A Report

On

**Display Examination Result**

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Abstract:

Existing System:

Existing platform basically works on web based system with designing & programming done in web languages such as HTML, CSS, JS and PHP. This facilitates people to access the result from all over the world.

This system gives result once the person log on to the website and enter his or her roll no and the result is generated.

**Disadvantages in existing system:**

* No security to an individual's result. An unknown person having a desired roll no can see students result.
* Database is maintained which is difficult for a layman to manage details.
* Always need a web programmer to add or modify data.
* Fails to load fast if huge traffic is on the website. This is due to lack of sufficient web hosting bandwidth.

Proposed System:

This system works on desktop based platform where designing & programming is done using software and languages such as MS Excel, JAVA, JSP, etc.

This system generated results only to the person giving proper identity verification.

**Features As An Advantage:**

* Our proposed system gives high security to an individual's result. A person must give correct roll no, his/her full name, father's full name, and date of birth in order to get his/her result. Hence avoid unauthorised access to one's personal details.
* No database via sql or pl/sql need to be maintained.
* Students marks will be stored in an easily understandable Microsoft Excel sheet, so that even a beginner can add, modify and update details easily and quickly without any training.

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Introduction

The aim of Display Examination Result is to automate student academic performance, by maintaining their sessional marks in detail, security from unauthorized access, functionalities to admin such as insert, delete, update, etc and most important is to generate results of specific student when required. This system will help in displaying student examination result according to their classes and sections. This project mainly deals with JAVA language and Microsoft Excel for painless understanding and maintaining results.

Connection to excel data base is made using Excel Apache POI called Java excel api that have separate commands to call upon its usage.

This project facilitates students to check their result online

Literature Survey

Ancient:

In the distance past, ancient China first started their exams and result system in 605 A.D. The declaration of examination results used to be a traumatic experience - both for the students and for the teachers. The teachers used to spend sleepless nights in manually compiling marks of each paper for every single student, aggregating them and then deciding if one has passed or not.

In ancient times exams where taken by rich people who could afford the education at schools. In China many dynasties had similar pattern of examinations where students had to write the exam for 3 days and 2 nights. Each student taking the exam had to arrive at the examination compound with only a few amenities: a water bottle, a chamber pot, bedding, food, an ink stone, ink and brushes. Guards would verify the student's identity and search them for hidden written materials. The exam was conducted in a tiny room with a rough and ready bed, desk and bench.

There were no interruptions in those three days, nor were candidates allowed to have any communication. After writing exam their papers were then copied by skilled copyists so that the student's handwriting wasn't recognized by the paper correction authority. However, when results were declared which would take about 2 to 3 months from the date of examination, they were announced publicly and the students would then know if they had passed or not thereby leading to public appreciation or even humiliation.

 (In Ancient Times)

Medieval:

From 1920s printing or publishing of examination results by way of newspapers was started and carried till 1970s. This aid candidates to avoid going to the college for checking the results which was a disturbing act in ancient times. In this time, only the travelling problem was solved, but the trouble of knowing secured marks in each paper and total aggregate marks was not cracked as the results published in newspapers were also by way of displaying roll numbers indicating only the passed or successful candidates. Later, in 1970s an update was made by way of posting a sheet on college or university notice board of typewritten roll numbers and secured marks indicating both succeeded and un-succeeded candidates. Hence giving information about the marks secured in each paper and even the aggregate marks. The formal mark sheet (commonly known as MEMO) would be available only after a lapse of several weeks - sometimes, after months.



(In Medieval Times)

Present**:**

In 2004, results were made available on the Internet for the first time, which was commonly known as online examination results has drastically made a revolution into virtual world. Thus allowing students who for instance, had moved school or left school to get their results without having to return to their old school for checking the results. In the present system, we have made an endeavour to present the result digitally with detailed marks for each of the subjects that the student secured, his position/ranking and all the other relevant data. This result would be available to the students at the comfort of his home soon after the formal declaration of results is made. The simplification and the convenience would be very helpful to all those who are directly or indirectly involved in the process of examination.



(In Present Times)

Future:

On 5th March, 2013 the Higher Secondary Education Board (HSEB) has decided to implement modern technology from this year to reform the examination system. The Board is using advanced technology for the first time in Nepal to reform the examination system and to change the examination security strategy and technology drastically.

The Board will use the technology as a pilot project in one million examinees of Class 11 and 12 from April this year by installing machine and software at a cost of Rs. 2 million to 2. 5 million. The Board will use the bar code in answer sheets and Optical Mark Reader (OMR) machine, which can bring out results quickly, said Council Member Secretary Bhimlal Gurung. This will make the examination systematic, safe and less labour consuming, precise and maintain secrecy of results from employees, he claimed.

This will help in keeping secrecy as it can be done by one person in less time after its implementation as the previous system took much manpower and long time, said Gurung. Examination Controller of the Board, Durga Prasad Aryal said one cannot identify from the new technology whose answer sheet it is and there will be impartiality. In this system, fake students cannot give examination and there will be no fake mark sheet and fake certificate.

Design

Coding and Testing

Our project uses jxl.jar Apache POI file to connect Microsoft excel with java GUI (Graphic User Interface) where the excel file also acts as a database to store student sessional marks details. The command used to connect jxl.jar with our application kit and simultaneously compile it is:

**javac –cp jxl.jar;. Frameresult.java**

The files imported are:

* IO.File
* IO.IOException
* Util.Arrays
* Cell
* CellType
* Sheet
* Workbook
* javax.Swing And
* Read.biff.Biffexception

We will be using the above mentioned files in the consecutive code for easy access of functions.

The coding begins with frame creation.

FRAME CREATION

The frame is created using javax.Swing.JFrame by passing the class “Frameresult” along with the initComponents().

The Frame was created using NetBeans IDE because NetBeans IDE creates the code behind when we drag and drop the following components:

* Label
* TextField
* Button
* Background color
* Font selection
* Images

The respective code for Labels, Textfields, Buttons, Background, Font selection and Images was simultaneously generated by NetBeans IDE. So, after the frame was created in NetBeans, the entire code was taken and placed in Notepad with the rest of the code.

DATA EXTRACTION AFTER PRESSING “SUBMIT” BUTTON

The code for this was written manually. This begins with the inclusion of a “Button1ActionPerformed” class and also using “ActionEvent”.

**CASE(1) IF THE FIELDS ARE EMPTY**

The fields 1,2 and 3 after being filled by the user are then verified using jTextField(n).getText().isEmpty() functions where n is the number of the textfield being entered. If any of the 3 fields are empty a pop up message is displayed on the screen with the message “Fields can’t be empty”.

**CASE(2) IF THE FIELDS ARE NOT EMPTY**

If the fields are NOT empty then, an input file by the name “Student data” of Microsoft Excel format is fetched. A variable “studmark” of the type private int is taken and initialized to -1.

A function checkpara() is called upon. When this function checkpara() is called, the text fields which were entered in the beginning are now checked with row values and column names inside the Database i.e. the Student data excel file. If the values are checked and the values turn out to be correct and match with the Student Data then the value of the variable Studmark is changed to the value of the current row in which the data was matched.

Then the modified Studmark variable is used to display sessional marks of the specific student.

Below given is the total code of approximate 15 pages

import java.io.File;

import java.io.IOException;

import java.util.Arrays;

import jxl.Cell;

import jxl.CellType;

import jxl.Sheet;

import jxl.Workbook;

import jxl.read.biff.BiffException;

public class Frameresult extends javax.swing.JFrame {

public Frameresult() {

initComponents();

}

@SuppressWarnings("unchecked")

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jTextField2 = new javax.swing.JTextField();

jTextField3 = new javax.swing.JTextField();

jLabel3 = new javax.swing.JLabel();

jLabel4 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jLabel6 = new javax.swing.JLabel();

jTextField4 = new javax.swing.JTextField();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

setTitle("Mini Project On Display Examination Result");

setBackground(new java.awt.Color(255, 51, 0));

setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT\_CURSOR));

jLabel1.setBackground(new java.awt.Color(153, 255, 0));

jLabel1.setFont(new java.awt.Font("Monotype Corsiva", 0, 24)); // NOI18N

jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

jLabel1.setIcon(new javax.swing.ImageIcon("images/dcet.jpg")); // NOI18N

jLabel2.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N

jLabel2.setText("Roll No");

jLabel3.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N

jLabel3.setText("Full Name");

jLabel4.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N

jLabel4.setText("Father's Name");

jButton1.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N

jButton1.setText("Submit");

jButton1.addActionListener(new java.awt.event.ActionListener() {

public void actionPerformed(java.awt.event.ActionEvent evt) {

jButton1ActionPerformed(evt);

}

});

jLabel6.setFont(new java.awt.Font("Times New Roman", 0, 19)); // NOI18N

jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);

jLabel6.setText("Please fill up the following fields to get your results with marks");

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(36, 36, 36)

.addComponent(jLabel6, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addGap(130, 130, 130)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 170, Short.MAX\_VALUE)

.addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED\_SIZE, 182, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel3, javax.swing.GroupLayout.PREFERRED\_SIZE, 95, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 141, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addComponent(jTextField3, javax.swing.GroupLayout.DEFAULT\_SIZE, 182, Short.MAX\_VALUE)

.addComponent(jTextField4))))

.addGap(0, 241, Short.MAX\_VALUE)))

.addContainerGap())

.addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addGroup(layout.createSequentialGroup()

.addGap(308, 308, 308)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 91, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 96, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel6, javax.swing.GroupLayout.PREFERRED\_SIZE, 32, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jTextField2))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel3, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jTextField3))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

.addComponent(jLabel4, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jTextField4, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(18, 18, 18)

.addComponent(jButton1, javax.swing.GroupLayout.PREFERRED\_SIZE, 37, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(288, 288, 288))

);

pack();

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

if(jTextField2.getText().isEmpty()||jTextField3.getText().isEmpty()||jTextField4.getText().isEmpty())

{

javax.swing.JOptionPane.showMessageDialog(this,"Fields Can't be empty");

}

else

{

inputFile ="Student-data.xls";

studmark = -1;

checkpara();

if(studmark!=-1)

{

File inputWorkbook = new File(inputFile);

Workbook w;

try {

w = Workbook.getWorkbook(inputWorkbook);

Sheet sheet = w.getSheet(0);

int i=studmark;

int k=0;

String[] marks = new String[sheet.getColumns()-4];

for (int j = 4; j < sheet.getColumns(); j++){

Cell cell = sheet.getCell(j,i); //Printing Cells

Cell head = sheet.getCell(j,k); //Printing Headers

marks[j-4] = head.getContents()+" : "+cell.getContents();

marks[j-4] = marks[j-4].toUpperCase();

}

javax.swing.JOptionPane.showMessageDialog(this," "+Arrays.toString(marks),"Printing Results With Marks",javax.swing.JOptionPane.PLAIN\_MESSAGE);

}

catch(BiffException e) {

e.printStackTrace();

}

catch(IOException e) {

javax.swing.JOptionPane.showMessageDialog(this,"Database Does not Exist");

}

}

else

{

javax.swing.JOptionPane.showMessageDialog(this,"Data Not Found");

}

}

}

public void checkpara() {

File inputWorkbook = new File(inputFile);

Workbook w;

try {

w = Workbook.getWorkbook(inputWorkbook);

Sheet sheet = w.getSheet(0);

for (int i = 0; i < sheet.getRows(); i++) {

for (int j = 0; j < 4; j++){

Cell cell = sheet.getCell(j,i);

if(cell.getContents().equals(jTextField2.getText()))

{

j++;

cell = sheet.getCell(j,i);

fullname = jTextField3.getText();

fullname = fullname.toUpperCase();

if(cell.getContents().equals(fullname))

{

j++;

cell = sheet.getCell(j,i);

father = jTextField4.getText();

father = father.toUpperCase();

if(cell.getContents().equals(father))

{

studmark = i;

return;

}

}

}

}

}

}

catch(BiffException e) {

e.printStackTrace();

}

catch(IOException e) {

javax.swing.JOptionPane.showMessageDialog(this,"Database Does not Exist");

}

}

public static void main(String args[]) {

try {

for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {

if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());

break;

}

}

} catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(Frameresult.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(Frameresult.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(Frameresult.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(Frameresult.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

}

java.awt.EventQueue.invokeLater(new Runnable() {

public void run() {

new Frameresult().setVisible(true);

}

});

}

// External Variable Declaration

private javax.swing.JButton jButton1;

private javax.swing.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JLabel jLabel3;

private javax.swing.JLabel jLabel4;

private javax.swing.JLabel jLabel6;

private javax.swing.JTextField jTextField2;

private javax.swing.JTextField jTextField3;

private javax.swing.JTextField jTextField4;

private String inputFile;

private int studmark;

private String fullname;

private String father;

// End of variables declaration

}

Deployment

The purpose of this document is to identify the key factors that influence the performance, reliability and functionality of the Display Result application. This deployment guideline will help to ensure the highest possible level of reliability, sustainability, performance, predictability and end-user usability.

**System Requirements:**

Make sure that your system environment meets the following requirements:

Conclusion & References

Usually programs designed for displaying examination results contains backend as a database (SQL or MySQL) due to which only technical person can handle it for maintenance while our designed program contains backend as a MS Excel Work Sheet to store data which allows anybody to add and modify data and also a person cannot see the result of another without proper verification of identification.

Details entering in the fields such as Roll No, Full Name, Father's Name will automatically converts into upper case and then send to excel for verification.

Sources:

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