SOFTWARE ENGINEERING LAB RECORD

BLOOD BANK MANAGEMENT SYSTEM
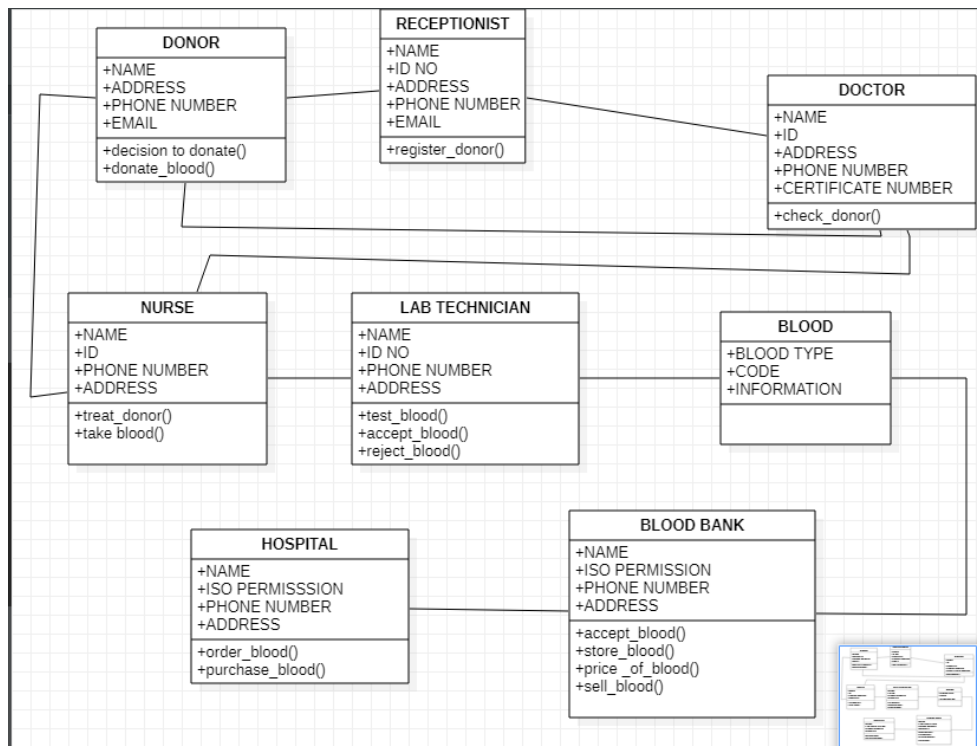
NAME: MAGANTI VIJAYA DURGA

ID NUMBER: AP18110010456
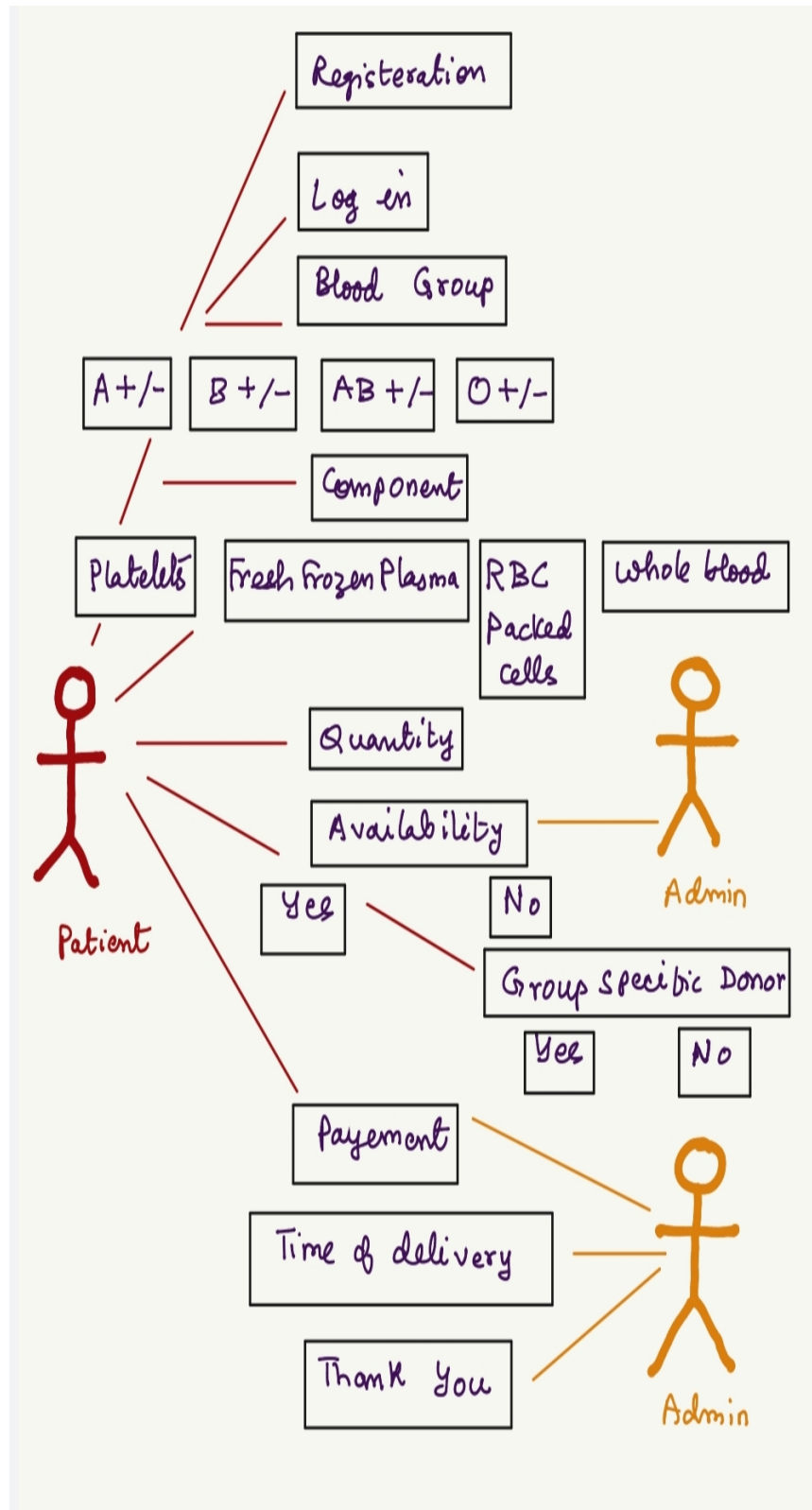
SECTION: CSE-G(7) 3RD YEAR

1) Structural view diagram: Class Diagram

Class Diagram

Object Diagram

Registeration

Log in

Blood Group

A +/- | B +/- | AB +/- | O +/-

Component

Platelets | Fresh Frozen Plasma | RBC Packed cells | Whole blood

Quantity

Availability

Yes | No

Group specific Donor

Yes | No

Payement

Time of delivery

Thank you

Patient

Admin

Admin

2) Behavioral view diagram:

Sequence Diagram

sd Blood Bank managaement systemSequenceDiagram

| DONOR | DONATION CAMP | BLOOD BANK | HOSPITAL |

1 : REGISTER USER

2 : CHECK USER

3 : DONATE BLOOD

4 : PROVIDERECEIPT

5 : TEST BLOOD AND STORE

6 : ACKNOWLEDGEMENT

7 : GIVE ORDER FOR BLOOD

8 : PROVIDE BLOOD
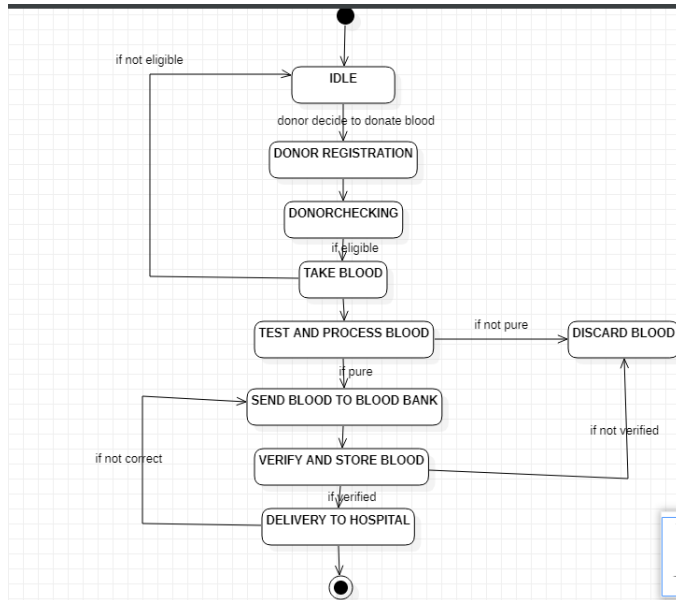
9 : ACKNOWLEDGEMENT
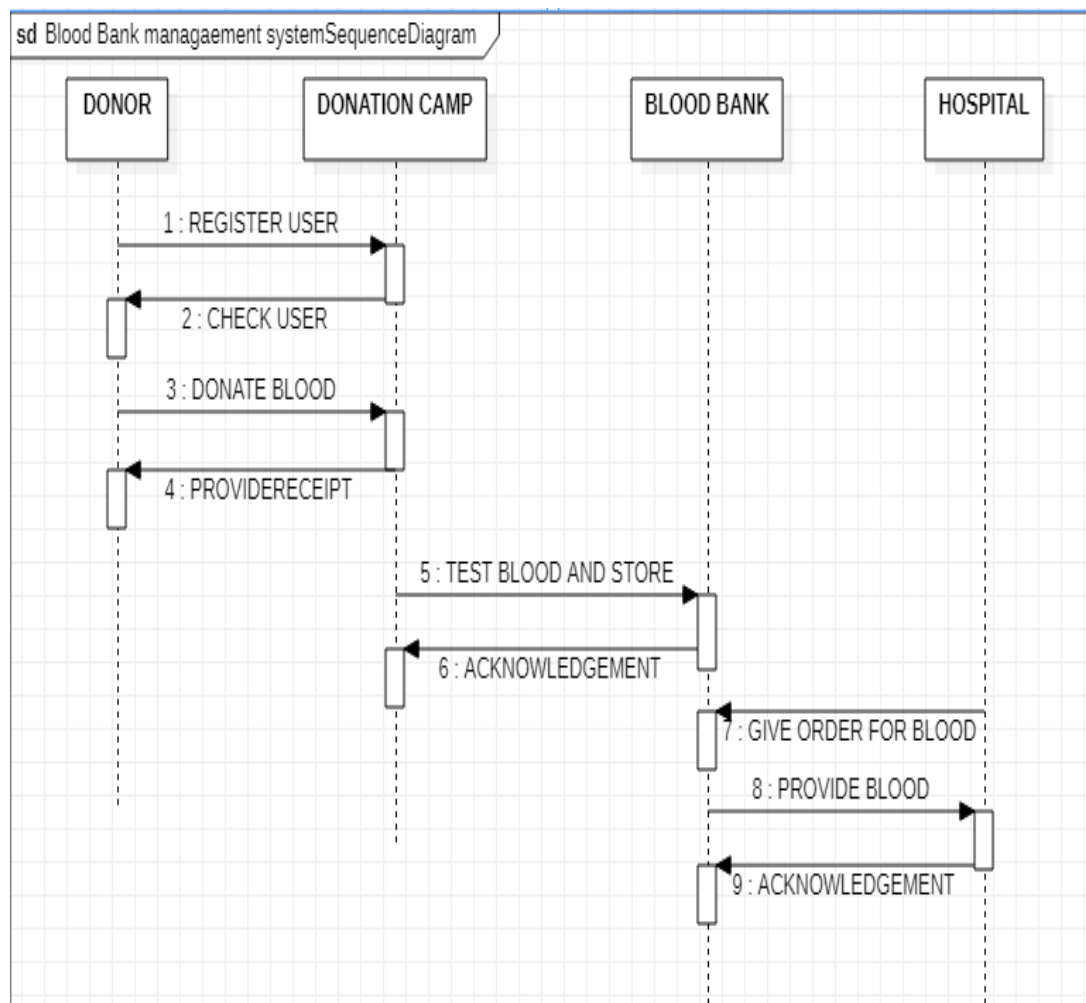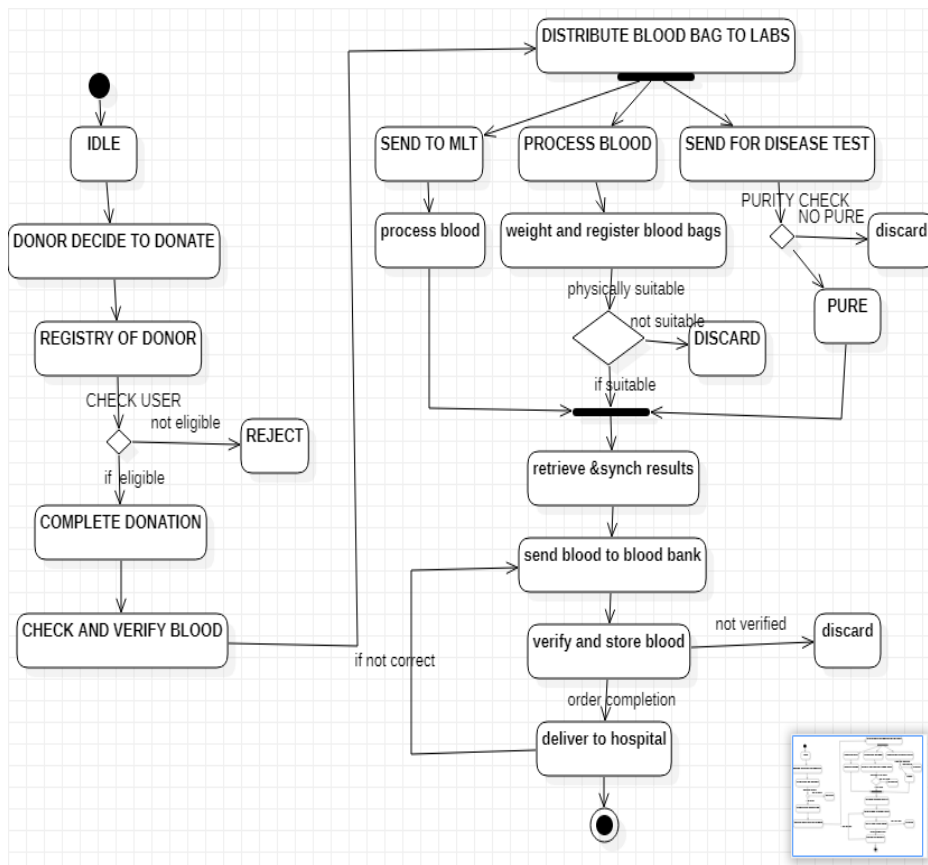
Collaboration Diagram
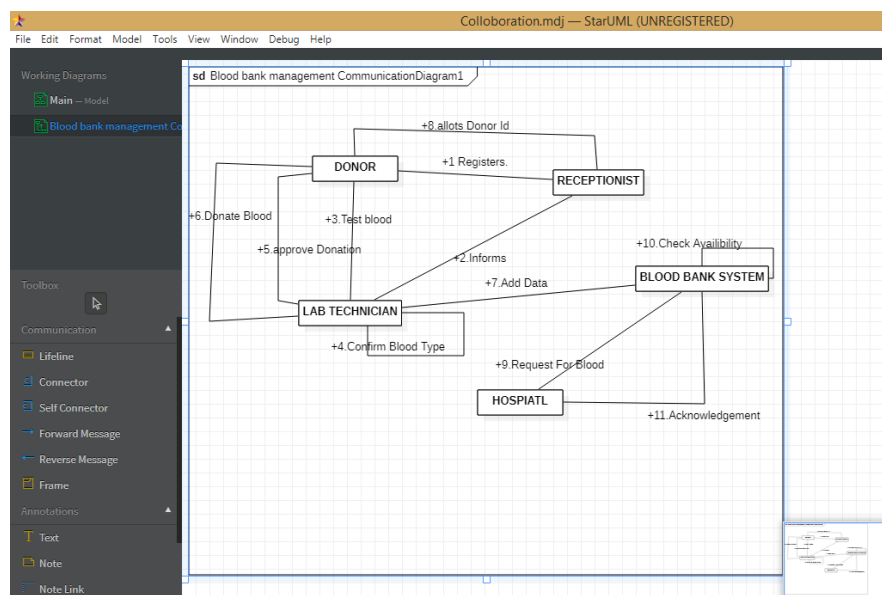
3) Behavioral view diagram:
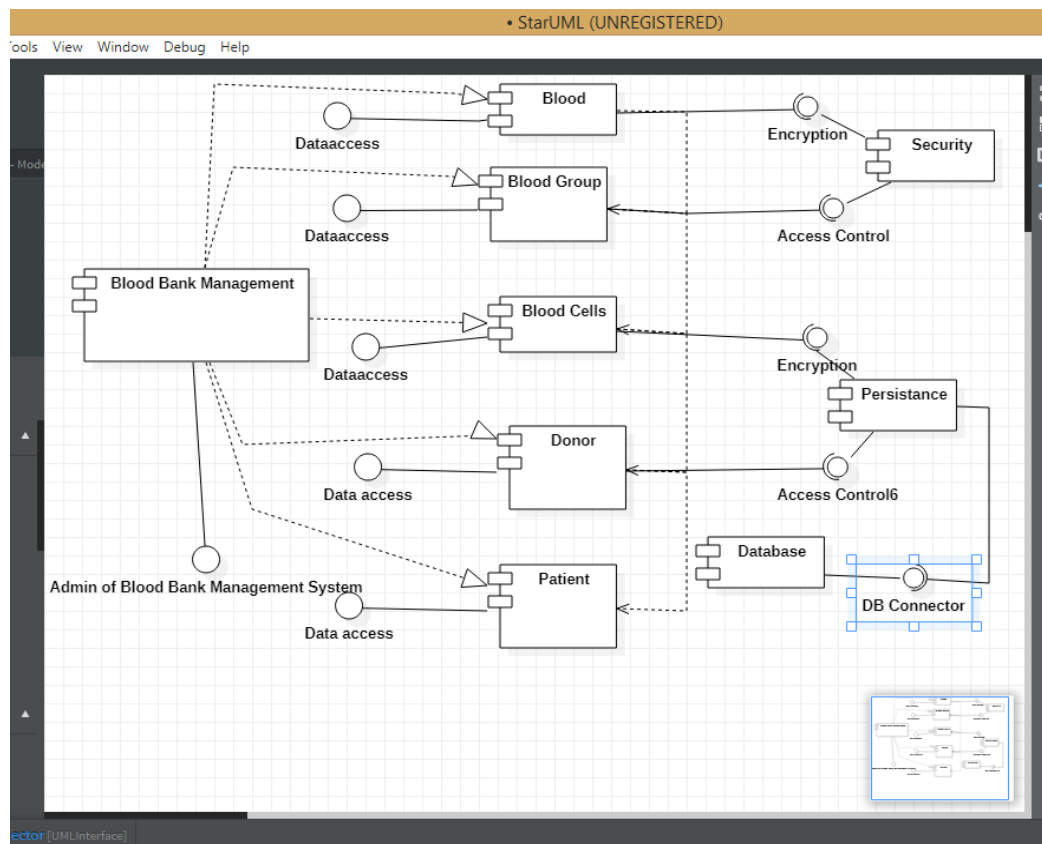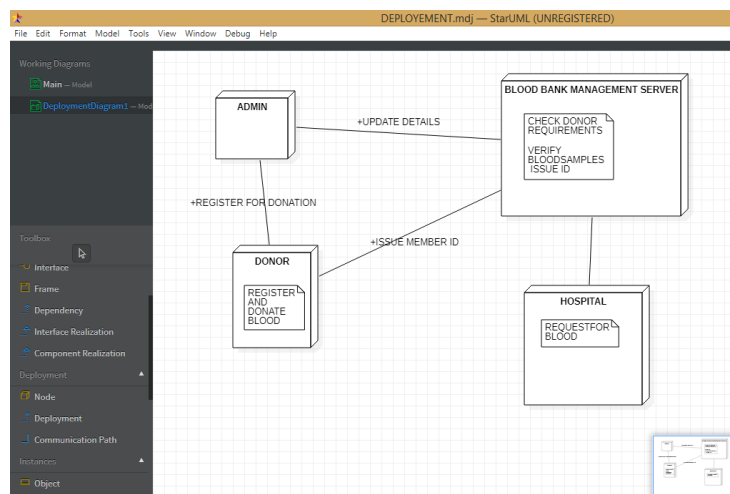
State-chart Diagram

Activity Diagram
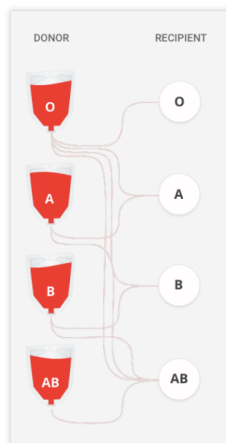
4)Implementation view diagram:

Component Diagram

5)Environmental view diagram :

Deployment Diagram

6) Testing: These are some of the screen shots of the project

❤️ **Blood Bank**   Available blood samples   Register   Login

DONOR	RECIPIENT

O

A

B

AB

O

A

B

AB

A+

If you are A+: You can give blood to A+ and AB+. You can receive blood from A+, A-, O+ and O-

A-

If you are A-: You can give blood to A-, A+, AB- and AB+. You can receive blood from A- and O-.

B+

You can give blood to A+ and AB+. You can receive blood from A+, A-, O+ and O-.

B-

If you are B-: You can give blood to B-, B+, AB+ and AB-, You can receive blood from B- and O-.You can give blood to B+ and AB+.

AB+

People with AB+ blood can receive red blood cells from any blood type. This means that demand for AB+ can donate with AB only.

AB-

AB- patients can receive red blood cells from all negative blood types. AB- can give red blood cells to both AB- and AB+ blood types.

O+

O-

Admin contact

❤️ **Blood Bank**   Available blood samples   Register   Login

You have successfully registered. Please, login to continue.   ✕

Hospitals	Receiver's

Hospital Email

Hospital Email

Hospital Password

Hospital Password

Login

Don't have account?

Blood Bank   Add blood info   Blood Request   Available blood samples   🌐 Gandhi hospit

You have accepted the request.   ✕

Blood Requests

#	Name	Email	City	Phone	Blood Group	Status	Action	
1	test	test@gmail.com	lucknow	8875643456	B+	You have Accepted	Accepted	Reject

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Blood Bank   Sent Blood Request   Available blood samples

You have requested for blood group A . Our team will   ✕
contact you soon.

Sent Requests

#	Name	Email	City	Phone	Blood Group	Status	Action
1	Unknown hospital	unknown@gmail.com	unknown	9876543267	A+	Pending	Cancel

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Blood Bank   Available blood samples   Register   Login

Select Blood Group:

[▾]

Reset   search

Available Blood Samples

#	Hospital Name	Hospital City	Hospital Email	Hospital Phone	Blood Group	Action
1	Gandhi hospital	Delhi	gandhi@gmail.com	7865376358	B+	Request Sample
2	Unknown hospital	unknown	unknown@gmail.com	9876543267	A+	Request Sample

1) Unit testing: Unit testing is defined as short code fragments created by programmers or occasionally by white box testers during the development process. It forms the basis for component testing. Ideally, each test case is independent from the others. Substitutes such as method stubs, mock objects, fakes, and test harnesses can be used to assist testing a module in isolation. Unit tests are typically written and run by software developers to ensure that code meets its design and behaves as intended.

2) Integrating testing: Integration testing which is called integration and testing, a is the phase in software testing in which individual software modules are combined and tested as a group. It occurs after unit testing and before validation testing. Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

Screen shots

USE CASE DIAGRAM

BLOOD BANK MANAGEMENT SYSTEM USE CASE DIAGRAM

DONOR

DONATION CAMP

RECEPTION TABLE

DONATE BLOOD

UPDATE DETAILS

BLOOD BANK

PROCESS AND TEST BLOOD

STORE BLOOD

HOSPITAL

ORDER BLOOD

PURCHASE BLOOD