NAVYA NARAYAN PANICKER

WEEK 4

DAY 1: 13/10/25 [MONDAY]

TASK : Add endpoints: Design schema for tasks: fields such as id, title, description, status, due\_date; create tables

QUESTIONS/REFLECTIONS:

1. What is the normalized form? Why avoid data redundancy?

* Normalization is a form that is used to structure the relational databases to reduce the redundancy.
* There are different kind of normal forms :

1NF, 2NF, 3NF, BCNF

* If you change the same data in multiple places then it will cause inconsistent data
* The complexity of the database will increase otherwise.
* The operations will be slower as the db becomes heavier.

1. How would you decide types (VARCHAR, DATE, INT etc.)?

* The type should match the meaning of the data that you want to store.
* Use appropriate integer that fits the data and can save space.
* Date/time is used if you want to show the date and time.
* Numeric for integer data.

1. Describe schema changes you might make if tasks need tagging / user assignment.

* Add a tag table and a task\_tag and join the table to support multiple tagging.
* Add a user table
* Add a task\_assignment table to assign multiple times.
* Add required indexes, constraints and foreign keys.