**Organ donation management system:**

**Problem Definition:**

The purpose of this study is to develop an Organ donation management information system to assist in the management of organ distribution to the hospital of a particular area as per the demands of the organs.

**The applications serve following functionalities:**

* The person who is willing to donate his/her organs has to register with” United network of organ sharing (UNOS)”.
* The person is supposed to go under medical tests conducted at labs of UNOS and all their medical reports are being collected.
* All the records of the donors are sent to UNOS. Hence, it consists of the list of the donors and their reports.
* The person who has organ failure acts as receivers are supposed to register themselves at “Organ procurement and transplant center (OPTC)” via hospitals.
* The hospital runs the tests on the receivers and the reports of them are sent to OPTC.
* The OPTC will send the list of the receivers with their requirements to the UNOS.
* When the person dies the hospital will check whether the person is a donor. If he/she is the donor hospital will send the donor body to UNOS. And notifies the death registry about the death.
* Once the UNOS receives the donor’s body it will find the best fit receiver. UNOS will inform OPTC about it.
* The OPTC will inform the receiver and the hospital about the match and suggest for the transplant surgery.

**Entities**:

1. United network of organ sharing (UNOS)
2. Organ procurement and transplant center (OPTC)
3. Death registry.
4. Hospital.
5. Receiver.
6. Donor.
7. Laboratory.

**Architecture**:

