



American International University-Bangladesh (AIUB)

Department of Computer Science and Engineering

Faculty of Science & Technology (FST)

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CSC 00191- Object Oriented Analysis And Design (OOAD)

Section: J

Project Title: PLASMA Management System.

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2. Project overview:

In our Plasma management system, a citizen can request or donate plasma. First the citizen must register into the system. Then he can log in to the system anytime with the password. To donate plasma a citizen must make a consultation with a doctor first. To take consultation, a citizen first has to get serial to book an appointment. A receptionist handles the appointments. If the receptionist provides him/her serial number only then he/she can consult with a doctor. A doctor runs checkup on the citizen who wants to donate plasma. The doctor gives the citizen clearance to donate plasma. A lab assistant takes plasma from the citizen. He also analyses the plasma and makes a report on it. Then he stores the plasma. A citizen can request for donation. They can ask for blood or plasma donation. Their request for blood is forwarded to a blood bank. Their request for plasma is forwarded to the system. The system checks for plasma availability and provides them plasma if available. The system also stores report, manages donor and also manages other applications. The receptionist provides the report to the citizen.

Actors	Citizen, System, Lab Assistant, Blood bank, Receptionist, Doctor
Use Cases	Provide plasma, registration, request donation, make donation, give clearance, report, take plasma, store plasma , check availability, manage donor, manage application, analyze plasma etc.

3. Justification:

Each day, hundreds of people need donated plasma and blood to keep them in good health or allow them to stay alive. Plasma management system is an enhance management system. The purpose of the system is to simplify and automate the process of searching for plasma in case of emergency and maintain the records of plasma donors, recipients and plasma stocks in the system.

Here are some of major the benefits of our management system:

1. Seeker can get the information of the desired group from the system.
2. Seeker can get the information of the particular plasma available in the system.
3. Here, donor can also check his blood group medical status whether it is healthy or unhealthy.
3. The probability of error should be minimal.
4. As also it is a web-based application, its index page encourages the donor to donate the blood.

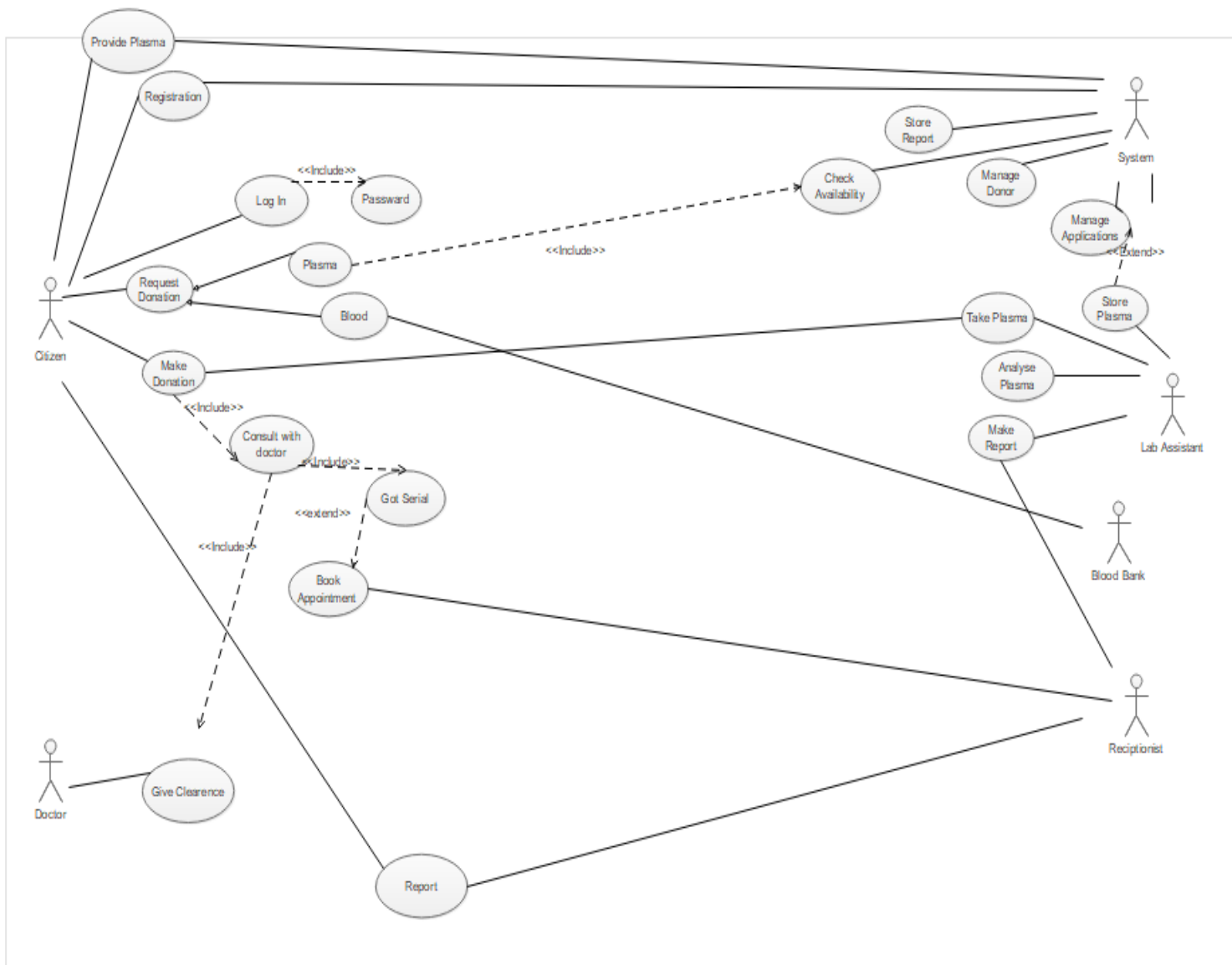
Lastly, we can say that this system will reduce the complexities for a citizen of getting the appointment of doctors and also reduce the problem of carrying different types of files and reports.

4. Overall Use Case of the Proposed Project:

Actors: Citizen, System, Lab Assistant, Blood bank, Receptionist, Doctor

Use Cases: Provide plasma, registration, request donation, make donation, give clearance, report, take plasma, store plasma , check availability, manage donor, manage application, analyze plasma etc.

USE CASE Diagram:



analysis. कि बाउंड बॉक्स system ५?

component: इस software को छोटे छोटे भागों
में बांटा जाता है। Hospital में Accounts, Lab, Pathology.
component independent २३५, interface २४६,
जैसे: २३५ component एक-दूसरे से direct
contact करते हैं। interface दिया जाता है।

UML component diagram shows components,
provided and required interfaces, ports, and
relationships between them.

Deployment diagrams are used **to visualize the hardware processors/ nodes/ devices of a system**, the links of communication between them and the placement of software files on that hardware.

- Cohesive parameter Common.
- Coupling \rightarrow 2 or class or more connected

* Inheritance.

Accountant, Blood Bank
Citizen.

* Class — operation, attribute.

* Antifacts

1) Citizen \rightarrow Register to system, log in,

Doctor or Permission form

Component

[Account, Admission, Library. — @ log in, payment]

User login. — Class

class Element \rightarrow attribute, function, method