

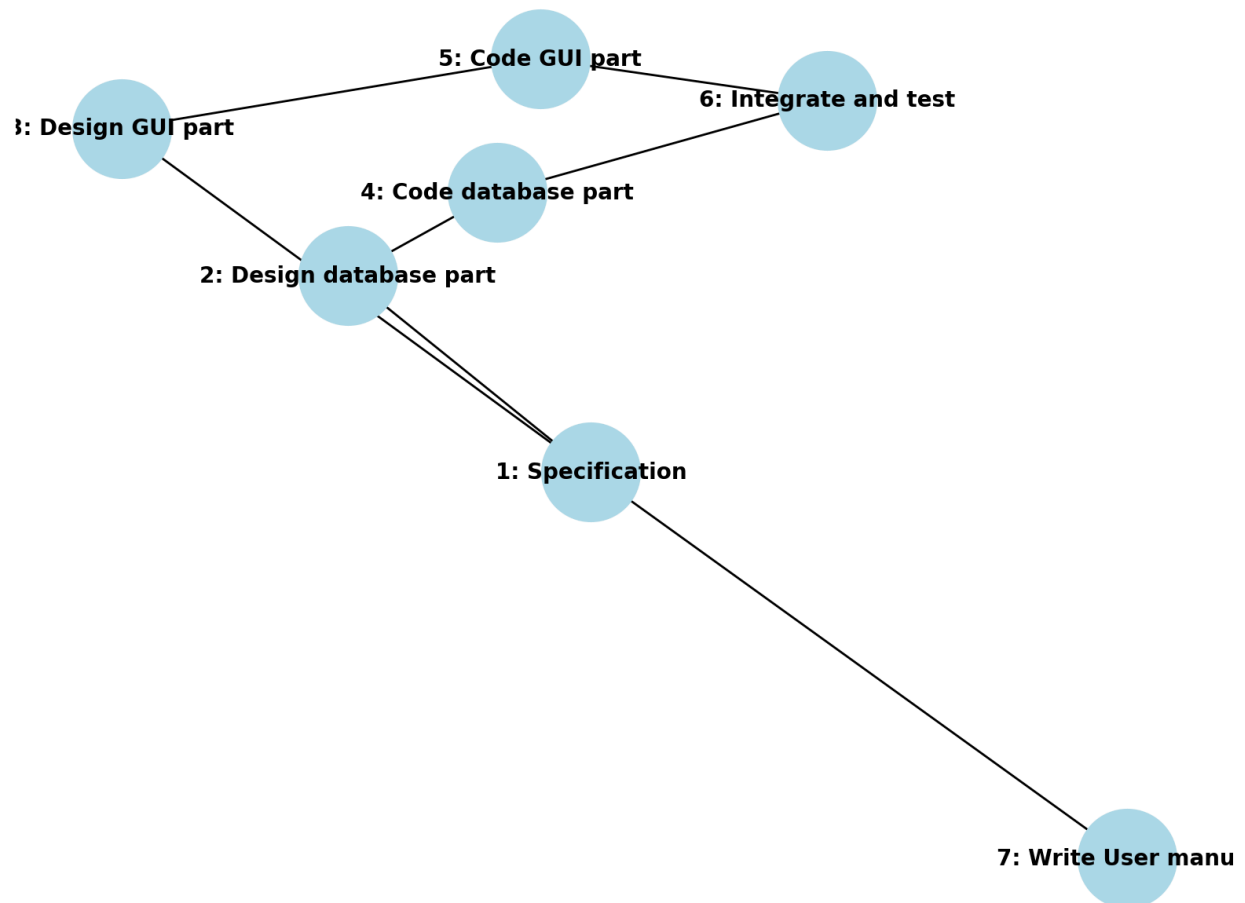
Suppose you are a project manager of a software project that consists of the following activities:

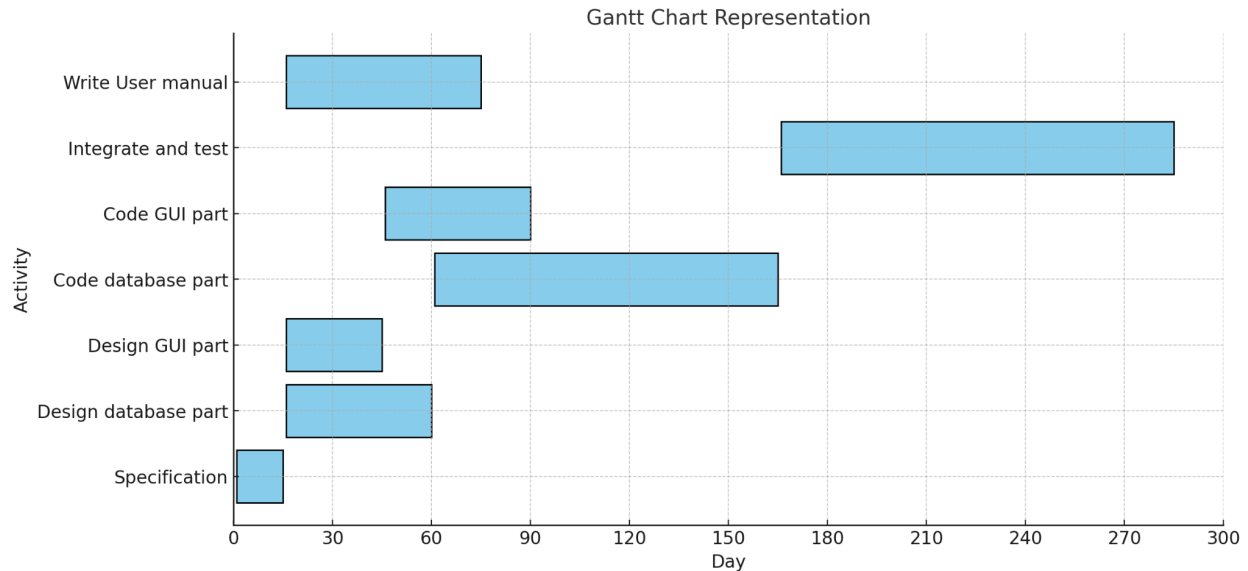
Activity No.	Activity Name	Duration (Days)	Immediate Predecessor
1	Specification	15	-
2	Design database part	45	1
3	Design GUI part	30	1
4	Code database part	105	2
5	Code GUI part	45	3
6	Integrate and test	120	4, 5
7	Write User manual	60	1

Tasks:

1. Draw the Activity Network Representation of the project.
2. Create a Gantt chart representation of the project.

Activity Network Representation





1. Activity Network Representation

The **Activity Network Diagram** (also known as a precedence diagram) depicts the dependencies between activities.

1. Activity 1 (Specification) is the starting activity and has no predecessors.
2. Activity 2 (Design database part) and Activity 3 (Design GUI part) both depend on Activity 1.
3. Activity 4 (Code database part) depends on Activity 2.
4. Activity 5 (Code GUI part) depends on Activity 3.
5. Activity 6 (Integrate and test) depends on Activities 4 and 5.
6. Activity 7 (Write User manual) depends on Activity 1.

Network Representation Diagram:

We use nodes for activities and arrows to show dependencies. I'll describe how this diagram looks:

1. Start with **Activity 1** (Specification).
 2. Draw arrows from Activity 1 to **Activity 2** and **Activity 3**.
 3. From Activity 2, draw an arrow to **Activity 4**.
 4. From Activity 3, draw an arrow to **Activity 5**.
 5. From Activities 4 and 5, draw arrows merging into **Activity 6**.
 6. From Activity 1, draw a separate arrow to **Activity 7**.
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2. Gantt Chart Representation

A Gantt chart visually represents the timeline of the project, showing which activities happen when and their durations.

- **Activity 1:** Day 1–15
- **Activity 2:** Day 16–60 (follows Activity 1)
- **Activity 3:** Day 16–45 (follows Activity 1)
- **Activity 4:** Day 61–165 (follows Activity 2)
- **Activity 5:** Day 46–90 (follows Activity 3)
- **Activity 6:** Day 166–285 (follows Activities 4 and 5)
- **Activity 7:** Day 16–75 (follows Activity 1)

The Gantt chart will show overlapping bars where activities occur in parallel.