

# Mini Project in Database Systems

## First Stage

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## 1 Proposal

Ask Us is a hypothetical organisation who want to create a website where people can ask and answer questions to the general public on any topic. Our task is to analyse the data needs of such a website, to the ends of creating a database for them along with a website to interface with it.

Ask Us will need to store information on its users, as well as all the questions and answers. They would also like each question and answer to have its own comment thread, for people to contribute helpful information regarding answers as well as for short follow up questions.

Additionally, they would like questions to be organised by topic, where each question can be associated with multiple topics. Users should also be able to follow topics they are interested in, so they can see questions related to their interests.

## 2 Entity Relationship Diagram

### 2.1 Entities

We will have seven entities: user, post, comment, topic, question, Q&A post, and answer.

A user is any individual writing a post on Ask Us. The user entity will have five attributes: ID, name, email, password, and points. ID will be the primary key. Points is a metric of rating.

Topic is a way a user can categorize his question thus getting better targeted responses. A user can also follow a topic of interest. The topic entity will have three attributes: ID, name, and description. ID will be the primary key.

A post is anything a user writes. That can either a question, an answer, or a comment. The post entity will have four attributes: ID, body, date-time, and points. ID will be the primary key.

A comment what a user would write if was to comment on a post. The comment entity is special type of Post. Comment itself has no attributes.

A Q&A post is either a question or an answer that a user posts. The Q&A post entity has no attributes of its own.

A question is what a user would post if he wanted to receive a solution to his inquiry. The question entity has one attribute called title.

An answer is what a user would post if he wanted to give a solution to a inquiry. The answer entity has one attribute called accepted.

## **2.2 Relations**