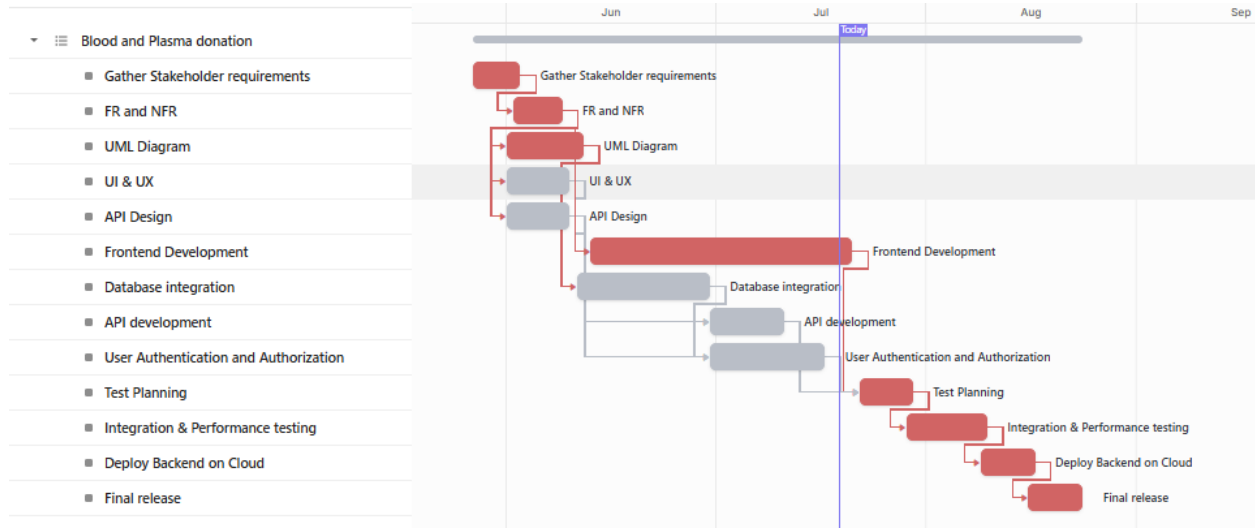
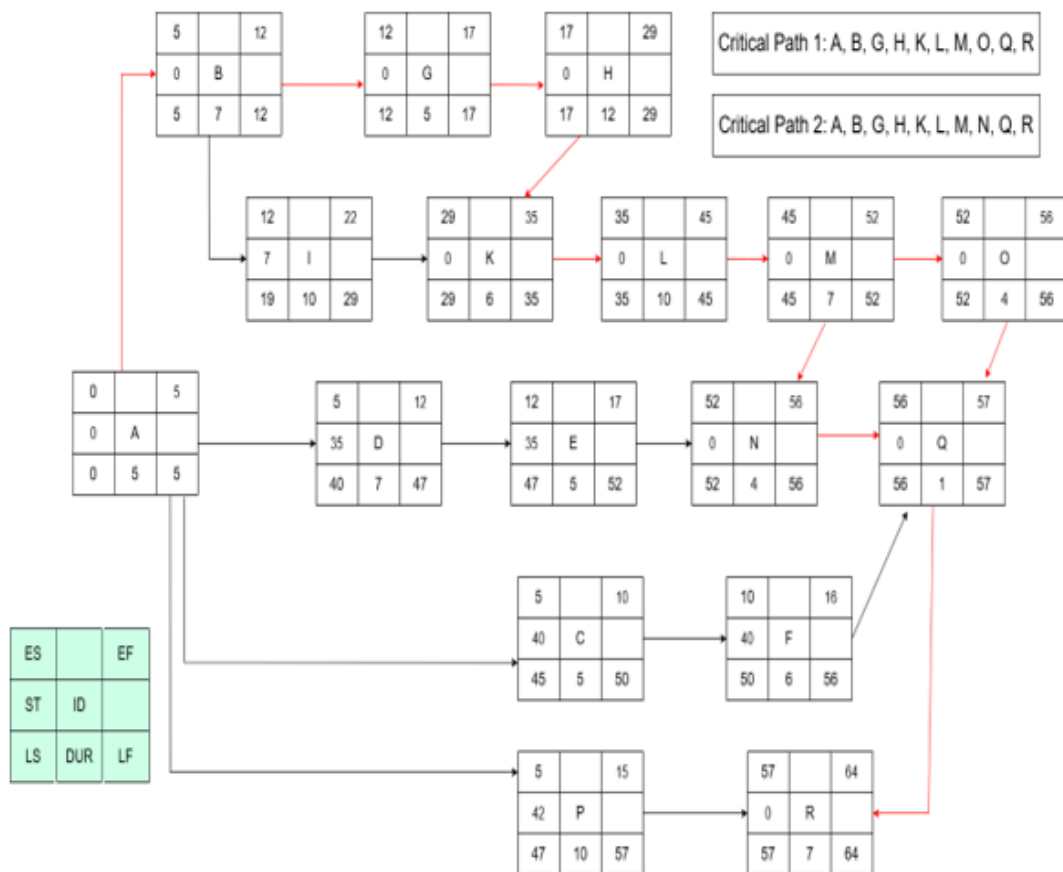


Gantt Chart:



Network diagram and Critical Path:



Critical Path 1: A → B → G → H → K → L → M → O → Q → R

Critical Path 2: A → B → G → H → K → L → M → N → Q → R

Activity Table:

Activity Table:

| Phase Name | Activity Name | ID | Duration (weeks) | Predecessors |
|-----------------------|---|----|------------------|--------------|
| Requirements Analysis | Gather Stakeholder Requirements | A | 1 | — |
| | Define Functional & Nonfunctional Requirements | B | 1 | A |
| System Design | UML Diagram Design (Use Case, Activity, Sequence, DFD, ERD) | C | 1.5 | B |
| | UI & UX Design | D | 1 | B |
| | API Design | E | 1 | B |
| Web App Development | Develop Web App Frontend | F | 4.5 | C, D, E |
| Backend Development | Database Design & Development | G | 2.5 | C |
| | API Development | H | 1.5 | G, E |
| | User Authentication & Authorization | I | 2 | G, E |
| Testing | Test Planning | J | 1 | F, H, I |
| | Integration & Performance Testing | K | 1.5 | J |
| Deployment & Release | Deploy Backend on Cloud | L | 1 | K |
| | Final Release | M | 1 | L |