**Higher National Diploma in Information Technology**

**Object Oriented Programming (Java)**

**Year 1 Semester 2 – 2019**

**Project Specification**

# Objectives

This assignment requires students to practice object-oriented concepts and GUI using Java programming language.

# The Problem

NG hospital has a blood donation bank that supplies blood to the patients in ICU. currently the all records and process in the blood bank are done manually. With the increase of blood donors and complexity of the blood donation process the management of the NG hospital has decided to hire a software development team from the SLIIT Academy. Your task is to identify the requirement of the blood donation process and develop a system to automate the process. The following functionality should be included in the System.

1. Blood donor’s information management
2. Patient information management who requires blood
3. Assignment of doctors and nurses for the blood donation process.
4. Monthly reports on blood supply and demand.
5. Send notifications to donors if there is a defect in the blood sample.
6. Unit testing implementation for validity of the System.

The Application should show examples of the Use of Object-Oriented Concepts such as

* Classes and Object Creation with correct constructors, Methods etc
* OO Concepts – Encapsualation, Abstraction, Polymorphism, Inheritance
* Java Junit Testing.
* Use of Good GUI Design
* A database with data values
* Inovative concepts

# What to submit –Submit a soft copy of whole program (source code). work allocation plan for members.

Deadlines-work allocation plan 12th of September 2019

Final Project -After the final Examination

Where to submit - You should submit your softcopy the evaluation time. The schedule will be uploaded to later.

Marking scheme – check for the attachment in this document.

**Group Registration**

Please Register Your Group using the following link Access Link:[click here](about:blank)