

Computer System for Medical Analysis and Diagnosis

This project is submitted in partial
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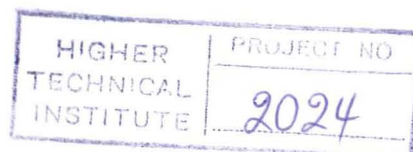
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Project Supervisor: Miss Eliza Angelidou
Bsc MSc

External Assesor : Mr. K. Pattichis

Design by
KORELLI THEODORA

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INTRODUCTION

The computerized system for Medical Analysis / Diagnosis is involved with the Biochemical and Immunology Labs of the Cyprus Institute of Neurology and Genetics (CING). These departments have only been recently established. A brief description of each of these departments follows.

The general purpose of the Biochemical Laboratory is to perform two types of tests:

- Biochemical and
- Drug Monitoring.

Biochemical tests are tests that are performed in order to determine if the patients suffer from any Neuromuscular or metabolic disorders. For this purpose, blood, urine, CSF and muscle samples are taken from the patient. The tests requested by the referring doctor (on biochemical test form) are performed. The results are compared with the normal values in order to help in the diagnosis of a disease. Then a form is filled with the results, which is send to the referring doctor. Copies of the forms are kept within the department as well.

Drug Monitoring performs tests on patients that are treated with a certain drug. Tests are performed for antiepileptic and general purpose drugs. By general purpose drugs we refer to drugs taken by cancer patients and/or patients that have

undergone a transplant operation. These tests are performed on a regular basis, for the following two reasons: (i) to check the drug level in the blood in order to determine the right dose for the specific patient and (ii) to determine whether the patient actually takes the drug.

The general purpose of the Immunology Laboratory is to determine whether the patient suffers from neurological, rheumatic, autoimmune, immunodeficient, allergy, leukaemia diseases and others. Mainly tests are performed on blood and CSF samples. The test results are compared, where available, with normal ranges to determine whether a patient suffers from a disease. This department deals mainly with children and adults.

The project's purpose is to identify the problems and needs of the existing manual systems in the two laboratories and develop computer aided records. This will be done by simply replacing the manual functions with computerized operations.

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