DBS Mini Project Synopsis

Team members –

* Suchit Gupta
* Tejas Sai
* Amulya

Topic – Allocation of Liver Transplantation Simulation

Background – The patients requiring a liver transplantation are sorted based on variety of factors which include meld score, alcoholism, age, etc. The liver harvested from the donors go through this list of patients to find the appropriate match. Sometimes livers need to be transported to other hospitals due to no match available in the hospital in which it was acquired.

Objective – Our project will demonstrate how livers and patients are selected for liver transplantation based on real systems. It will be a simulation on a smaller scale. We will show how liver are transported to nearest hospital for transplantation with a matched patient and how patients are ranked among each other based on some medical factors.

Entity expected –

* Patient – This will contain medical information and residing hospital of each patient which will be needed to sort the patients for transplantation.
* Hospitals – This will include the map coordinates of the hospital and other factors subject to project flow that will determine liver transportation.
* Liver – This will contain medical information about the livers. It may also include liver life, weight, size, and other information for doctors.

Views expected –

* List of patients – For each hospital, the patients residing will be ranked according to meld score, age, alcoholism and etc.

*According to project flow we can include availability of doctors and beds in the hospitals.*