TIME-TABLING SCHEDULING FOR EDUCATIONAL INSTITUTION

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TABLE of CONTENTS

Abstract

This project presents the structured and computerised steps in the making of timetable for educational institutions. The system provides facilities to the timetable maker with a user-friendly interface and flexible end-user requirement. Each step in the making of the timetable is carefully studied and clearly defined to produce the well-structured steps. The steps involved were then computerised to enhance the process of the making of the timetable. The system was developed using Visual Basic and all the related data were save in the Access Database. The data validation concept and the database design and query strategy were adopted smartly in ensuring the successfulness of this project. The system is found to be very efficient since it has manages to reduce the time taken to produce a well-looks timetable.

CHAPTER I

INTRODUCTION

1.1 Introduction

Timetable is very important in Higher Institution. Every year a new timetable must be produced to take account of staff, student and course changes. These processes require a necessarily large amount of work. Computer timetable and administration systems do exist to ease this burden but each timetable problem is as individual as the institution from which it originates. A generalized system must take into account as many different requirements as possible.

Class scheduling is tedious and troublesome, yet it is an important task in schools, especially in universities. Since many factors and situation have to be taken into consideration, this work may be very time-consuming and often leads to inadequate solutions. Timetable, which is known as scheduling is a process that efficiently allocates a limited set of resources to perform a collection of activities or tasks, which satisfy all constraints.

Basically there are two kinds of timetable problems. Firstly, how to meet all the constraints involved such as lecturer , student and room. Secondly, limited number of classroom and increases number of student in every semester. This will make it difficult for Coordinator to predict total number of students and divide the student into group.

Many different techniques have and are being applied to solve the scheduling problem such as Graph Colouring Heuristics, Hybrid Genetic Algorithm and neurocomputing. However using such techniques require a lot of time to study and determine the parameters involve and the relationship between the parameters. The situation in the faculty of electrical engineering such as uncertainty in number of student taking each subject plus the repeaters of each subject, the distance between classroom, lecturers