

Plasma management system specifications:

Hospitals can now find plasma for critically ill COVID-19 patient who needs immediate plasma transfusion by using the Plasma Management System. This system will have the following specifications:

1. Every **Hospital** will have a username (must be the hospital's name and will be unique) and a password for the respective account. A staff can access the plasma management system with that account only.
2. Hospital staffs either the **doctors** or **receptionists** will have access to the system. No other staff can access the plasma management system.
3. **Donors** who will be donating plasma are identified by a donor_id (unique) and have multiple information including name, blood group, gender, health complication (if any), contact details (phone number, email address and a permanent address). A donor can donate to multiple patients if he/she wants in the listed hospital.
4. On the other hand, a hospital can have many donors but a donor can be listed with only in one hospital.
5. A **patient** receiving plasma can have at most 1 donor (i.e., the patient and donor's blood group must match).
6. A donor can donate to multiple patients if he/she wants.
7. Each patient will have information about the patient's blood group and name. A patient id will be used to uniquely identify the patient.
8. There must be at least one donor for each of eight blood group (if possible). The donor must be someone who recovered from Covid-19 recently