

# Automatic Answer Checker

S.Lakshmipriya

Assistant Professor

Department of Electronics and Communication Engineering  
Bannari Amman Institute of Technology, Sathyamangalam-638401, India

**Abstract**— An automatic answer checker application that checks and marks answers similar to a human being. This software application is built to check subjective answers in an examination and allocate marks to the user after verifying the answer. The system requires you to store the original answer for the system. This facility is provided to the admin. The admin may insert questions and respective subjective answers in the system. These answers are stored as database files. When a user takes the test which is provided with questions and area to mark answers. Once the user enters the answers the system then compares this answer to original answer written in database and allocates marks accordingly. The system allocate marks accordingly as good as a human being.

**Keywords:** Automatic Answer Checker

## I. INTRODUCTION

Today Automatic Answer Checking is considered a fast developing examination method because of its accuracy and speed. Almost all organizations today are managing their exams by this process since it reduces student's time in examinations. As a result of this the result is calculated in less time. It also helps reducing the need for paper. According to today's requirement Automatic Answer Checker is significantly important to the educational institution to prepare the exams, saving the time and effort that is required to check the exam papers and to prepare the results reports. It helps the educational institutions to monitor their students and keep eyes on their progress. The best use of this system in training centres because it helps in managing the exams and get the results in easy and an efficient manner. Until today the preparing for exams and preparing the results was performed manually, this required more time to complete. The examination can be conducted in any number of systems in the same lab, so that students of the same batch can do the examinations at the same time. The questions will be issued to the students as per the order of the computer i.e. questions will be randomly displayed to the students.

## II. SPECIFICATIONS

### A. Hardware Specification

Below are the specifications of the hardware expected to be required for this project.

Processor: Pentium IV 1.7 GHz.

Hard Disk Capacity: 80 GB.

RAM: 1 GB.

Monitor : 15inchColor.

Keyboard: 102 keys.

### B. Software Specification

Below are the software requirements expected for this project.

Front-End: Visual Studio 2012.

Coding Language: VB.Net 2012.

Back-End: MS-access.

Operating System: Windows 7,8,10.

### C. Operating System - Windows 10

Windows 10 is the successor to both Windows 2000 Professional and Windows XP, and is the first consumer-oriented operating system produced by Microsoft to be built on the Windows NT kernel and architecture. According to an estimate in that month by an IDC analyst It was succeeded by Windows Vista. Direct OEM and retail sales of Windows 10 ceased on June 30, 2012.

### D. VB.NET

Visual Basic .NET (VB.NET) is an object- oriented computer programming language that can be viewed as an evolution of the classic Visual Basic (VB), implemented on the .NET Framework. Microsoft currently supplies two main editions of IDEs for developing in Visual Basic: Microsoft Visual Studio 2012, which is commercial software and Visual Basic Express Edition 2012, which is free of charge. The command-line compiler, VBC.EXE, is installed as part of the freeware .NET Framework SDK.

## III. DESIGN AND DEVELOPMENT

The design of the system is essentially a blue print or plan for solution of the system to be developed. A part of the system or subsystem of a whole of the system can itself be considered a system with its own complements.

### A. File Design

The file design is the last phase that indicates the final system and process of the final system. In the design phase of 'AUTOMATIC ANSWER CHECKER', the database tables, input screen design and output design are designed.

- The database tables where designed by using all the necessary fields in compact manner.
- All the input screens in this system are user- friendly and understandable format. Also the sizes of all the screens are standardized.
- Icons designed in this system are brief, compact and self-explanatory. The icons are sharp and novice user can invoke the system.

### B. Input Design

Input Design is one of the most expensive phases of the operation of computerized system and is often the major problem of a system. A large number of problems with a system can usually be tracked backs to fault input design and method. The input data is the life blood of a system and have to be analyzed and designed with utmost case and consideration. The decisions made during the input design are

- To provide cost effective method of input.

- To achieve the highest possible level of accuracy.
- To ensure that the input is understood by the user.

### C. Output Design

Output design generally refers to the results and information that are integrated by the system for many end users. Output is the main reason for developing the system and the basis on which they evaluate the usefulness of the application. The objective of a system finds its shape in terms of output; Output of a system can face various forms. The most common are the reports, screen displays, printed forms, graphical. The basic requirements of output are that it should be accurate, timely and of content, medium and layout for its intended purpose.

### D. Database Design

The Database Management System (DBMS) consists of a collection of interrelated data and a set of programs to access that data. The collection of data usually referred to as a database. The primary key goal of DBMS is to provide an environment that is both convenient and efficient to use in retrieving and storing data information. The term database design can be used to describe many different parts of the design of an overall database system. Principally, and most correctly, it can be thought of as the logical design of the base data structures used to store the data. In the relational model these are the tables and views.

The project titled "AUTOMATIC ANSWER CHECKER" data has been designed using MS-access, which is used to keep all the data in a data management system proper care has been taken in designing the database to achieve the objectives listed below

- Data integrity.
- Data consistency.
- Data independence.

### E. Description of Modules

The Automatic Answer Checker is designed from a user point of view. The user friendly design helps the users in accomplishing their task with ease. Attempts have been made to keep the design simple and understandable. The screens were designed in VB and the code was written in .net.

Modules are

- Admin login
- Student login
- Admin page
- Student Page
- Result

## IV. IMPLEMENTATION AND RESULT

### A. Backend Code

The backend code is written in VB.net language. This cannot be seen by the user in frontend. The backend code is used to create functionality. The .net can be used as both frontend and backend language. For every single frontend view a different code is to be built. This code is linked to frontend. The codes are written in MS-access which can be linked to database. There are some cases where the VB.net syntax and structures actually make this marginally easier

and more readable. The backend codes are built for the following modules.

#### 1) Login

This login form is made for security purposes. So an authenticated user only has access to the project. There are two types of persons who can enter in the project.

- Admin
- Student

### B. Front End View

#### 1) Admin Login

Fig. 4.1: Admin Login

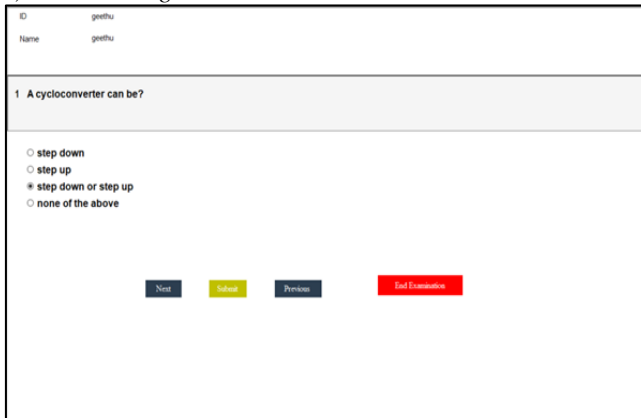
#### 2) Student Login

Fig. 4.2: Student Login

#### 3) Admin Page

Fig. 4.3: Admin Page

#### 4) Student Page

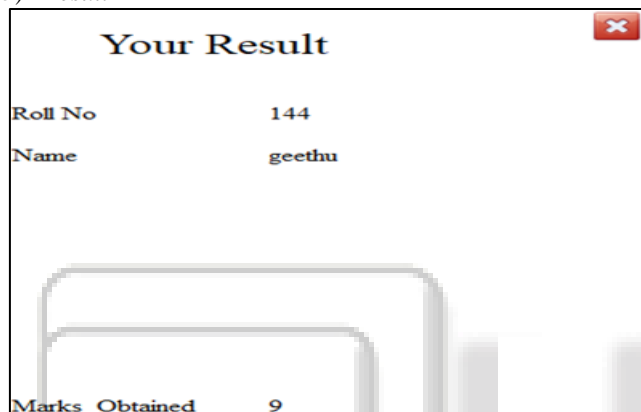


The screenshot shows a student interface with the following elements:

- ID: geethu
- Name: geethu
- Question: 1 A cycloconverter can be?
- Options:
  - step down
  - step up
  - step down or step up
  - none of the above
- Navigation buttons: Next (dark blue), Submit (yellow), Previous (dark blue), End Examination (red).

Fig. 4.4: Student Page

#### 5) Result



The screenshot shows a 'Your Result' window with the following details:

- Roll No: 144
- Name: geethu
- Marks Obtained: 9

Fig. 4.5: Result

#### V. CONCLUSION

This software has demands in private and public area. This software provides a great help in managing the data in a well-mannered order. This project is designed specially to maintain the data in a sequential manner and to save the time and efforts of database administrator. The project is structured according to today's need. Due to time constraint it is possible that some points might remain uncovered by us. In future we will update our software to give valuable information left at present.

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