**A Miniproject**

Report

**On**

**“Online Test”**

**Submitted By**

**Abhale Om Jalinder (1)**

**Sayyad Jishan Shakil(54)**

**Sonawane Geeta Dattatray(141)**

Computer Engineering

**Guided By**

**Prof. Bhalerao Sir**



**(Savitribai Phule Pune University,Pune)**

**In the academic year 2021-22**

**Department of Computer Engineering**

**Sanjivani College Of Engineering**

**Kopargaon – 423 603.**

**Sanjivani College of Engineeing,Kopargaon**

**CERTIFICATE**

**This is certify that**

**Abhale Om Jalinder (1)**

**Sayyad Jishan Shakil(54)**

**Sonawane Geeta Dattatray(141)**

(S.E Computer)

Has Successfully completed her miniproject report on

**“Online Test”**

**Towards the partial fulfilment**

Of bachelor’s degree in Computer

Engineering

During the academic year 2021-22

**Prof.Bhalerao Sir Dr.D.B.Kshirsagar**

**[Guide] [HOD Comp Dept]**

**Dr.A.G.Thakur**

**[Director]**

**Introduction**

Online Quiz System is a web-based application in Java. The main aim of this project is to create a discussion platform consisting of quiz questions on different topics, fields and subjects. Online Quiz system facilitates a user-friendly environment of Bluebook implementation, and the project overall manual effort. Those who are looking forward to taking mock tests may find this project very useful for practicing mock quiz tests.

This Java Online Test simulates a real online certification exams. You will be presented Multiple Choice Questions (MCQs) based on Core Java Concepts, where you will be given four options. You will select the best suitable answer for the question and then proceed to the next question without wasting given time. You will get your online test score after finishing the complete test.

The main purpose of this project is to the development of an online exam system for the ease of students so that they can attempt the exam by sitting at home and they do not need to travel to distant places for giving various exams. This application will also contribute towards e-learning.

**Existing System**

The existing Online Exam Suite system requires the preparation of test halls and the hiring of multiple invigilators for the test. After the test lots of man-hours are spent grading these answer sheets and the results are delayed as a result.

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

**Proposed System**

In the proposed Online Exam Suite system, the institution conducting the test only needs to prepare the test and provide the facility. The invigilation, grading and result announcement will be done promptly at the end of the test. It is important to note that this system is only designed for tests with multiple choice questions

Proposed system is an Exam Suite. According to designate we can create an account, writing exam using that account. Our proposed system has the following advantages.

* User friendly Interface
* Fast access to database
* Less error
* Storage Capacity

**ABOUT THE LANGUAGE**

**Java** is a programming language developed by Sun Microsystems and is based on the concepts of C and C++. The syntax for Java is similar to C.

**HISTORY OF JAVA**

In November 1995, Sun Microsystems introduced a new programming language to the world- Java. Until then the word “**Java**” could only mean an island in Indonesia or a particular blend of coffee.

Though its initial development began as early as 1991, it took some time for the final working version to reach the market. The basic objective behind developing the language was to create software that could be embedded in consumer electronic devices. Efforts were taken to produce a portable, platform in dependable language, and the result of this led to the birth of a new language. James Gosling and a team of other programmers were the pioneers behind this development. It was initially called “**Oak**” but was later renamed to “**Java”**. Slowly but gradually it was found that Internet users had similar problems of portability and platform independence and were looking for software that could address these issues. Java language was found to be small, secure and portable. Thus Java, which was initially developed to cater

To small-scale problems, was found capable of addressing large-scale problems across the Internet.

**FEATURES OF JAVA**

The Java Language is

* Simple
* Object Oriented
* Platform-Independent
* Robust
* Secure
* Distributed
* Multithreaded
  + **Simple**

The designers of Java were trying to develop a language that a programmer could learn quickly. They also wanted the language to be familiar to most programmers, for ease of migration. Hence the Java designers removed a number of complex features that existed in C and C++. Java does not have features such as pointer manipulation, operator overloading etc. Java does not use the ‘go to’ statement, or header filed. Constructs like ‘struct’ and ‘union’ have also been removed from Java.

* **Platform-Independent**

Platform-independence refers to the ability of the program to migrate from one computer to another without any

Difficulty. Java is platform independent at the source level as well as at the binary level.

Java is strongly typed language. This means that you need to declare the type for any variable. The java data types are consistent across all the development platforms. Java has its own foundation class libraries. This allows the programmer to write code that can be mobbed from one machine to another, with out having to rewrite it.

In short, platform independence at the source level allows the user to move the source code from one system to another, compile the code, and run it clearly on the system.

Platform independence at the binary level allows the user to run the compiled binary file on multiple platforms without recompiling the code.

* **Robust**

Java is strictly a typed language. Hence it requires explicit method declaration. Java checks your code at the time of compilation and also at the time of interpretation. Thus it eliminates certain types of programming errors.

Java does not have pointers and pointer arithmetic. It checks all access to arrays and strings at the runtime. It also checks the casts of objects from one type to another at runtime.

In traditional programming environments, the programmer had to manually allocate memory. By the end of the program, the programmer had to explicitly free this memory. Problems arose when the programmer forgot to de allocate the memory. In Java the programmer doesn’t need to bother about memory de allocation. It’s done automatically, as Java provides

Garbage collections for un used objects. Java’s exception handling feature simplifies the task of error handling and recovery.

* **Secure**:

Viruses are a great cause of worry in the world of computers. Prior to the advent of Java, programmers had to first scan files, before downloading and executing them. Often this precaution was no guarantee against viruses. Also there were many malicious programs that programmers need to look out for.

These programs could search the contents of your local file system and retrieve sensitive data.

Java provides a controlled environment for the execution of the program. It never assumes that the code is safe for execution. And since java is more than a programming language, it provides several layers of security control.

In the first layer, the data and methods are encapsulated in the class. They can be accessed only through the interface that the class provides. Java does not allow any pointer arithmetic. Hence it does not allow direct access to the memory. It disallows array overflow, prevents reading memory out of bounds, and provides garbage collection. All these features help minimize safety and portability problems.

In the second layer the compiler ensures that the code is safe and follows the protocols set by Java before compiling the code.

The third layer is safety provided by the Interpreter. The verifier thoroughly screens the byte codes to ensure they obey the rules before executing them.

The fourth layer takes care of loading the classes. The class loader ensures that the class doesn’t violate the access restrictions, before loading it to the system.

* **Distributed**

Java can be used to develop applications that are portable across multiple platforms and operating systems. Java is designed to support network applications.

* **Multithreaded**

Java programs use a process called ‘multithreading’ to perform many tasks simultaneously. Java provides the master solution for synchronizing multiple processes. The built in support for threads enables interactive applications on the internet to run simultaneously

**System Design**

**OUTPUT FORM DESIGN**

Computer output is the most important and direct source of information to the user. Efficient, intelligible output design should improve the system relationship with the user and help in decision-making. The outputs provide in the system are the softcopy report available for printing. Printouts should be designed around the output requirement of the user. The output devices to consider depend on the factor such as compatibility of the device with the system, response time requirement and number of copies needed.

**INPUT FORM DESIGN**

Input Design is the process of converting user originated computer based format. Inaccurate input data are the most common cause of errors in data processing .Errors entered by data entry operators can be controlled by input design. The goal of designing input data is to make data entry as easy, logical and free from errors as far as possible. In this system, the input screens are developed according to the user requirements.

**Module**

1. Selection module

This module based on the user privilege sets the question paper for the user. there are three privileges. They are candidate, administrator and operator.

2. Questionnaire module

In this module after getting the access for the required area, the system provides the questions related to that area to the user. The questions are in the form of multiple-choice questions.

3. Score report module

In this module, the system generates the score for the questions taken by the candidate. User can report those scores to store in that data base or otherwise cancel them.

In online test, testing could be scheduled when it is convenient for the students, which also encourages students to increase the time management skills. After the tests are scored, the data can be easily downloaded into the database.

**Menu Tree**

**Main Module**

**System**

**Module 2**

**Result**

**Module 1**

**Exam**

**Result published**

**Questions**

**Advantages of Online Test :**

* It contains sample questions which are likely to be asked in the exam.
* It helps you check your knowledge and assess your mistakes while taking the exam
* It helps to enhance your confidence during the exam
* Environment-Friendly
* Economical
* Quick Turnaround Time
* Highly Secure
* Easy-to-use
* Autograding

**The Disadvantages Of An Online Examination System**

Let us look at the disadvantages of an online examination system:

* Challenges in Technology Adoption
* Infrastructural Barriers
* Difficulty in Grading Long-answer Type
* Susceptible to Cheating
* Transitioning to Open-Book Exams

**HARDWARE REQUIREMENTS**

Processor : Intel Pentium IV 2.4 GHZ or above

Clock speed : 500 MHZ

System bus : 32 bits

RAM : 256MB of RAM

HDD : 40 GB or higher

Monitor : SVGA COLOR

Keyboard : 108Keys

Mouse : 2 button mouse

**SOFTWARE REQUIREMENTS**

OS : MS WINDOWS XP SP2

Environment : Java Runtime Environment 1.5

Front end : Core Java J2SDK1.5

Back end : Microsoft Access 2003

**Code:**

import java.awt.\*;

import java.awt.event.\*;

import javax.swing.\*;

class OnlineTest extends JFrame implements ActionListener

{

JLabel l;

JRadioButton jb[]=new JRadioButton[5];

JButton b1,b2;

ButtonGroup bg;

int count=0,current=0,x=1,y=1,now=0;

int m[]=new int[10];

OnlineTest(String s)

{

super(s);

l=new JLabel();

add(l);

bg=new ButtonGroup();

for(int i=0;i<5;i++)

{

jb[i]=new JRadioButton();

add(jb[i]);

bg.add(jb[i]);

}

b1=new JButton("Next");

b2=new JButton("Bookmark");

b1.addActionListener(this);

b2.addActionListener(this);

add(b1);add(b2);

set();

l.setBounds(30,40,450,20);

jb[0].setBounds(50,80,100,20);

jb[1].setBounds(50,110,100,20);

jb[2].setBounds(50,140,100,20);

jb[3].setBounds(50,170,100,20);

b1.setBounds(100,240,100,30);

b2.setBounds(270,240,100,30);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

setLayout(null);

setLocation(250,100);

setVisible(true);

setSize(600,350);

}

public void actionPerformed(ActionEvent e)

{

if(e.getSource()==b1)

{

if(check())

count=count+1;

current++;

set();

if(current==9)

{

b1.setEnabled(false);

b2.setText("Result");

}

}

if(e.getActionCommand().equals("Bookmark"))

{

JButton bk=new JButton("Bookmark"+x);

bk.setBounds(480,20+30\*x,100,30);

add(bk);

bk.addActionListener(this);

m[x]=current;

x++;

current++;

set();

if(current==9)

b2.setText("Result");

setVisible(false);

setVisible(true);

}

for(int i=0,y=1;i<x;i++,y++)

{

if(e.getActionCommand().equals("Bookmark"+y))

{

if(check())

count=count+1;

now=current;

current=m[y];

set();

((JButton)e.getSource()).setEnabled(false);

current=now;

}

}

if(e.getActionCommand().equals("Result"))

{

if(check())

count=count+1;

current++;

//System.out.println("correct ans="+count);

JOptionPane.showMessageDialog(this,"correct ans="+count);

System.exit(0);

}

}

void set()

{

jb[4].setSelected(true);

if(current==0)

{

l.setText("Que1: Which one among these is not a primitive datatype?");

jb[0].setText("int");jb[1].setText("Float");jb[2].setText("boolean");jb[3].setText("char");

}

if(current==1)

{

l.setText("Que2: Which class is available to all the class automatically?");

jb[0].setText("Swing");jb[1].setText("Applet");jb[2].setText("Object");jb[3].setText("ActionEvent");

}

if(current==2)

{

l.setText("Que3: Which package is directly available to our class without importing it?");

jb[0].setText("swing");jb[1].setText("applet");jb[2].setText("net");jb[3].setText("lang");

}

if(current==3)

{

l.setText("Que4: String class is defined in which package?");

jb[0].setText("lang");jb[1].setText("Swing");jb[2].setText("Applet");jb[3].setText("awt");

}

if(current==4)

{

l.setText("Que5: Which institute is best for java coaching?");

jb[0].setText("Utek");jb[1].setText("Aptech");jb[2].setText("SSS IT");jb[3].setText("jtek");

}

if(current==5)

{

l.setText("Que6: Which one among these is not a keyword?");

jb[0].setText("class");jb[1].setText("int");jb[2].setText("get");jb[3].setText("if");

}

if(current==6)

{

l.setText("Que7: Which one among these is not a class? ");

jb[0].setText("Swing");jb[1].setText("Actionperformed");jb[2].setText("ActionEvent");

jb[3].setText("Button");

}

if(current==7)

{

l.setText("Que8: which one among these is not a function of Object class?");

jb[0].setText("toString");jb[1].setText("finalize");jb[2].setText("equals");

jb[3].setText("getDocumentBase");

}

if(current==8)

{

l.setText("Que9: which function is not present in Applet class?");

jb[0].setText("init");jb[1].setText("main");jb[2].setText("start");jb[3].setText("destroy");

}

if(current==9)

{

l.setText("Que10: Which one among these is not a valid component?");

jb[0].setText("JButton");jb[1].setText("JList");jb[2].setText("JButtonGroup");

jb[3].setText("JTextArea");

}

l.setBounds(30,40,450,20);

for(int i=0,j=0;i<=90;i+=30,j++)

jb[j].setBounds(50,80+i,200,20);

}

boolean check()

{

if(current==0)

return(jb[1].isSelected());

if(current==1)

return(jb[2].isSelected());

if(current==2)

return(jb[3].isSelected());

if(current==3)

return(jb[0].isSelected());

if(current==4)

return(jb[2].isSelected());

if(current==5)

return(jb[2].isSelected());

if(current==6)

return(jb[1].isSelected());

if(current==7)

return(jb[3].isSelected());

if(current==8)

return(jb[1].isSelected());

if(current==9)

return(jb[2].isSelected());

return false;

}

public static void main(String s[])

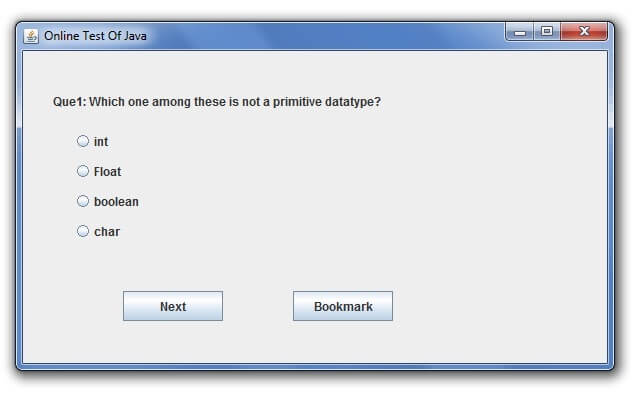
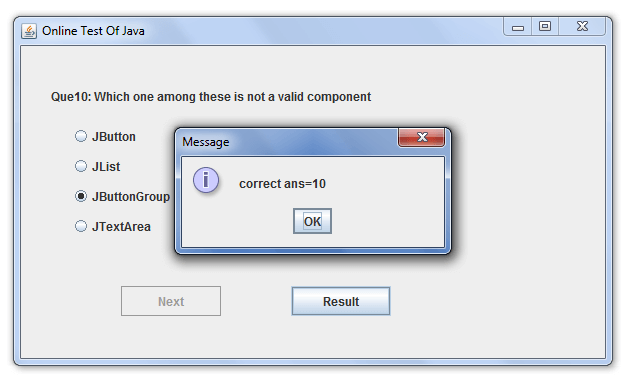
{

new OnlineTest("Online Test Of Java");

}

}

**Snapshots :**

**Future Scope**

Technological advancements in this era of digitization along with being a boon to the world have been advantageous to the educational sector too. The introduction of [**online exam software**](https://pesofts.com/) replaced the conventional system of assessment.

The various examination conducting agencies are now able to evaluate the test takers freely and [**cost-effectively**](https://pesofts.com/pricing) through [**computer-based tests**](https://pesofts.com/computer-based-test-software/). Today’s article discusses the current scope and objectives of an online examination system also with future.

Before proceeding further let us understand the concept of online examination software. Exam software allows users to take online tests and automatically generate results based on the answers marked by the users.

Lets now discuss the reasons for the introduction of online examination in the modes of conducting an assessment.

1. **Conduct exams effortless**:

Computer-based tests as a method of conducting an assessment enable users to manage an exam easily. The functionalities of an exam software such as user-friendly dashboard, multiple languages, support for multiple question types and formats, detailed reporting, automatic instant results help in smooth conduction.

1. **Reduce exam anxiety Amongst test takers**:

The flexibility associated with computer-based tests reduces exam anxiety among test takers as they can take the exam at any time of the day that coincides with their preferred sleep/ wake cycle.

1. **Promote social interaction between the test taker and experts**:

An online environment promotes exam preparation with experts or peers as they can review the course content together. [**Online assessment**](https://pesofts.com/what-is-online-assessment-software/) possible through exam software lays the real foundation of academic teaching as it facilitates discussion with teachers or other students.

1. **Prevents cheatings**:

Cheating amongst the test-takers in the examination hall is one of the major drawbacks of pen paper-based assessment. Online examination managed avoids the possibilities of secretly using unfair means to get the right answers

1. **Safe and secure data**:

Various tools offered by exam software have enabled the assessment conducting agencies to manage the crucial data related to examination questions and test-takers safely.

1. **Reduce administrative burden**:

Organizing and running exams online not only reduces an organization’s administrative burden but also saves cost and time. Online examination with its objective to make evaluation massive but simple, cost-effective and faster has replaced the pen paper-based assessment.

The examination managing agencies have started preferring computer-based test to instill their lost faith in the method of conducting an evaluation. Thus **online examination software** offered by Pesofts is one of the most advanced software for conducting tests.

**Conclusion**

The  project was successfully designed and is tested for accuracy and quality.

  During this project I have accomplished all the objectives and  this project meets the  needs of the organization . The developed will be used in searching , retrieving and generating information for the concerned requests.

You will be presented Multiple Choice Questions (MCQs) based on Statement and Conclusions Concepts, where you will be given five options. You will select the best suitable answer for the question and then proceed to the next question without wasting given time. You will get your online test score after finishing the complete test.

**References**

<https://www.tutorialspoint.com/reasoning/reasoning_statement_and_conclusions_online_test.htm>

<https://1000projects.org/project-report-online-test-system.html>

<https://www.academia.edu/6338470/Project_Report_On_Online_Examination_System_Submitted_By_Guided_By>

<https://www.geeksforgeeks.org/performing-database-operations-java-sql-create-insert-update-delete-select/>

<https://in.search.yahoo.com/search?fr=mcafee&type=E211IN714G0&p=develop+the+application+using+concept+of+jdbc+to+perform+various+operations+with+databse+like+mysql>