System Architecture Document

Components:

1. Application Layer:

- Hosted on **Amazon EC2** instances

- RESTful APIs using Node.js/Python

2. Data Layer:

- **Amazon RDS:** Relational data (users, hospitals)

- **Amazon DynamoDB:** Real-time blood stock data

3. Storage:

- **Amazon S3:** Reports, documents, images

4. Authentication:

- **Amazon Cognito** for secure login & session management

5. Monitoring:

- **AWS CloudWatch** for system logs

- **AWS CloudTrail** for API access tracking

Architecture Flow:

User > API Gateway > Lambda/EC2 > RDS/DynamoDB > S3

System Architecture Diagram