Phase 1: Design and Planning (4 weeks)

Weeks 1-2:

Conduct requirement gathering sessions with stakeholders (hospital staff, donors, blood bank personnel).

Define system functionalities and features.

Finalize technology stack (programming language, database, framework).

Design user interface mockups and user flows.

Week 3:

Develop system architecture and database schema.

Create detailed project plan with milestones and deliverables.

Identify potential risks and mitigation strategies.

Week 4:

Present plan and mockups to stakeholders for feedback and approval.

Secure project funding and resources.

Phase 2: Development and Testing (8 weeks)

Weeks 5-8:

Develop core functionalities: donor management, blood inventory management, recipient management, and basic reporting.

Implement unit testing and integration testing.

Conduct internal user testing and refine user interface.

Weeks 9-12:

Perform system-level testing and security audits.

Conduct user acceptance testing with stakeholders.

Week 13:

Address any bugs or issues identified during testing.

Prepare final system documentation and user manuals.

Phase 3: Deployment and Maintenance (2 weeks)

Week 14:

Deploy the BBRMS to the production environment.

Train system users on operation and maintenance procedures.

Week 15:

Monitor system performance and address any initial deployment issues.

Provide ongoing support and maintenance for the BBRMS.

Budget:

The estimated budget for the BBRMS mini-project is as follows:

Hardware and software (laptops, development tools):

Team:

The project will be undertaken by a team of 3 students with expertise in programming, database management, and user interface design.

Expected Outcomes:

Improved efficiency and accuracy in blood bank operations.

Reduced blood wastage and shortage risks.

Faster and more effective blood matching for patients.

Enhanced data reporting and analysis for informed decision-making.

Potential for future expansion and integration with other healthcare systems.