

Project Initialization and Planning Phase

Date	14 May 2025
Student Name	Aditya Anilkumar Bhole
Project Name	BloodBridge: Optimizing Lifesaving Resources using RDS, EC2
Maximum Marks	4 Marks

Project Proposal (Proposed Solution):

Blood Bridge is a cloud-native application that:

- Uses AWS to host a reliable, scalable infrastructure.
- Offers REST APIs for donor registration, inventory updates, and request management.
- Provides real-time access to blood product availability.
- Implements secure login and role-based access for donors, staff, and hospitals.

Features:

- Real-time Inventory Dashboard
- Donor Management System
- Request Fulfillment Workflow
- Role-Based Access (Donor, Hospital, Admin)
- Audit Logs and Monitoring
- Secure Data Handling

Benefits:

- Faster blood availability
- Reduced wastage
- Improved emergency response
- Seamless coordination between stakeholders