

Requirement Analysis

AIM: TO DRAW THE CONTEXT DIAGRAM, DATAFLOW DIAGRAMS, AND THE ENTITY RELATION DIAGRAMS FOR UNIVERSITY REGISTRATION PORTAL.

Introduction

The **context diagram** is a simple model that defines the boundaries and interfaces the proposed system with the external world. It identifies the entities outside the system that interact with the system and the outputs it gives.

The system is shown using a circle labeled with the name of the system and the interfaces with labels outside the system and the interactions with arrows.

A **data flow diagram (DFD)** is a graphical representation of the "flow" of data through an information system, modelling its process aspects. A DFD is often used as a preliminary step to create an overview of the system without going into detail, which can later be elaborated.

A DFD shows what kind of information will be input to and output from the system, how the data will advance through the system, and where the data will be stored. It does not show information about process timing or whether processes will operate in sequence or in parallel, unlike a traditional structured flowchart which focuses on control flow.

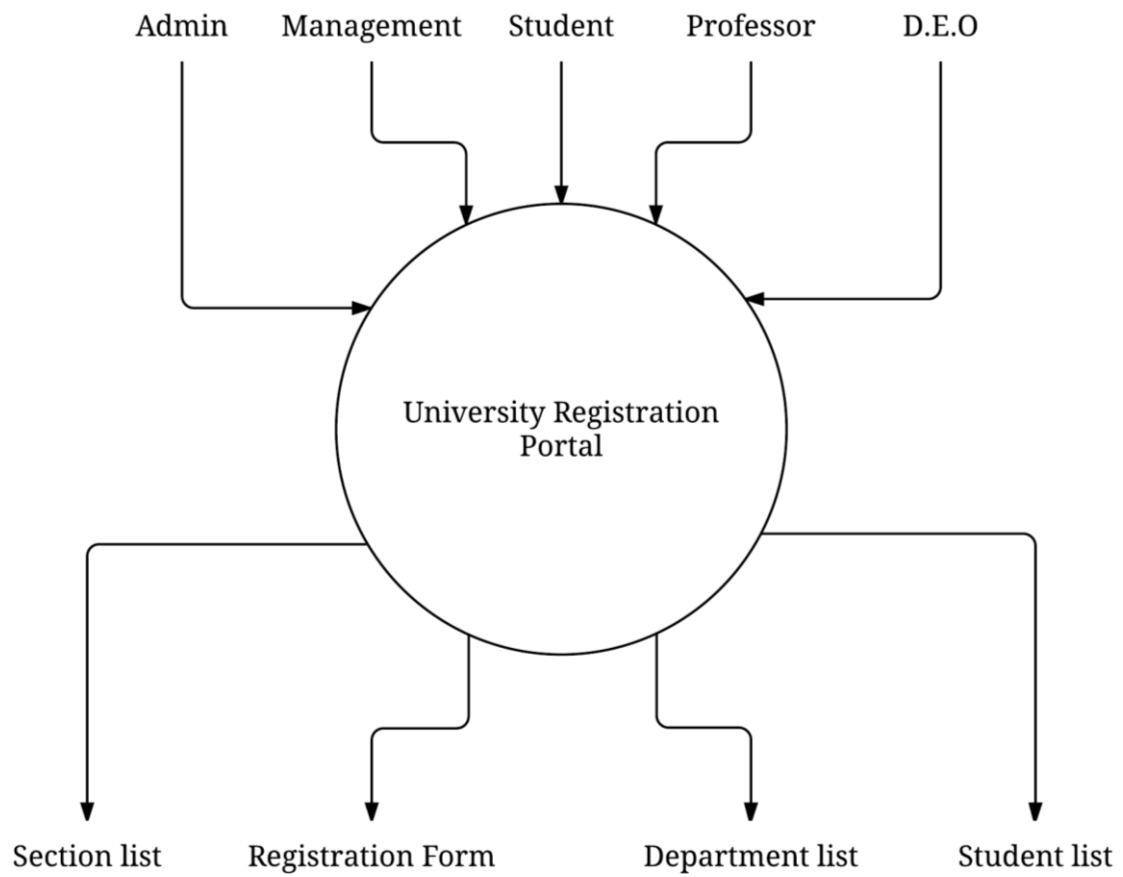
In a DFD a circle is used to represent a process that performs some transform, a rectangle represents a source/sink of data, an arrow shows the flow of data between processes and sinks/sources, and two vertical parallel lines with incoming/outgoing arrows are used to show a data store/repository.

An **entity relationship diagram (ERD)** shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases.

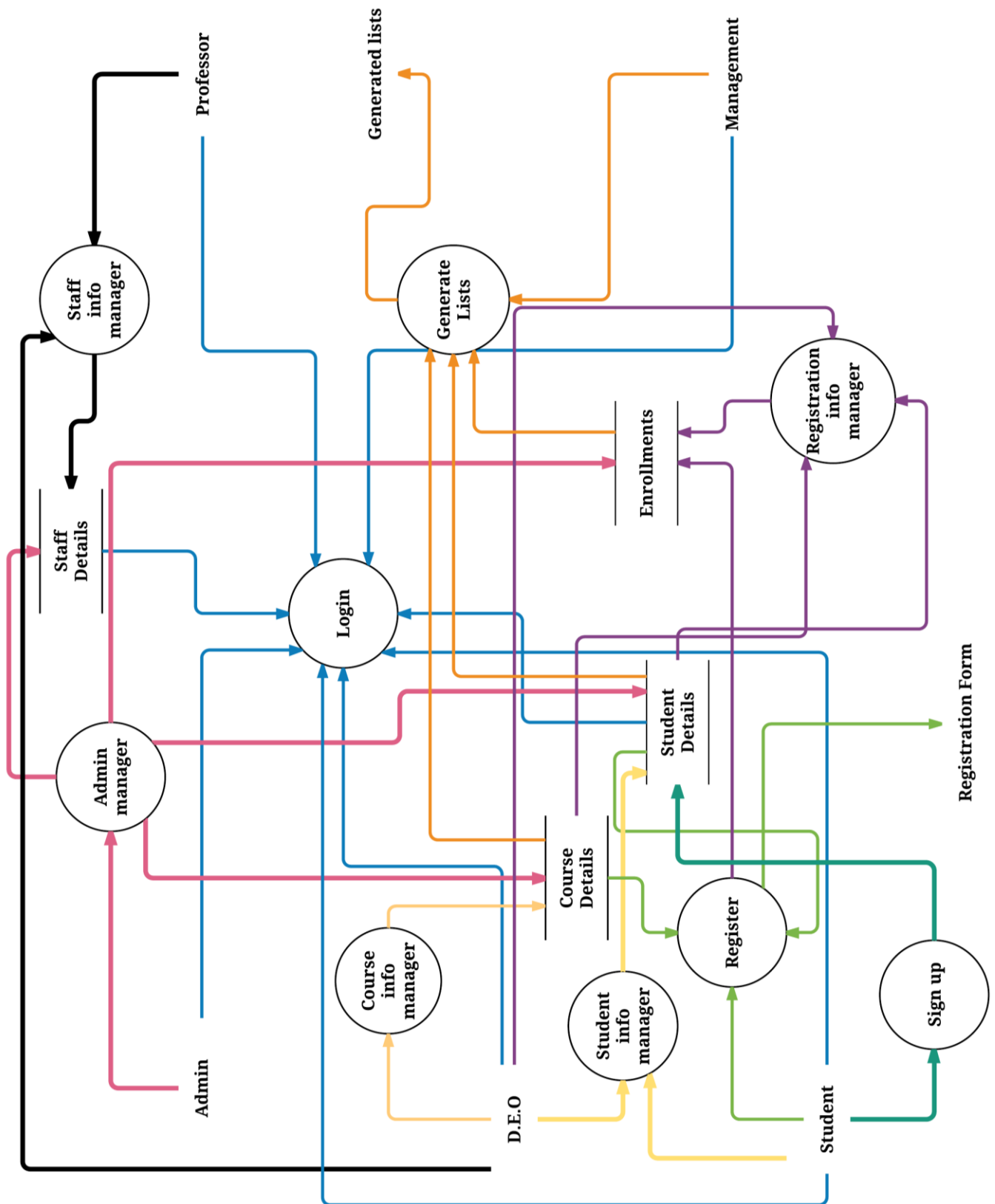
Three main components of an ERD are the entities, which are objects or concepts that can have data stored about them, the relationship between those entities, and the cardinality, which defines that relationship in terms of numbers.

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1. Context Diagram

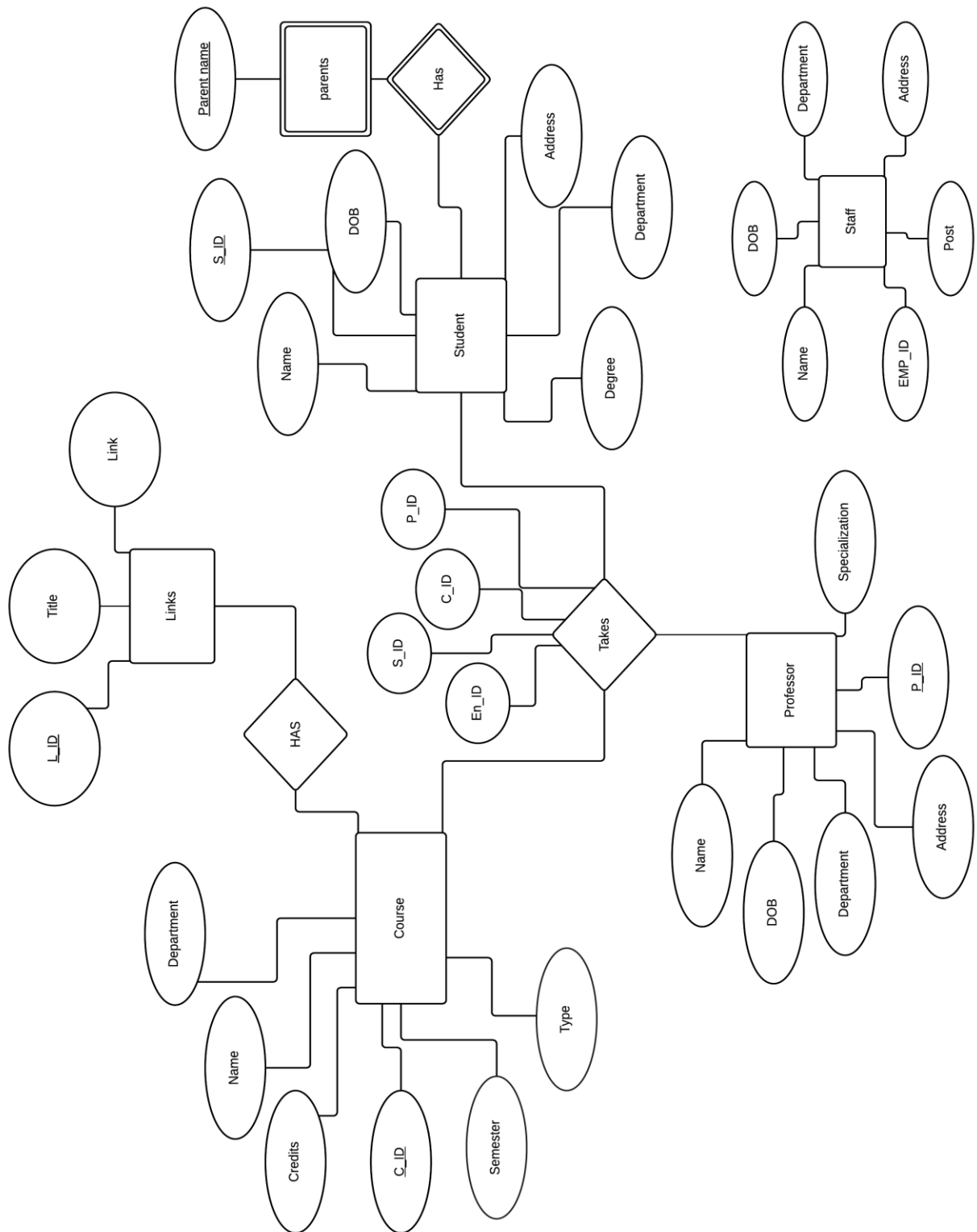


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2. 1-Level DFD

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3. Entity Relation Diagram

Learnings

We have drawn the various requirement analysis diagrams and found the flow of data and the relation between the entities.