Project Initialization and Planning Phase

Date	14 May 2025
Student Name	Prathmesh Arvind Kumbhar
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