Data and Its Applications (CS4.301)

Monsoon 2021, IIIT Hyderabad
16 August, Monday (Lecture 1)

Taught by Prof. Kamal Karlapalem

Database Systems

Data is factual (undoubted) information that can be recorded and have implicit meaning. There are three important parts of data: its creator, its believability and its semantics (or meaning).

A *database* is a collection of related data. Its properties are:

- it represents some aspect of the real world (universe of discourse)
- it is logically coherent
- it has a specific purpose
- it has an intended group of users and some preconceived application.

A *database management system* (DBMS) is a collection of programs that enables users to create and maintain databases. The database along with a DBMS software is called a *database system*.