2 Assumptions & Constraints

#### 2.1 Assumptions

- 1. The primary key of the Shelter Manager table is username that is the table rows are unique based on the username attribute.
- 2. The primary keys of the Caretaker table are name, surname, and animal that is the table rows are unique based on these attributes.
- 3. The primary key of the Animal table is name that is the table rows are unique based on the name attribute.
- 4. The primary keys of the Sponsor table are name, surname, and animal that is the table rows are unique based on these attribute.
- 5. The age column of the Animal table is composed of integer values.

#### 2.2 Constraints

- 1. An animal can have at most 1 sponsor.
- 2. The Caretaker column of the Animal table must satisfy the "Last-Name, FirstName" format for each entry.
- 3. The Sponsor column of the Animal table must satisfy the "LastName, FirstName" format for each entry.

Name	Age	Species	Caretaker	Sponsor
NameA	AgeA	SpeciesA	lNameCA,fNameCA	lNameSA,fNameSA
NameB	AgeB	SpeciesB	lNameCB,fNameCB	lNameSB,fNameSB
NameC	AgeC	SpeciesC	lNameCC,fNameCC	lNameSC,fNameSC

Table 1: The Formatting of The Animal Table

#### 2.3 Conclusion & Assessment

- 1. The project provided a better insight into the logical level of database management systems, and the implementations of the database systems.
- 2. Current implementation provides a basic, and useful functionality which is designed to satisfy BCNF. The primary keys are selected in order to avoid conflicts that may cause some ambiguities in operations.
- 3. In the end of the semester, we have earned an insight into the database systems in various aspects, since the levels of a database architecture has been asked to apply one by one.