

## BST-BCS-23A – Data Bases

### Project Overview

#### **Part I. Project Objective**

The objective of the project is to provide students with hands-on experience in discovering and understanding real-world data structures. The project aims to design a relational database for a career office to manage information requirements and support managerial decision-making effectively.

#### **Part II. Project Subject: “Career Office Management System”**

The "Career Office Management System" facilitates seamless collaboration among career consultants, students, alumni, and companies. The system enables students to easily access and engage with career events such as seminars, training sessions, job/internship postings, and career coaching services. Additionally, university decision-makers can obtain valuable insights into the career office's contributions, students' participation, and the effectiveness of various activities.

In this system, students register using their student numbers and personal information. They can request career coaching meetings with consultants or apply for job/internship opportunities. The career office can accept or reject these meeting requests, and approved meetings will be recorded in the system. Career office consultants are responsible for adding information about planned and organized activities, including time, location, number of participants, and organizers. Alums can register in the system, attend activities, and even organize events with the career office's approval. Companies can also register to collaborate with the career office and share job and internship opportunities with students through the platform.

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#### **Part III. Project Scope**

The project encompasses the following key aspects:

*1.1 Requirements Collection & Analysis:* Teams will thoroughly study the project subject and identify the information requirements of the system. This includes determining what queries and reports should be generated to aid managers or decision-makers in using the platform. Teams will also gather and specify the necessary data requirements through various data-gathering techniques. This phase will expand and refine the use case scenario mentioned above.

*1.2 Conceptual Design:* Based on the requirements collected and analyzed in the previous step, teams will construct an Entity-Relationship (ER) model and/or Enhanced Entity-Relationship (EER) models. This model will incorporate at least eight entities and an appropriate number of relationships.

*1.3 Logical Design:* Using the ER/EER model developed in the previous step, teams will map the conceptual design into a relational database design. The relational schema will be created based on this logical design.

*1.4 Physical Design/Implementation & Querying:* Teams will implement the proposed design in a Relational Database Management System (RDBMS) and create queries/reports using SQL (Structured Query Language).

#### **Part IV. Team Formation**

Students are responsible for forming their teams and emailing ([eburu.dilan.extern@srh.de](mailto:eburu.dilan.extern@srh.de)) to initiate collaboration by June 7, 2023, at 11:59 pm. *It is crucial to distribute the workload evenly among team members and ensure that every member comprehensively understands the project.*

No. of teams * No. of students	Total # of students	Total # of teams
[4 teams * 4 students]	16	4

#### **PART V. Project Timeline**

	Tentative Due Dates
Project Final Report	June 29
Project Q&A Sessions	June 30