HIGHER TECHNICAL INSTITUTE

COURSE IN COMPUTER STUDIES

DIPLOMA PROJECT

(USER MANUAL)

A (CHEMICAL) LABORATORY INFORMATION
MANAGEMENT SYSTEM (LIMS)

CS/386

BY

KYRIACOU SAVVAS

JUNE 2008

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Project number: CS/386

Project report submitted by: Kyriacou Savvas

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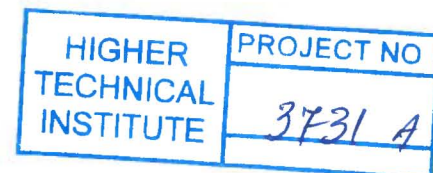COMPUTER STUDIES

Project Supervisor: Mr.Andreas Hadjiprokopis

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INTRODUCTION

The name of the project is "A (chemical) Laboratory Information Management System (LIMS)". This project is a computer software that will be used in (chemical) laboratory for the management of samples, laboratory users, instruments, standards and other laboratory functions such as invoicing and work flow automation.

A typical LIMS lifecycle is as follow:

A Customer brings a sample to the lab and asks for a chemical analysis. He is presented with an online form and selects the types of analysis required. The LIMS issues a sample ID and put it in the pipeline. Then a suitably trained Analyst picks that sample and makes the requested analysis and fills an online form with the results and additional information. The LIMS keeps a record of all users and all samples. To use LIMS you must be registered to the system and security protocols were constructed to assure the safety of all information associated with the users and samples.

For the completion of the system, Java Development Tool 1.5.0_06 for implementing the code was installed. Thus, Apache Software for building the server of the system was installed. Furthermore, MySQL Query Browser 1.1 and MySQL Server 5.0 for building the database were installed.