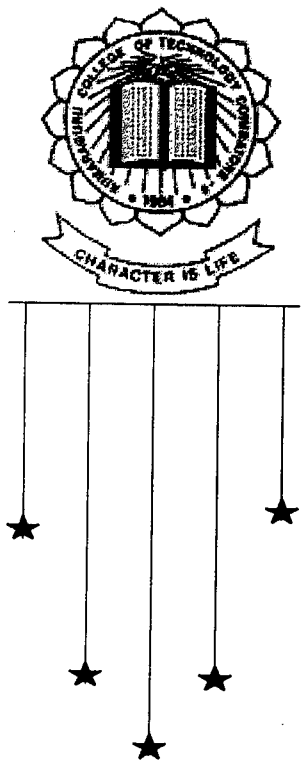
# ON-LINE EXAMINATION SYSTEM





**PROJECT REPORT**

*Submitted By*

**MUNISSHWAR .G**

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*Under the Guidance of*

**Mr.M.V.Sethuramalingam, M.Sc.**

**2000 - 2001**

In partial fulfillment of the requirements for the award of the degree of

**BACHELOR OF SCIENCE IN**

**APPLIED SCIENCE - COMPUTER TECHNOLOGY**

of the Bharathiar University, Coimbatore.

**Department of Computer Science and Engineering**

**Kumaraguru College Of Technology**

Coimbatore- 641 006.

# DECLARATION

We hereby declare that the project work entitled,

**"ON-LINE EXAMINATION SYSTEMS"**
at
**SKYSOFT TECHNOLOGIES (P)LIMITED**
Coimbatore

Submitted in partial fulfillment of the requirements for the degree of

**Bachelor of Science**
**(Applied Science – Computer Technology)**
is a report of original work done by us during the period of study in

**KUMARAGURU COLLEGE OF TECHNOLOGY,**
(Affilated to Bharathiar University)
Coimbatore – 641006 .


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Date : 16-3-2001
Place : Coimbatore

# CERTIFICATE

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This is to certify this project work entitled

**"ON-LINE EXAMINATION SYSTEM"**


Submitted to

**KUMARAGURU COLLEGE OF TECHNOLOGY**
(Affiliated to Bharathiar University)

in partial fulfillment of the requirements for the degree of
B.Sc.(Applied sciences – Computer Technology)
is record of original work done by

| | |
|---|---|
| Mr.G.Munisshwar. | (Reg.No 9827Q0135) |
| Mr.B.Rabishbabu. | (Reg.No 9827Q0148) |
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during their study in the Department of Computer Science and Engineering, Kumaraguru College of Technology, Coimbatore - 641006, under my Supervision and guidance and this project work has not formed the basis for the award of any degree/associateship/fellowship or similar title to any candidate of any University.

S. J. 15/3/01
Professor and Head

14/03/2001
Internal guide

Submitted for University Examination held on 16 / 3/2001

16/03
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**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Mr.G.Munisshwar, B.Rabish Babu and R.N.Vallimanalan** have been working as **Programmer Trainee** from December 2000 to Feb 2001.They were involved in system design, coding, testing and debugging of "**ON LINE EXAMINATION**" developed using Java Servlets, Java Script, HTML & Oracle 8.0.

During this period of training they have been found to be hardworking and meticulous in all the responsibilities assigned to them.

We wish them success in all their future endeavors.

M.Pumithi 12/3/01

**Project Manager**

*Dedicated to*

*Our beloved*

*Parents*

# ACKNOWLEDGEMENT

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We thank the God Almighty for His blessings bestowed upon us to complete this project.

We take this opportunity to express our gratitude to all those good people whose Contribution to the successful completion of this project cannot be over emphasized.

We express our profound gratitude to **Dr. K.K.Padmanabhan**, B.Sc. (Engg), M. Tech ., Ph.D., Principal, Kumaraguru College of Technology, Coimbatore for his support and encouragement.

We extend our thanks to Prof. **Dr.S. Thangasamy** B.E. (Hons), Ph.D., Head of the Department of Computer Science and Engineering, Kumaraguru College of Technology for motivating us to do our project at a leading software company and for his continuous support and advice during the course of this project.

We are greatly in debted to our guide **Mr.M.V.Sethuramalingam** M.Sc. Lecturer, Kumaraguru College of Technology , for his help and support given to us to make this endeavour a sucessful one.

We express our deep sense of gratitude to **Mr.D.Rathnakumar**. Managing Director, SKYSOFT TECHNOLOGIES INDIA(P)LTD who will be the primary user of this project, for motivating, guiding and correcting us every day of our tenure at SKYSOFT .I thank him for being so patient, for his trust in our abilities and for giving us the opportunity to learn so much during the course of this project.

Our sincere thanks to **Mr. T.Jaikumar**, who was our project guide at SKYSOFT for his able guidance and the free and flexible working environment he provided for us to do the project.

We sincerely thank **Mr.S.Andrews** M.Sc., PDGPM, M.Phil Lecturer, Kumaraguru College of Technology , Coimbatore who was our course Co-Ordinator for his guidance and encouragement during the course of this project.

We would like to place in record our sincere thanks to our Class Advisor **Mr.M.Raju.** MCA., BEd., whose numerous insights, guidance and valuable advice helped us to shape and mould the system design leading to successful completion of the project.

We thank all other staff members of the Computer Science Department of Kumaraguru College of Technology for their help and support to complete our project.

Finally , we thank our family members and relatives who helped and supported us a lot throughout the course and extended helping hand towards the sucessful completion of the project.

# SYNOPSIS

# SYNOPSIS

## SKYSOFT TECHNOLOGIES INDIA (P) LTD

Skysoft Technologies India (p) Ltd is a software development company which specialises in IT solutions for garment industry, pump industry, process industry, finance industry etc.

## BACKGROUND

This project entitled online examination is intended to streamline the project allocation process. This software enables to screen the application, once they clear the foreliminary test, those who have got through can be called for the next stage of selection process which saves a lot of man hours and helps to identify the right resource.

## INPUTS FOR ON-LINE EXAMINATION

The inputs required for online The inputs required examination can be classified into two types

1. Candidate details.
2. Question Bank for each specialization.

The software can be of useful to two categories

1. Enabling individuals to access themselves on a particular subject.
2. Helping companies to allot project to student based on their ranking.

## SPECIAL FEATURES OF ON-LINE EXAMINATION SOFTWARE

This a software designed and developed by SKYSOFT with the intention of making the project allocation process simple as well as helping individuals to risen their skills so as to upgrade themselves.

The database is designed in such a way that it updates every individual user records whenever they login to the site and give the standing of individual candidates as an data.

## ADDITIONAL FACILITIES

1. Administrator can view all the candidates profit at an point of time.
2. The question bank doesn't allot same questions for multiple users at a time.
3. Administrator can modify the question bank if necessary.
4. Candidate can withdraw from one subject at any point of time and opt for the other specialization.
5. The question bank automatically calculates the time alloted for each question, if not attented it will pass on to next question.

## NEED FOR THE PROJECT

This project is designed and developed to match the resource with the source.

1. Man power requirement of software industry can be acquired in a fast phase with lesser overheads.
2. The candidates can upgrade their skills as per the industrial requirements.
3. The industry can have a databank of skilled resource for different specialization.

This software is designed to bridge the gap between the industrial requirement and the available resource.

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# INTRODUCTION

# 1.0 INTRODUCTION

## 1.1 ORGANISATION PROFILE

### 1.1.1 SKYSOFT – A OVERVIEW :

SKYSOFT TECHNOLOGIES INDIA (P) LTD is the leading software development Organisation aims to emerge as a forerunner in the field of Information Technology related services with an accepted brand image synonyms with equality. We at SKYSOFT develop software for people and people for software.

### 1.1.2 VISION :

SKYSOFT dreams to develop into a centre of excellence for the dissemination of professional knowledge ,by inculcating an understanding of the modern organisational environment developing the basic ingredients of business solutions in terms of strategies, techniques and essential skills using the latest developments in information technology.

### 1.1.3 THE ORGANIZATION'S MISSION STATEMENT :

"To emerge as a forerunner in the field of information technology related services with an accepted brand image synonymous with quality"

### 1.1.4 OBJECTIVES :

The objective of the SKYSOFT includes the following

1. Software Development.
2. Software Finishing School – Live Project Divison.
3. Software Training.

### 1.1.5 SOFTWARE DEVELOPMENT :

Expertise in designing an developing business solutions at organisational and functional levels including development of operational strategies on software
solutions.

**Expertise :**

- Client – Server based applications.
- E-Com applications and solutions.
- Web based solutions.
- Specific Business applications.

### 1.1.6 SOFTWARE FINISHING SCHOOL-LIVE PROJECT DIVISION :

There is wide gap between the requirements and expectations of the industry Corprates and the mass produces by Academin. "No experience –No work" is the current job scenario. SKYSOFT bridges this gap, and facilities the students to undergo live projects by providing hands on experience on developing various softwares with the focus on developing human resources for the IT industry .

Every corporate, every industry looks arround to pick up the stream of talent available in the job market, because it is this kind of talent that makes up the solid warfront for every companies competitive strategies.

The training methodologies used are aimed at maximising the training effectiveness as professional to suit the job requirement in the industry. The division is packed by the vast developing experience of the stream in familiarizing the trainees with the actual convention.

### 1.1.7 SOFTWARE TRAINING :

SKYSOFT providing professional training for trainees wanting to pursue a challenging carrier in the IT industry by offering latest state of the art technology in order to meet the ever increasing demand for IT professionals the world over especially in the developed countries.

The well trained computer professional finds absolutely no difficult in being placed globally by giant corporations keeping pace with the changing trend, the course include VB.6.0, Oracle-8, Java 2.0, and enterprise Java with JSP-EJB-XML & ASP.

## 1.2 ON-LINE EXAMINATION SYSTEM

This Examination is for users of different areas of interest. Theuser registers themselves in this examination and registration details is maintained in a database. The choice for the selection of the field is displayed to the user as JAVA, VB , & ORACLE. On selection of any interested option, the questions related to that option would be displayed to the user from the database randomly based on the subject code. The Question in this system are in multiple choice format with four answer choices per question. The user is required to select the correct answer. There is also an option given to the user to skip any question. Usually the number of questions will be thirty for a duration of ninety minutes. The administrator may change the number of questions and time limit based on requirement. All the exams will be for a fixed time duration and the system will display an user friendly message about the time left for the user when starts answering. In addition to this a caution message will be also displayed exactly five minutes before the end of the time limit. The user is then validated for the result using the key answers retrieved from the database .

The details of the students who have passed the examination is stored in the database which can be retrieved by the administrator. The project is then alloted to the students who have been selected according to the result obtained in the examination.

## 1.3 NEED FOR COMPUTERIZATION

The benefit of computerization over manual systems is many folds. The benefits can be stated as below.

**1.3.1 SPEED** – Computers enable to do arithmetical calculators with fantastic speed and ease. It is possible to do things, which so far no one could think of attempting in a manual system. Tasks involving large voluminous data processing are thus done with much accuracy and speed by the computers than by manual system.

**1.3.2 ACCURACY** – One of the greatest benefits which computers can give us is that of accuracy. Practical experience has already shown that these machines are capable of achieving the degree of accuracy, which hitherto has been unattainable in certain accounting processes into which the human brain enters at so many stages of the complete cycle of operation.

**1.3.3 FLEXIBILITY** – The user can take up the .the exam, at any flexible timings and no need of manual supervision required.

**1.3.4 EASY STORAGE & RETRIVAL** – The informations and results can be stored in database which can be used in future reference.

**1.3.5 REPORTS** - Various types of reports can be prepared based on the administrators convinience.

# 1.4 HARDWARE ENVIRONMENT

## MAINFRAMES, MIDRANGES & DESKTOPS

Mainframe systems are large, multi-user systems that historically have required a control environment. Environment factors included are conditioning special power hookups, under floor cabling etc. Mainframe systems required dedicated operations and system support staff and often involved duplicated hardware. Mainframe systems have a high overhead costs. Software is of comparable complexity regardless of execution platform.

Midrange systems are multi-user systems. They also have capacity comparable to mainframe systems. The priniciple factors seperating modern midrange systems from mainframe systems are the environmental and staff requirements. Also, where mainframes usually service the entire company, midrange systems are frequently dedicated to a single division or department. Midrange systems of midrange computers are designed to run less work at the same time than mainframe operating systems, which are simpler to install plus configure, and are also easier to operate.

Desktop systems are usually single-user systems. No special environment is required and these systems are found throughout modern organizations. Desktop systems are also interconnected to share application code. This may be done because of the resource requirements of an application, or because of the applications data access/update requirements. When data is shared between systems, it is often easier/cheaper to run related application on the server that manages the shared data rather than on each individual desktop system.

Hardware specification of the system used in the project :

**SERVER:**

Pentium II 633 MHz server
256 MB RAM / 4.3 GB Hard Disk Drive
1.44 MB Floppy Disk Drive
CD-ROM Drive
Ethernet card
HP-DDS_2 Tape Backup

**CLIENT:**

Pentium 166 MHz
32 MB RAM / 1.2 GB Hard Disk Drive
1.44 MB Floppy Disk Drive
SVGA Monitor
104 Keys Keyboard

**PLATFORM:**

Server : Microsoft Windows NT 4.0

Client : Microsoft Windows 98

Front-end : Java 1.2.2

Back-end : Oracle

**NETWORK OPERATING SYSTEM** : Windows NT/98

**MODEM** : 28.8 bps

**RDBMS** : Oracle

# 1.5 SOFTWARE ENVIRONMENT

## 1.5.1 JAVA OVERVIEW:

Java is the current need.As the internet is becoming more and more popular ther has to be a language to create program for the internet which should not be machine restricted. Java is machine independent by its birth and it has revolutionized the programming concept. Java is needed for its

- Simple and powerful
- Object Oriented
- Robust
- Distributed and interpreted
- Secure
- Interpreted and high performance
- Portable and high performance
- Multithreaded
- Platform independent

**Simple and powerful**

Java is a simple language. But what exactly do we mean by simple? One design goal was to create a language that a programmer could learn quickly, so the number of language constructs has been kept small. Another design goal was to make the language look familiar to a majority of programmers for ease of migration. The most important simplification, however, is Java does use pointers. But this automatically handles the referencing of objects. Java also eliminates the operator overloading and multiple inheritance features of C++.

**Object Oriented**

Java is an Object Oriented programming language. In an object-oriented system, a class is a collection of data and methods that operate on the data and methods describes the state and behaviour of an object. Java comes with an extensive set of classes, arranged in packages, that we can use in our programs. Most things in Java are

objects, the simple numeric, character and Boolean types are the only exceptions.

**Robust**

Java is intended for writing programs that must be reliable in a variety of ways. Java puts a lot of emphasis on early checking for possible problems, later dynamic checking and eliminating situations and error prone. In fact, many hard-to-track-down bugs that often turn up in hard-to reproduce run-time situations are simply impossible to create in Java.

**Distributed**

Java is designed to support application on networks; it is a distributed language. Java supports various levels of network connectivity through classes in the Java.net package. Java also supports reliable stream network connections with the socket class, so you can create distributed clients and servers.

**Secure**

Java is intended to be used in the network / distributed environments. Towards that end, a lot of emphasis has been placed on security. Java enables the construction of virus-free, tamper-free system.

**Interpreted and high performance**

The Java interpreter can execute Java byte codes directly on any machine in which the interpreter has been ported. Since linking is a more incremented and light weight process, the development process can be much more rapid and explanatory. The byte code can be translated on the fly into machine code for particular CPU the application is running on .

**Portable and high performance**

Unlike C and C++ there are no implementation dependent aspects of specification. The size of the primitive data types are specified as is the behaviour of arithmetic on them. The libraries that are a part of the system define portable interface.

**Multithread**

The benefits of multithreading are better interactive reponsiveness and real time behaviour.

A multithread program contains two or more parts that can run concurrently. Each part of such a program is called a thread , and each thread defines a separate path of execution. Thus, multithreading is a specialized form of multitasking.

**Components :**

Java has several in-built components.

Javac : Compiler for Java programs that could generate byte codes.

Java : Interpreter to read and execute Java byte codes .

Javap : To disassamble and debug the Java byte codes .

Javadoc: Document generator .

Javah : To write and link native codes with Java program.

Java programs have the extension '.Java'. These '.Java' files are compiled by the Java compiler creating byte codes in a special file having '.class' extension.

## ADVANTAGES:

**Java and Internet**

Java is basically a internet programming language. There are various built-in tools available in Java for internet programming because Java expands the universe of objects that can move about freely in cyberspace. In a network, two very broad categories of objects that can transmit between the server and your personal computer. Passive and dynamic, active programs. Java supports two of them by including the features of Applet and Servlet.

## Networking

Java is supported to become the premier tool for connecting computers over the internet . If we are used to programming network connections in C or C++, Java supports the Internet's TCP/IP protocol both by extending the already established Stream I/O interface and adding the features required to built I/O objects across the network. Java supports both the TCP and UDP protocol families. TCP is used for reliable stream- based I/O across the network. UDP supports a simpler, hence faster point -to- point datagram- oriented model.

## JDBC API

Java 1.2 has the JDBC API to connect to the database and work with them. It has so many classes and interface to connect with the databases. It helps to fetch the data from the database and view through the database. It helps more in navigate through the database and get all the items and data, tables description and it also includes the security privileges also.

Some of the methods are :

```
getConnection(Driver, Username, Password)
executeQuery(sql);
```

## InetAddress

Java supports internet naming through the interne addressed, when reduced to their lowest level, are comparised of a 32-bit host identifier and a 32-bit port selector on the host. InetAddress has three models that can be used to create instances of InetAddresse.

```
getLocalHost ()
getByName ()
getAllByName ()
```

## Sockets

The Java.net package strongly differentiates between sockets and Serversockets.

The primary difference between the two is that a serversocket will wait around for a client to connect to it. Whereas an ordinary socket will treat the unavailability of something to connect as an error condition.

Two constuctors

ServerSocket (int port)
ServerSocket (int port , int count)

## URL Connection

A URL connection is referred as Universal Resource Locater. The object that we use to either examines the properties of the remote resource referenced or to obtain its contents.

## 1.5.2 RDBMS

The database management systems(DBMS) called as Relational Database Management systems should satisfy the following 12 rule posted by the father of RDBMS, Dr.E.F.CODD.No RDBMS till date satisfies all of codd's 12 rules.

### RULE 1 : INFORMATION RULE

All information in a relational database is represented explicitly at the logical level and in exactly one-way by vlaues in R-table.

### RULE 2 : GURANTEED ACCESS RULE

Each and every datum in a relational database is guranteed to be logically assessable by resorting to a combination of R-table name, primary key value and column name.

### RULE 3 : SYSTEMATIC TREATMENT OF NULL VALUES

Indicators are supported in fully relational DBMS for representing at the logical level ,the fact that the information is missing in a systematic way-independent of data type.

### RULE 4 : DATA DESCRIPTION RULE

The database description is represented at the logical level just like the ordinary data,so that authorized user can apply the same relational language to its interrogation as they apply to the regular data.

### RULE 5 : COMPREHENSIVE DATA SUBLANGUAGE RULE

A Relational DBMSmust support at least one language (1) whose statements are expressible per some well defined syntax as character strings and (2) which is comprehensive in supporting all of the following terms.

- Data Definition.
- View Definition.
- Data Manipulation.
- Constraints.
- Authorization.
- Transaction Boundaries.

**RULE 6 : VIEW UPDATING RULE**

The DBMS includes an algorithm at least as powerful as VU-1 for determining whether that view is tupel –insertable and tupel –deletable and whether each of its columns is updatable.It records the result of this investigation in the catalogue.

**RULE 7 : INSERT,UPDATE AND DELETE**

The capability of handling a base relation or a derived relation as a single operand applies not only to the retrieval of data but also to the insertion, updation and deletion of data.

**RULE 8 : PHYSICAL DATA INDEPENDENCE RULE**

Application program and terminal activities remain logically un-impaired whenever any changes are made in either storage representation or access methods.

**RULE 9 : LOGICAL DATA INDEPENDENCE RULE**

Application programs and terminal activities remain logically un-impaired when information – preserving changes of any kind that theoretically permit unimpairment are made to the base table.

**RULE 10 : INTEGRITY INDEPENDENCE RULE**

Integrity constraints specific to a particular relational database must be definable in the relational data.

## RULE 11 : DISTRIBUTION INDEPENDENCE RULE

A RDBMS has distribution independence.

## RULE 12 : NON SUBVERSION RULE

If a relational systems has a low-level language ,that low level cannot be used to subvert or bypass the integrity rule and constraints unexpressed in the higher level relational language.

## FEATURES OF RDBMS :

- Minimal Redundancy.
- Accuracy.
- Reliability.
- Fast Processing.
- User Friendliness.
- Code reusability.
- Flexibility.
- Security.
- Data integrity.

# SYSTEM ANALYSIS

# 2.0 SYSTEM ANALYSIS

## 2.1 INTRODUCTION

A proper system analysis is absolutely essential to the development of an efficient management information system which has acceptable levels of user satisfaction. It is at this stage of the project that all the planning takes place. In this phase one raise to put down on paper the requirements of the user, the information and the resources available and the salient features of the existing system.

This system is divide into two subsections. In the first, problem definition, the problem is clearly defined and the users requirements are stated. In the second, system objectives, the objectives that were formulated after the system study was stated.

## 2.2 PROBLEM DEFENITION

SKYSOFT has been growing at a fast pace in the last couple of years. Unlike in other industries where educational qualification is the main indicator of an employee's skills and which remains constant over a long periods of time, in the software industry the skills of employees are indicated by their exposure to specific skills that are used every day IT and the level of which changes constantly with each completed project and each passing month. Due to the vastness of the field and mind boggling number of skills in which the software industry needs to give services, training of employee's in new skills is a common feature of any software company throughout the year. This is a major function of HRD in software companies.

So SKYSOFT decided that if necessary to develop a examination system to test the skill of the candidate and his exposure to a particular software.

**Objective:**

Prepare a comprehensive skills list with unique codes so as to be able to capture the skill information of each and every candidate completely.

## 2.3 SYSTEM OBJECTIVES

An examination system is to be developed to test the skill of the candidate attending the examination. The objectives of the ON-LINE EXAMINATION can be stated as follows:

1. To enable the company to select an eligible candidate for the purpose of doing projects.

2. To enable the user to access himself on a particular subject of specialization where he likes to perform a project.

The ON-LINE EXAMINATION System contains the following reports based on the performance of the candidate in the examination.

1. Reports containing list of candidates who are eligible to provided with a project.

2. Reports containing list of candidates who are eligible to be provided with specific topic of projects.

3. Reports containing list of all candidates who have been provided with a project

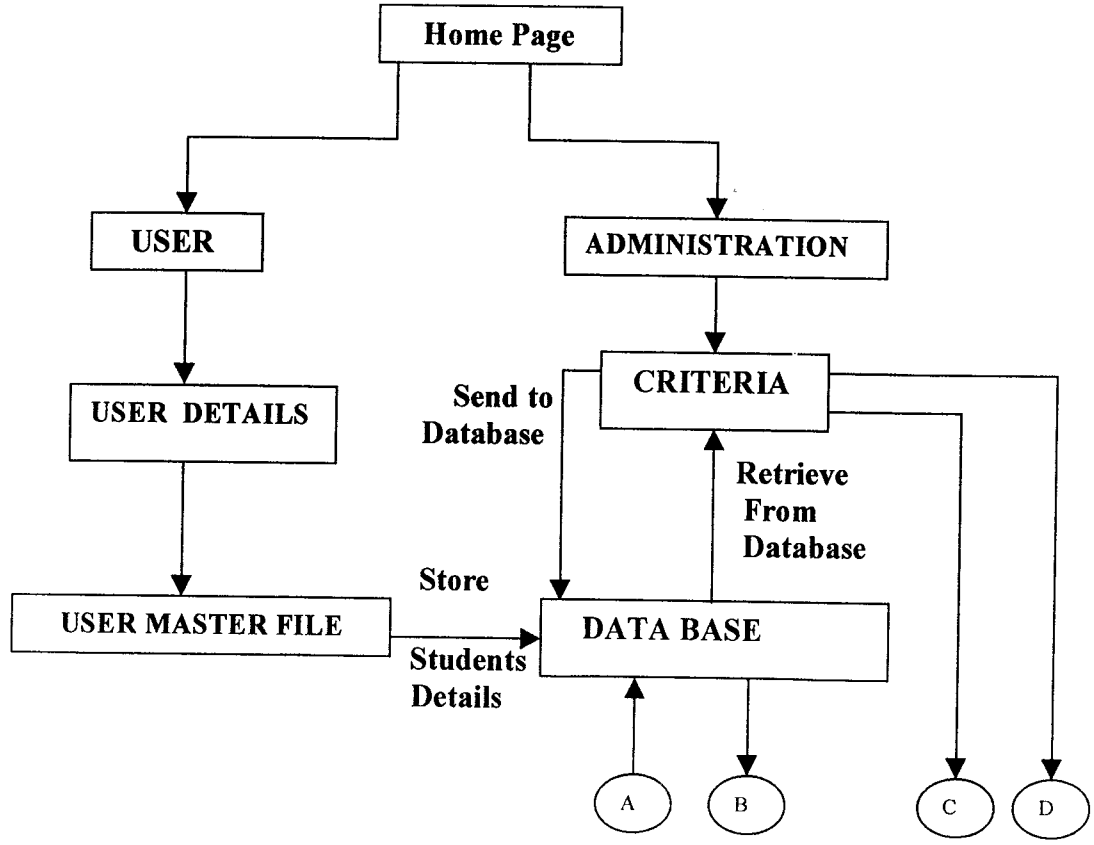
## 2.5 DATA FLOW DIAGRAM DESCRIPTION

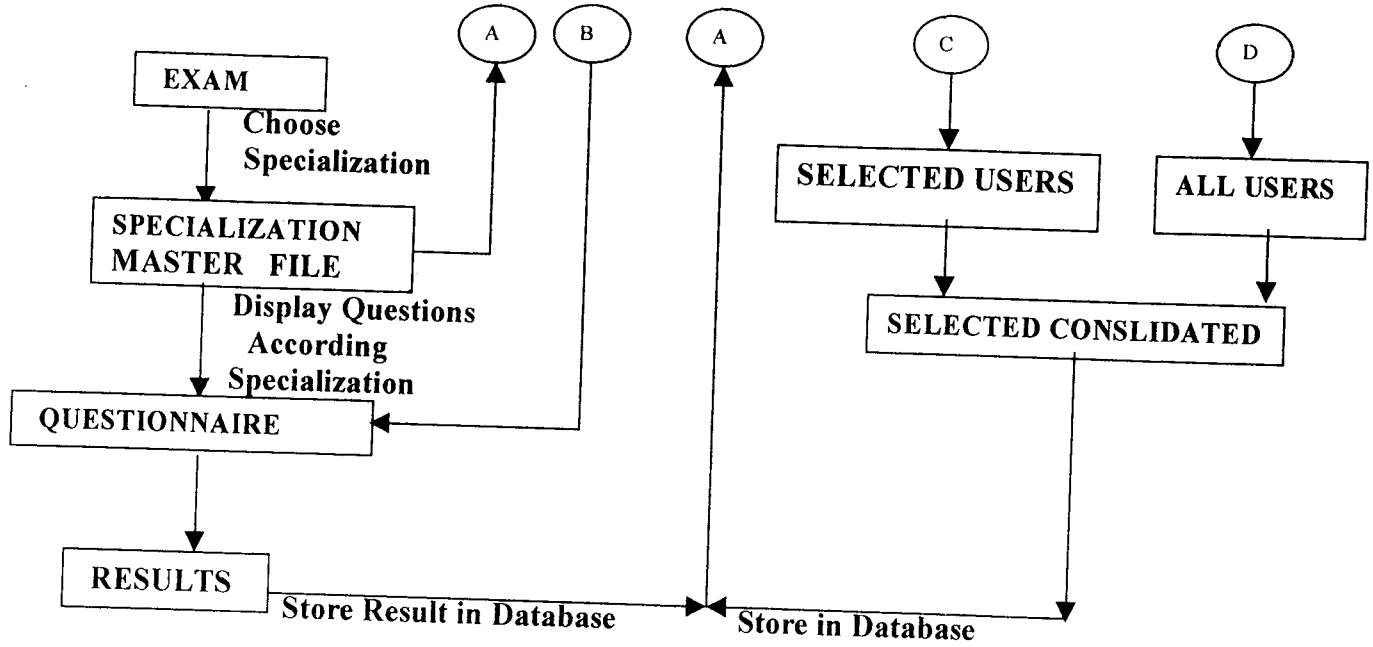
**Data Flow Diagram**

Although system flow charts have been and still are widely used in computerized management information systems, they are not the ideal design tool for structered system analysis and design. The flow of the system may not be obvious to the reciever. Most system analysts do not label the lines that connect the block of the diagram. The reciever has to guess the action of the transform ( i.e., the change of data ) and guess what data are moving from block to block. In addition, system flowcharts do not show clearly the separation of

various subsystems. To overcome limitations of system flowcharts, several design techniques for representing systems have come into use. One is the data flow diagram (DFD), which comes closest to the system flowchart.

## 2.4 DATAFLOW DIAGRAM




A
B
A
C
D
EXAM
Choose
Specialization
SPECIALIZATION
MASTER FILE
Display Questions
According
Specialization
QUESTIONNAIRE
RESULTS
Store Result in Database
SELECTED USERS
ALL USERS
SELECTED CONSLIDATED
Store in Database

# SYSTEM DESIGN

# 3.0 SYSTEM DESIGN

System Analysis and design comprises of the input design, file design and output design phases. All these phases are related to one another in some manner. So they will not be designed in separate ways. Hence this will be done only in an integrated way. Another thing is requirement of user. Each user has different type of requirements. Hence design of the system completely depends on the requirements of user.

## 3.1 INPUT DESIGN

The input to the on-line examination contains master details and administrator entries. So input screens have been designed according to these details. Each one has separate input screens.

The screens are well laid without any cramping of input fields. Prompts are available wherever possible, so that the user can select input values from these prompts. Thus, the screens are designed to be very user-friendly

The master available in this project are specilization master for the candidates to select their specilization, question master for appropriate selection of specilization and candidate master to maintain candidate details including their results and the project alloted to them.

Validation at the screen design level helps in solving a lot of difficult problems in the later stage of programming. Keeping this fact in mind the screens have been designed to avoid any erroneous data and any unwanted entering into the system. Screens wherever needed are designed to handle multiple record manipulation such as addition, deletion etc.

### 3.1.1 USER ENTRY DESIGN

New user can sign up and he will be given a user-id using which he can enter into the site. Existing user can enter into the site using the login-id which was given by the site. Then the candidate enters into the specilization form, and he can select their specilization

according to their skill levels. After taking the test the users result details are stored in a separate file which contains the details of the marks obtained, rank obtained, date on which he took the exam etc.

The declaration of results is done automatically after the completion of the examination and for each and every question answer is maintained in the database.

### 3.1.2 ADMINISTRATOR ENTRY DESIGN

In this phase the administrator can go through the results of all the candidates who attended the examination . Then according to their skill in the specilization they have selected to take up the test the projects are alloted to them by the administrator .

Administrator can change the question bank time to time for any specilization and the table for the insertion and deletion of the questions are managed by the administrator. Than at last the administrator will be given the repot of the students who are selected to do their projects and the duration alloted for the project with the members who are indulge in the project.

## 3.2 OUTPUT DESIGN

The output of this project will help very much for the organizations giving the live projects to the students whom are indulge in the project on a specific specilization like VB,ORACLE & JAVA.

The output design is a very important phase in designing of a system. The important objective of any system is in its capability of producing high quality outputs or reports.

The following reports are produced by the system.

- Candidates details.
- Specialization details.
- Question details.
- Candidates result details.
- Project allocation details.

# SYSTEM IMPLEMENTATION

# 4.0 SYSTEM IMPLEMENTATION

System implementation is the process where the system is actually given to the user & is tested in the environment it is going to be employed in . The system implementation involves the following stages :

- The system is tested with real time data and the results are verified for accuracy and effeciency. The developed application is tested for bugs and errors and are eliminated if found.
- The users are trained in the usage of the application.
- The system is modified based on user requirements to ensure user satisfaction.

Finally feedback is obtained from the users about the application and based on the user comments the application is changed to suit the user.

Our application has been tested with enough test data as well as Real time data has been found to work satisfactorily. The application has been thoroughly checked to determine any bugs and errors and most of the errors are debugged to ensure proper functioning of the application.

If there is any invalid data entry the user is prompted to enter valid data into the system. There is a host of other user-friendly features that makes the application easy to be operated. Even a layman can easily use the application.

# CONCULSION

# CONCLUSION

The On-Line Examination system can reduce the burden of the programmers in the organization. Reviews have been collected from the users about the modules and the users are found to be impressed upon the developments as they are found to be error free.

Maintenance of the developed system have to be undertaken at frequent intervals of time to cater to the new requirements that may pop up during the passage of time. Reports have been developed as user crafted as that the users can make any type of report they wish. The system is working according to the needs of the project leaders and the progress who are the uses of the system.

# APPENDIX A

# DATABASE DESIGN

| TNAME | TABTYPE |
|---|---|
| ALLOCATION | TABLE |
| CAND_MASTER | TABLE |
| LEFTQUESTION | TABLE |
| QUES_MASTER | TABLE |
| RESULT | TABLE |
| SPL_MASTER | TABLE |

**ALLOCATION TABLE:**

| NAME | TYPE |
|---|---|
| REGNO | VARCHAR2(20) |
| NAME | VARCHAR2(60) |
| SW | VARCHAR2(60) |
| PROJECT | VARCHAR2(20) |
| DURATION | NUMBER(3) |
| MEMBERS | VARCHAR2(180) |
| OS | VARCHAR2(60) |

**CANDIDATE MASTER TABLE:**

| NAME | TYPE |
|---|---|
| NAME | VARCHAR2(40) |
| USER_ID | VARCHAR2(20) |
| USER_PWD | VARCHAR2(10) |
| ADDRESS1 | VARCHAR2(80) |
| ADDRESS2 | VARCHAR2(80) |
| PHONE | VARCHAR2(60) |
| E-MAIL | VARCHAR2(60) |
| OTHERS | VARCHAR2(120) |

## REQUESTION TABLE:

| NAME | TYPE |
|---|---|
| Q_CODE | VARCHAR2(20) |
| USER_ID | VARCHAR2(20) |

## QUESTION MASTER TABLE:

| NAME | TYPE |
|---|---|
| SPL_CODE | VARCHAR2(20) |
| Q_CODE | VARCHAR2(20) |
| QUESTION | VARCHAR2(250) |
| ANS1 | VARCHAR2(250) |
| ANS2 | VARCHAR2(250) |
| ANS3 | VARCHAR2(250) |
| ANS4 | VARCHAR2(1) |
| KEY_ANS | VARCHAR2(1) |
| UPDATED | VARCHAR2(20) |

## RESULT MODULE:

| NAME | TYPE |
|---|---|
| EXAM_DATE | DATE |
| USER_ID | VARCHAR2(20) |
| SPL_CODE | VARCHAR2(20) |
| TOTAL MARKS | NUMBER(3) |
| PERCENTAGE | NUMBER(5,2) |

## SPECIALIZATION MASTER TABLE:

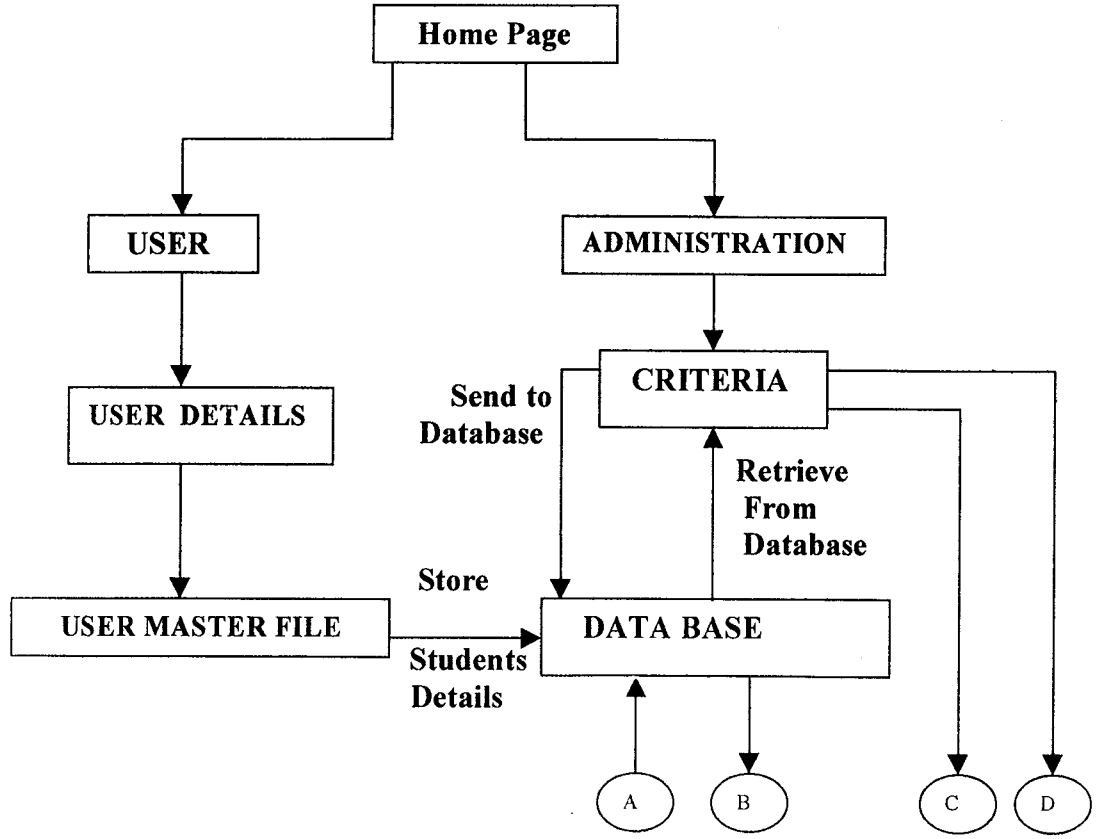
| NAME | TYPE |
|---|---|
| SPL_CODE | VARCHAR2(20) |
| SPL_NAME | VARCHAR2(60) |
| DESCRIPTION | VARCHAR2(80) |

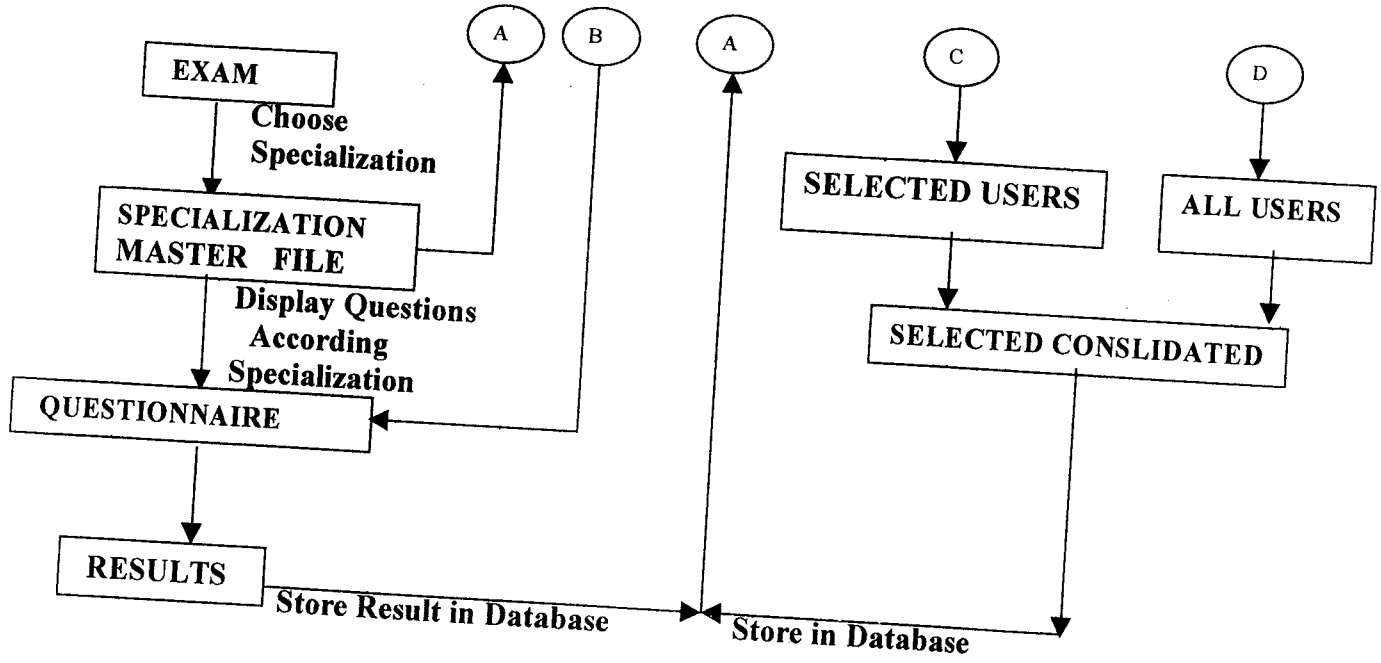
## TEMPORARY TABLE MASTER:

| NAME | TYPE |
|---|---|
| Q_CODE | VARCHAR2(20) |
| KEY_CODE | VARCHAR2(20) |
| USER_ANS | VARCHAR2(20) |
| USER_ID | VARCHAR2(20) |

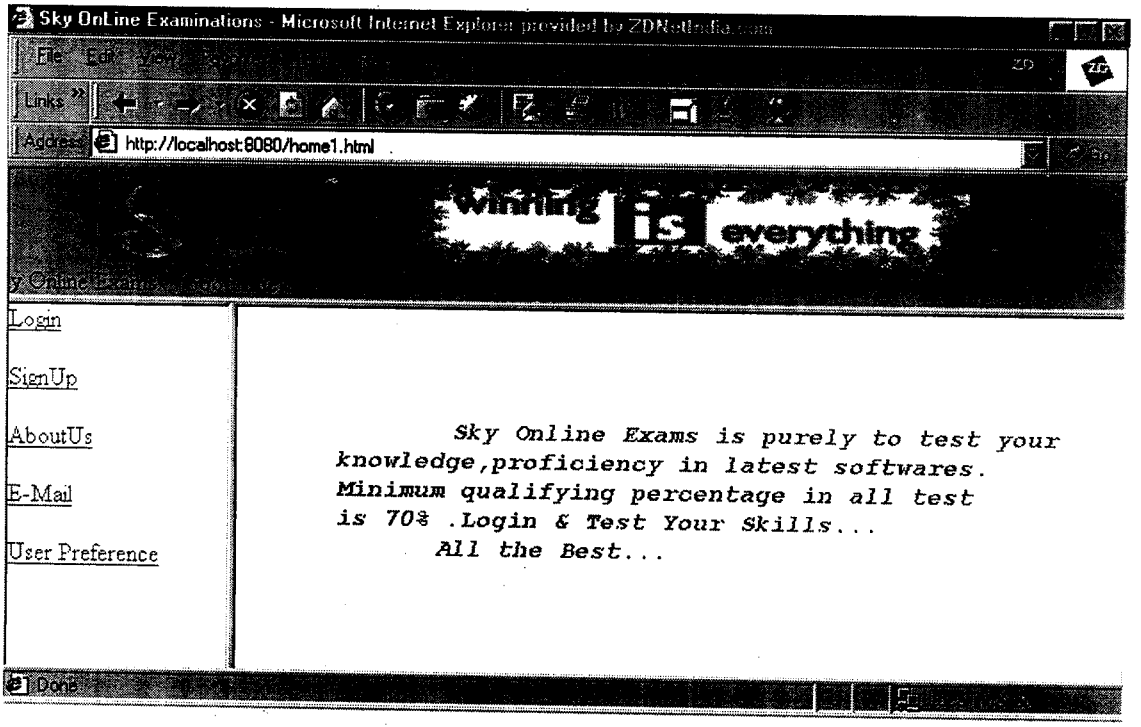
# APPENDIX B

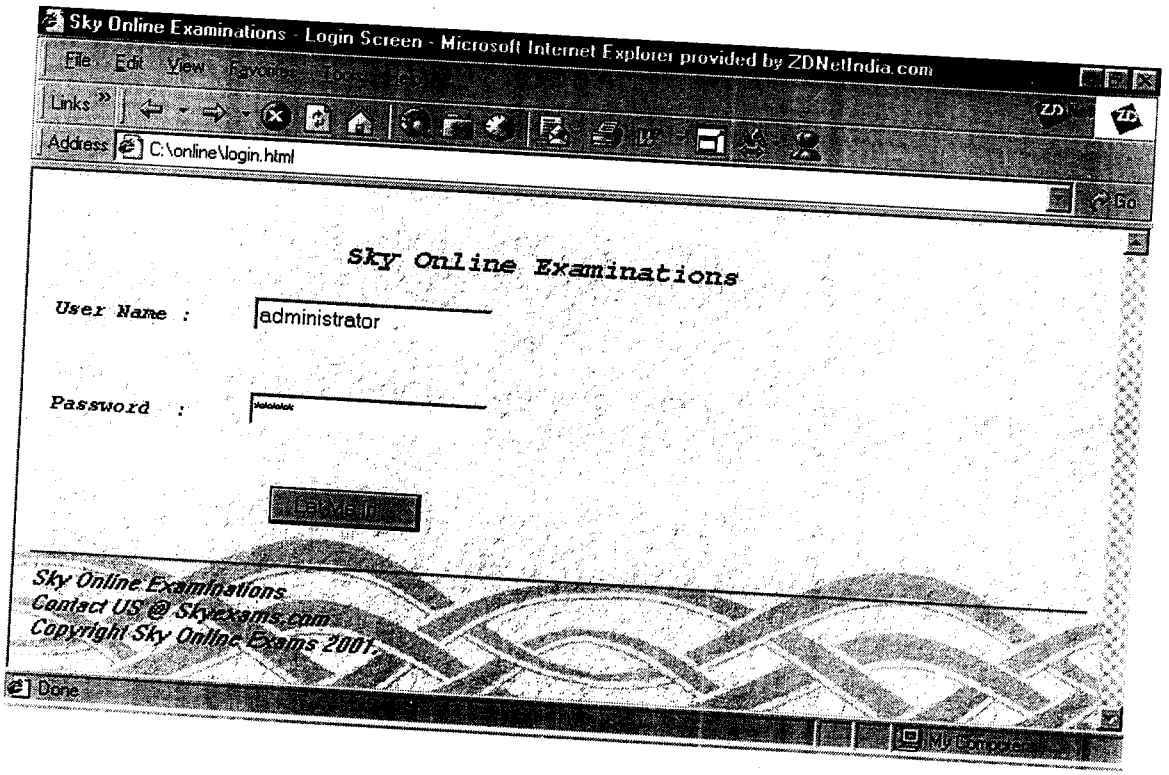
## DATAFLOW DIAGRAM

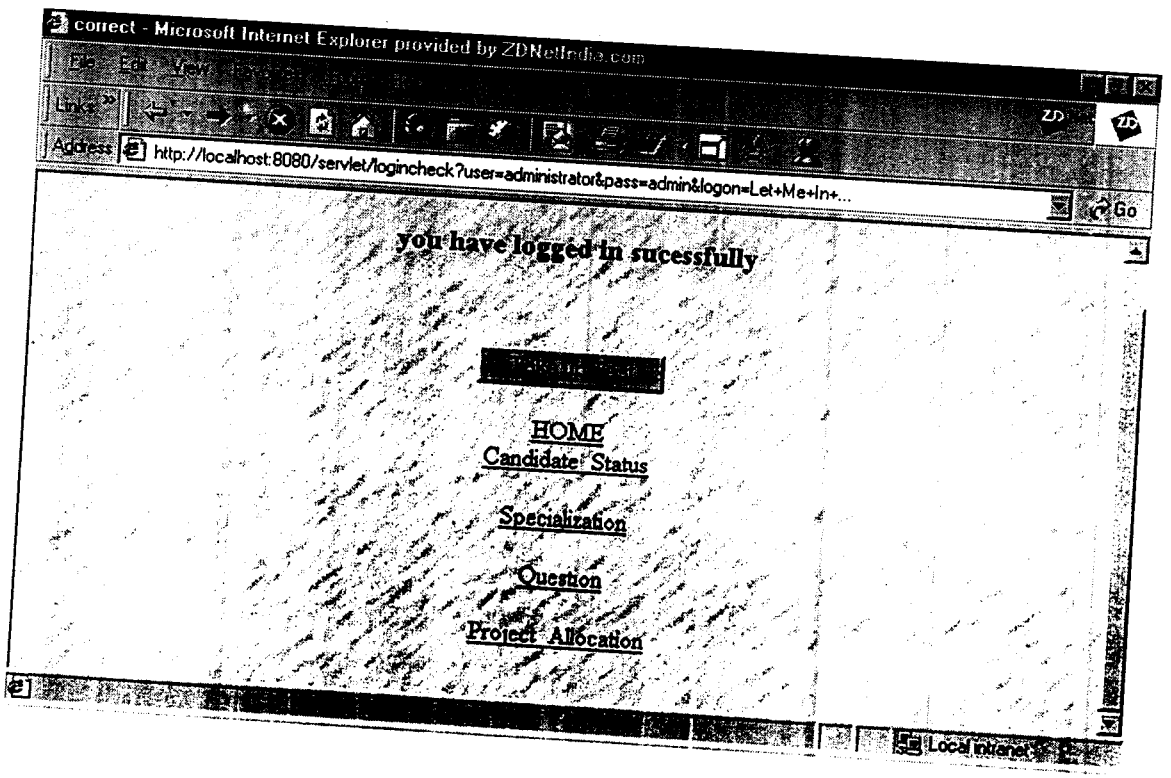


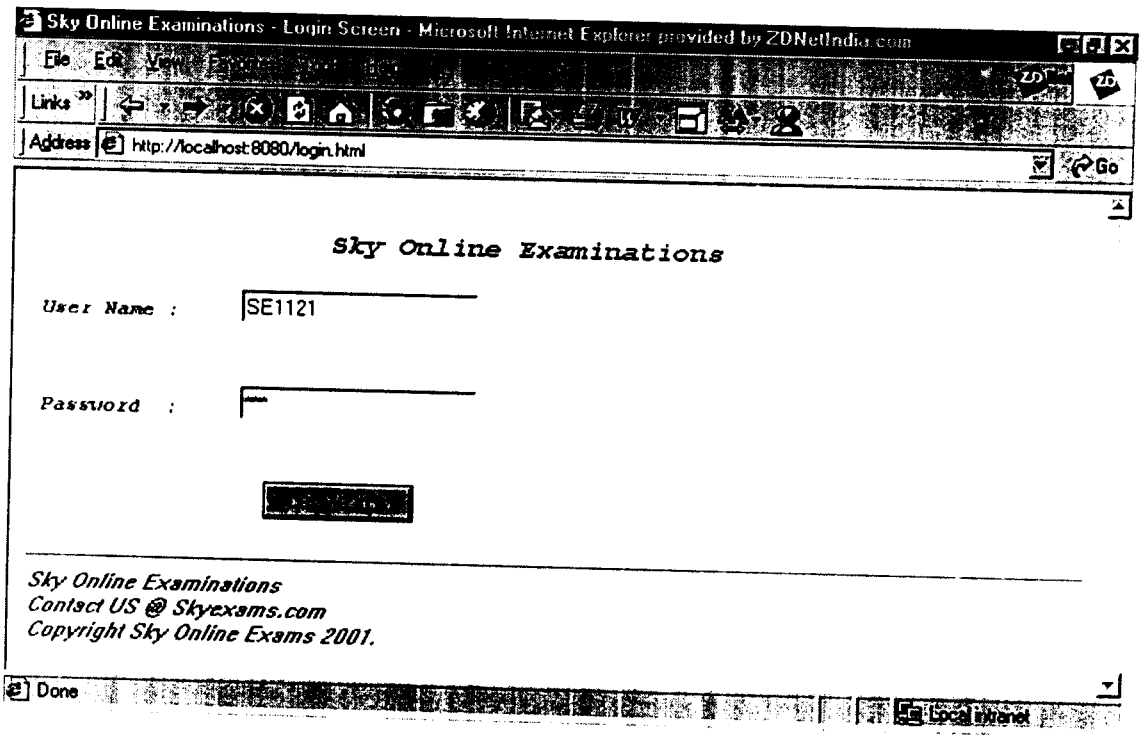

A
B
A
C
D
EXAM
Choose
Specialization
SPECIALIZATION
MASTER FILE
Display Questions
According
Specialization
QUESTIONNAIRE
SELECTED USERS
ALL USERS
SELECTED CONSLIDATED
RESULTS
Store Result in Database
Store in Database

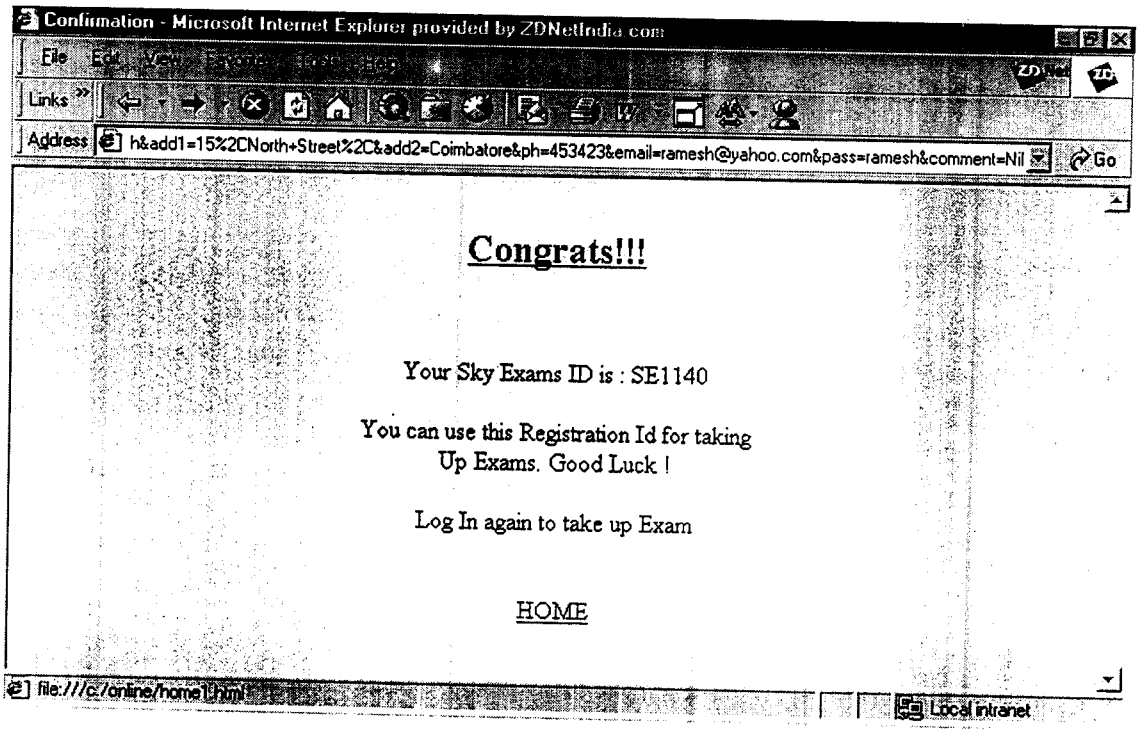
# APPENDIX C

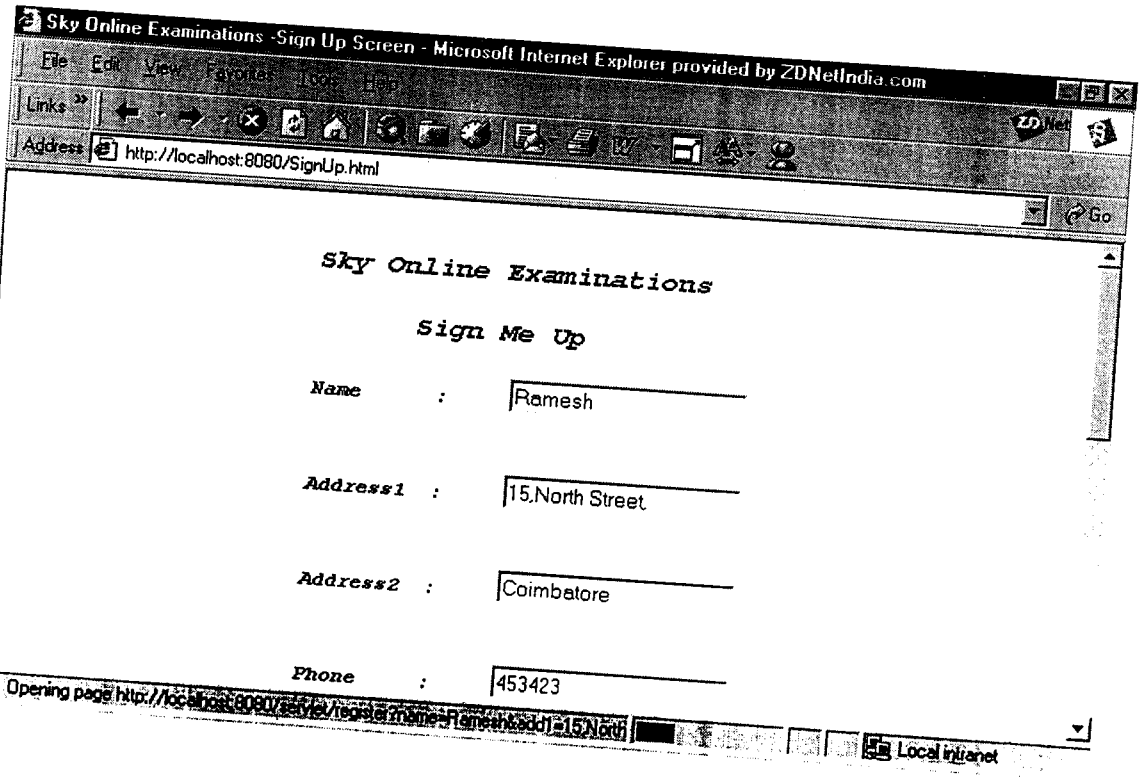

Sky OnLine Examinations - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View
Links
Address
http://localhost:8080/home1.html
winning is everything
Login
SignUp
AboutUs
E-Mail
User Preference
Sky Online Exams is purely to test your knowledge,proficiency in latest softwares. Minimum qualifying percentage in all test is 70% .Login & Test Your Skills...
All the Best...
Done

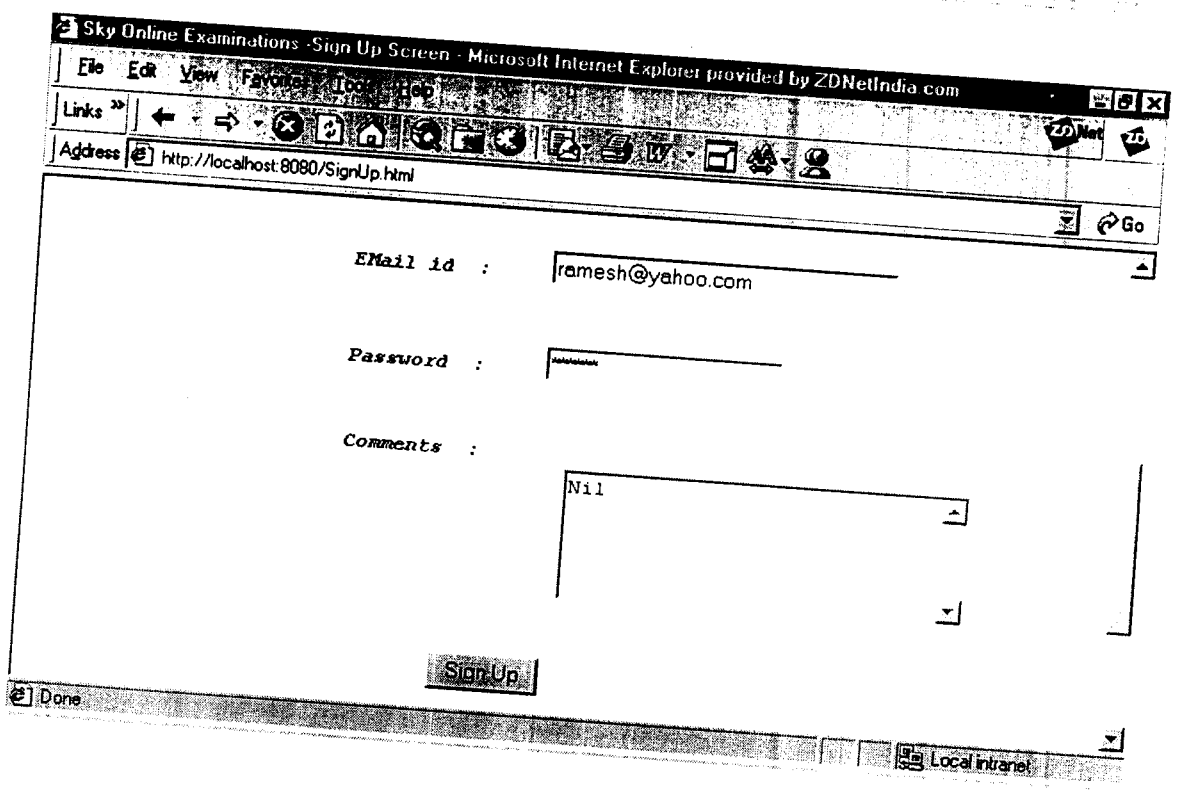

Sky Online Examinations - Login Screen - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites
Links
Address C:\online\login.html
Go
Sky Online Examinations
User Name :
administrator
Password :
Sky Online Examinations
Contact US @ Skyexams.com
Copyright Sky Online Exams 2001.
Done
My Computer

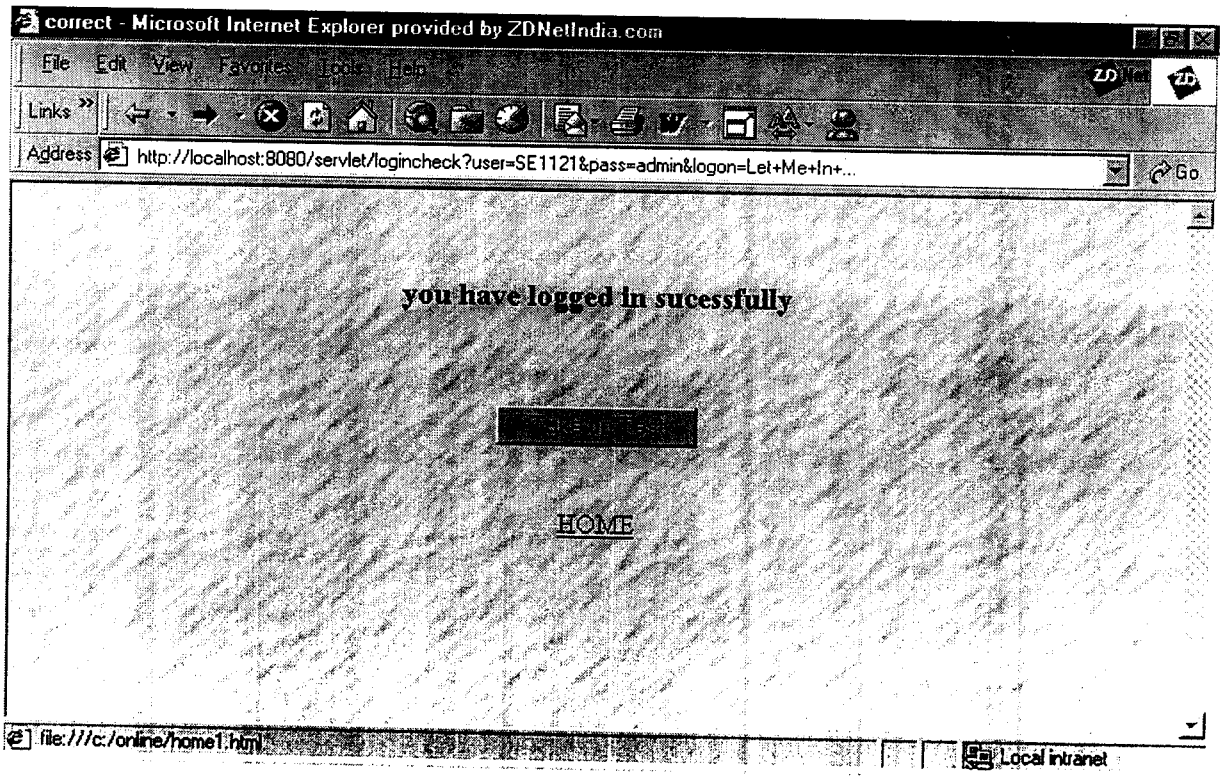

correct - Microsoft Internet Explorer provided by ZDNetIndia.com
Address http://localhost:8080/servlet/logincheck?user=administrator&pass=admin&logon=Let+Me+In+...
Go
you have logged in sucessfully
HOME
Candidate Status
Specialization
Question
Project Allocation
Local intranet

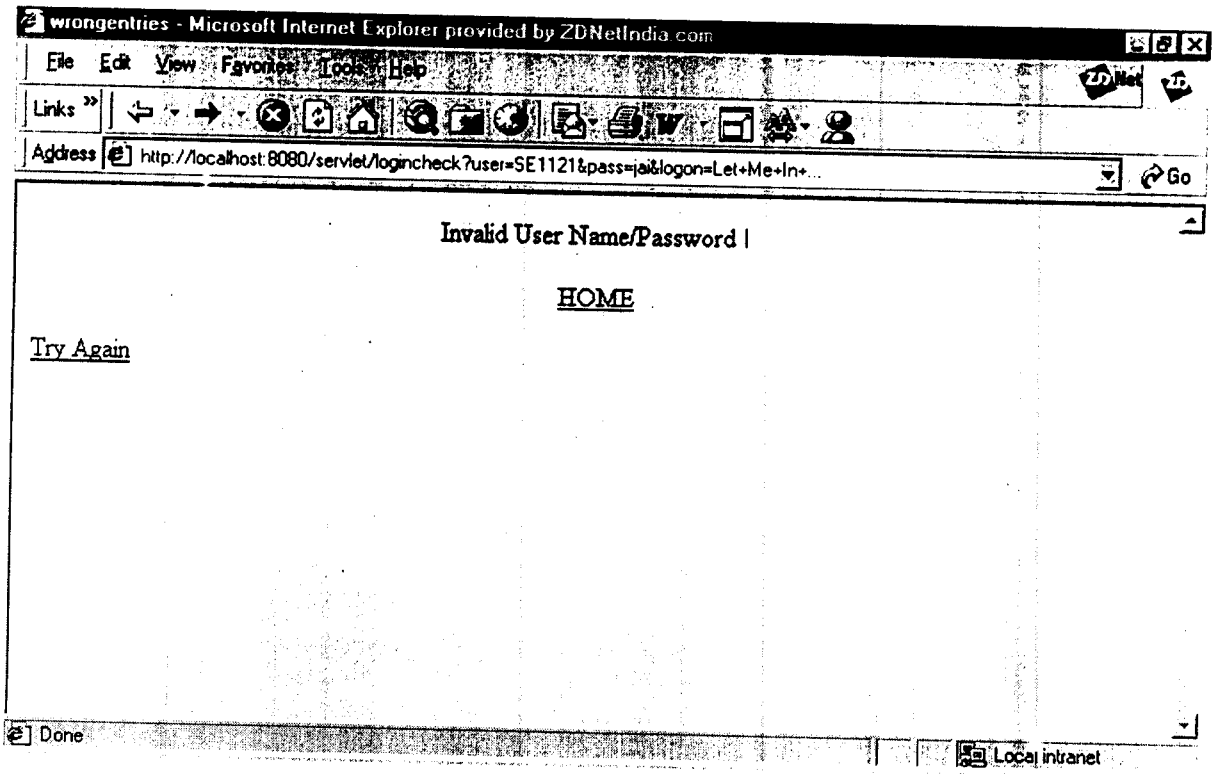

Sky Online Examinations - Login Screen - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View
Links
Address
http://localhost:8080/login.html
Go
Sky Online Examinations
User Name :
SE1121
Password :
Sky Online Examinations
Contact US @ Skyexams.com
Copyright Sky Online Exams 2001.
Done
Local intranet

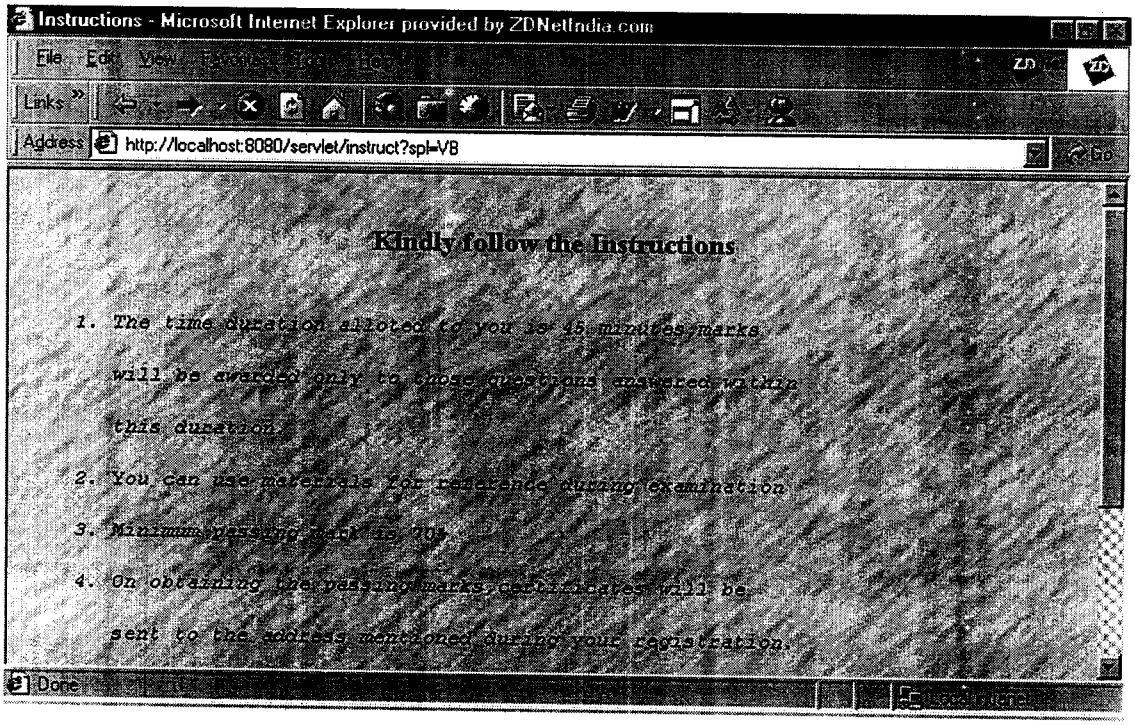

Confirmation - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address
h&add1=15%2CNorth+Street%2C&add2=Coimbatore&ph=453423&email=ramesh@yahoo.com&pass=ramesh&comment=Nil
Go
Congrats!!!
Your Sky Exams ID is : SE1140
You can use this Registration Id for taking
Up Exams. Good Luck !
Log In again to take up Exam
HOME
file:///c:/online/home1.html
Local intranet

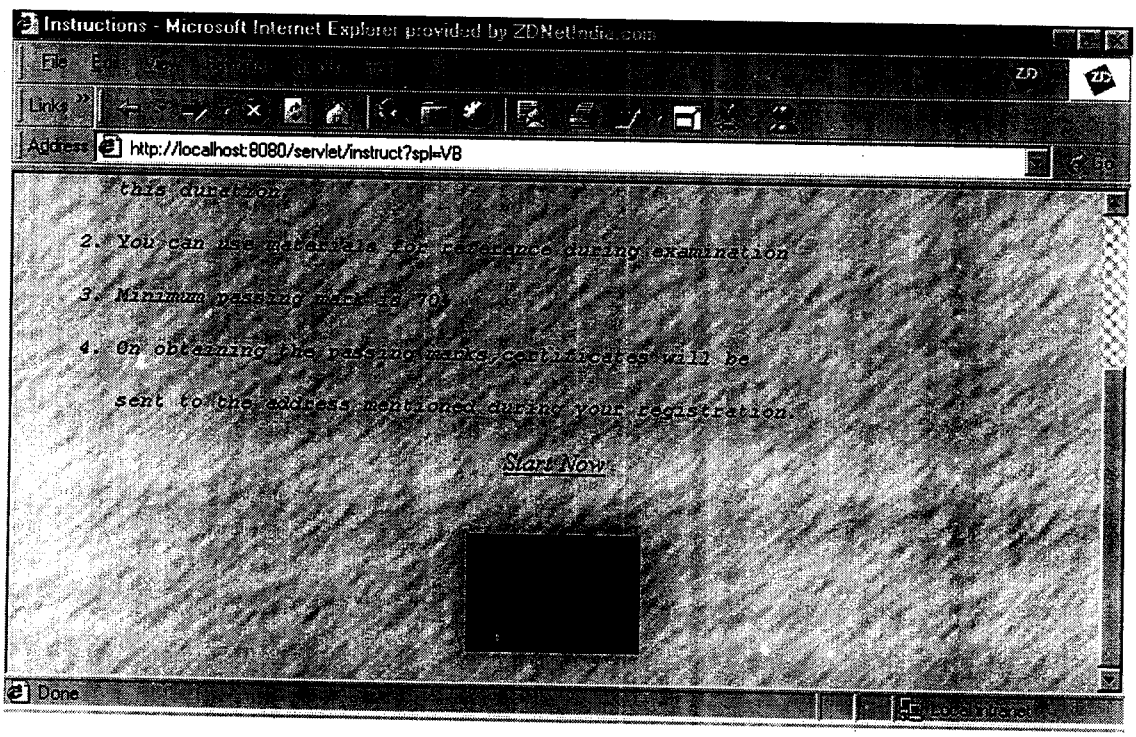

Sky Online Examinations -Sign Up Screen - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/SignUp.html
Go
Sky Online Examinations
Sign Me Up
Name : Ramesh
Address1 : 15,North Street
Address2 : Coimbatore
Phone : 453423
Opening page http://localhost:8080/servlet/register?name=Ramesh&add1=15,North
Local intranet

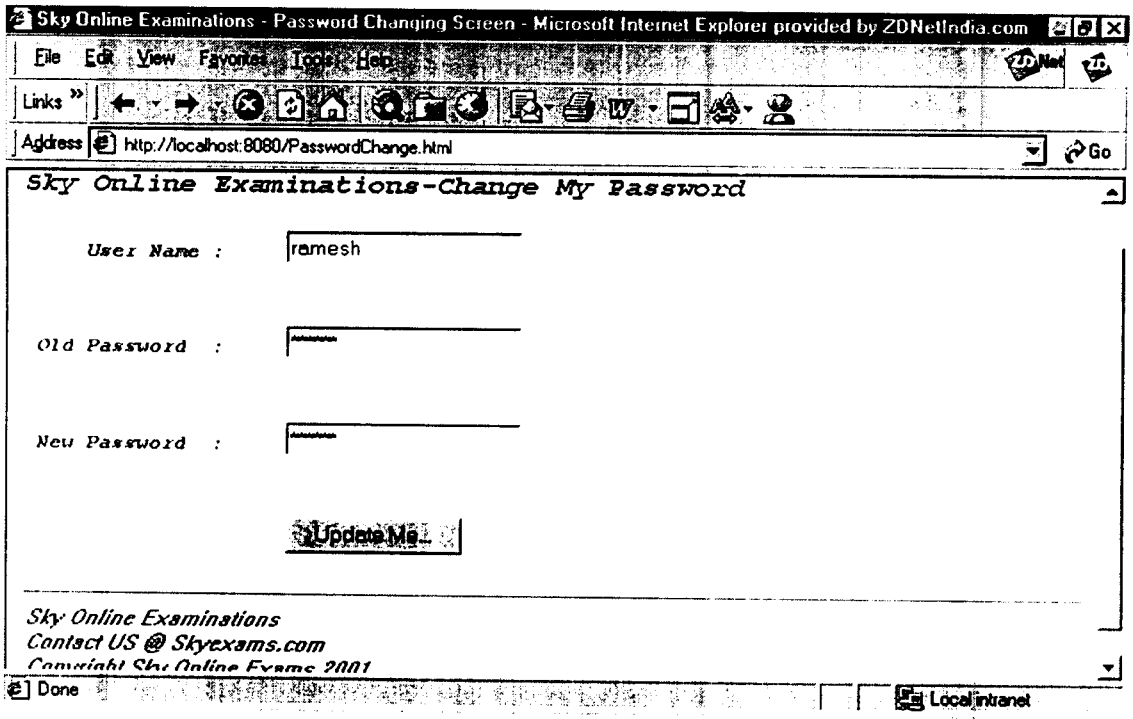

Sky Online Examinations -Sign Up Screen - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/SignUp.html
Go
EMail id : ramesh@yahoo.com
Password :
Comments :
Nil
Sign Up
Done
Local intranet

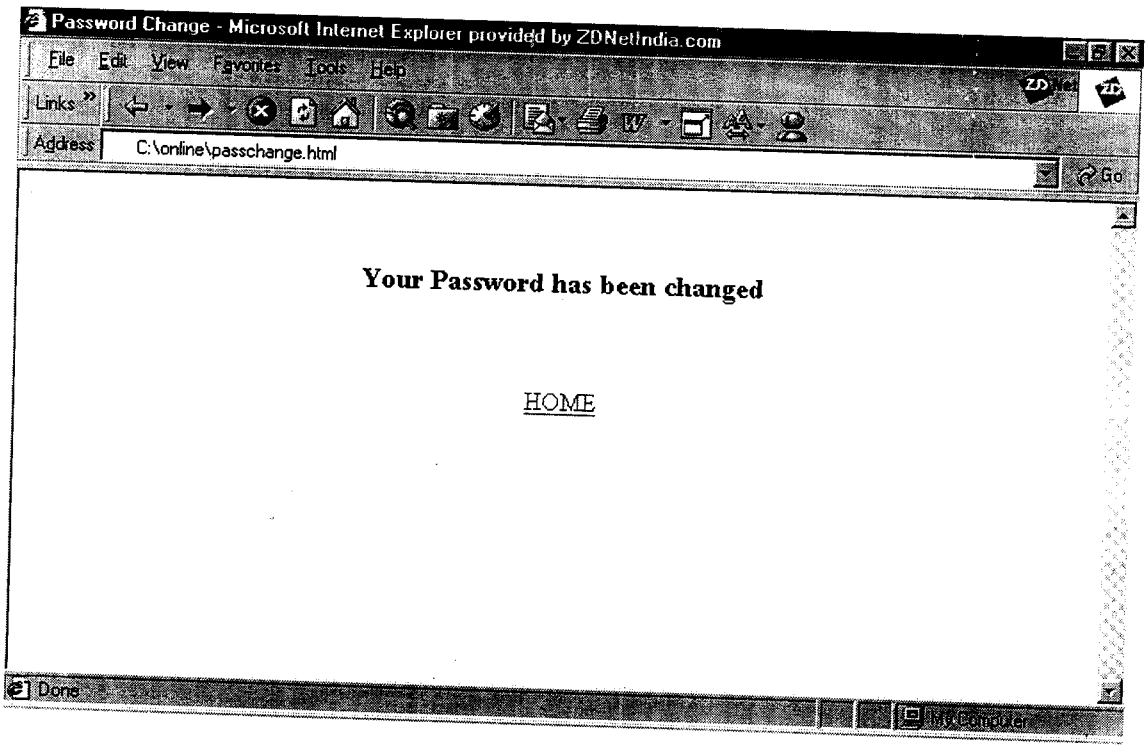

correct - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/servlet/logincheck?user=SE1121&pass=admin&logon=Let+Me+In+...
Go
you have logged in sucessfully
HOME
file:///c:/online/home1.html
Local intranet

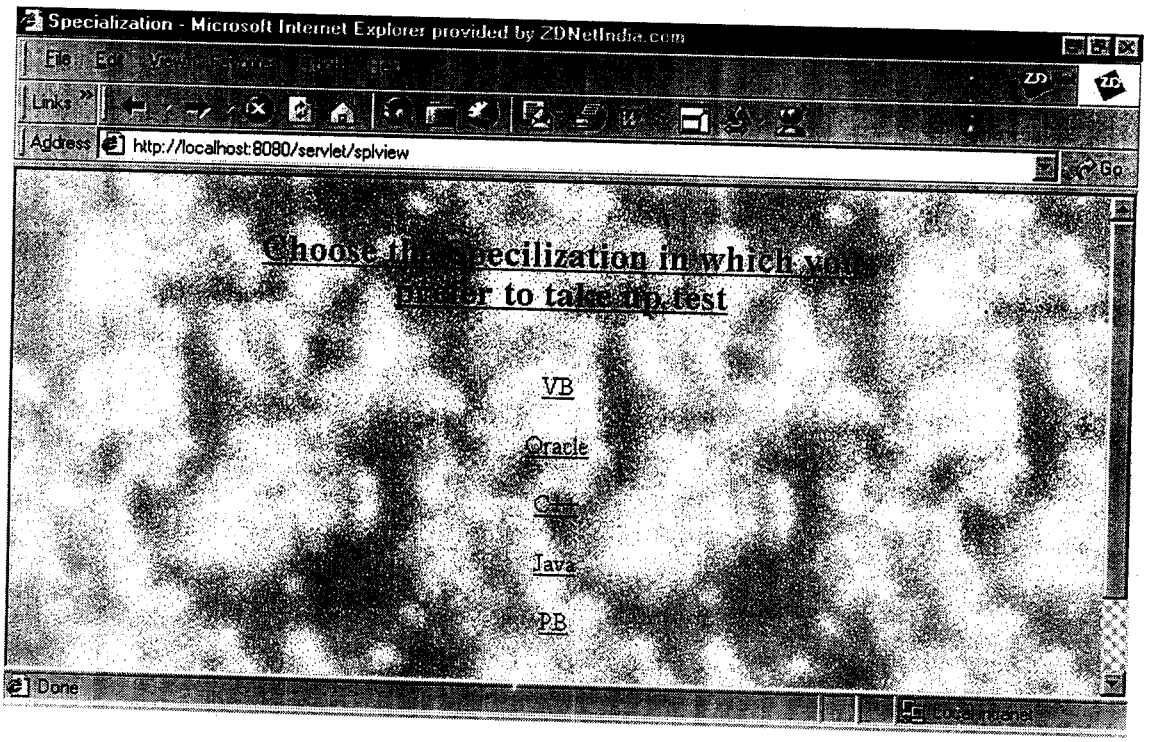

wrongentries - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/servlet/logincheck?user=SE1121&pass=jai&logon=Let+Me+In+...
Go
Invalid User Name/Password !
HOME
Try Again
Done
Local intranet

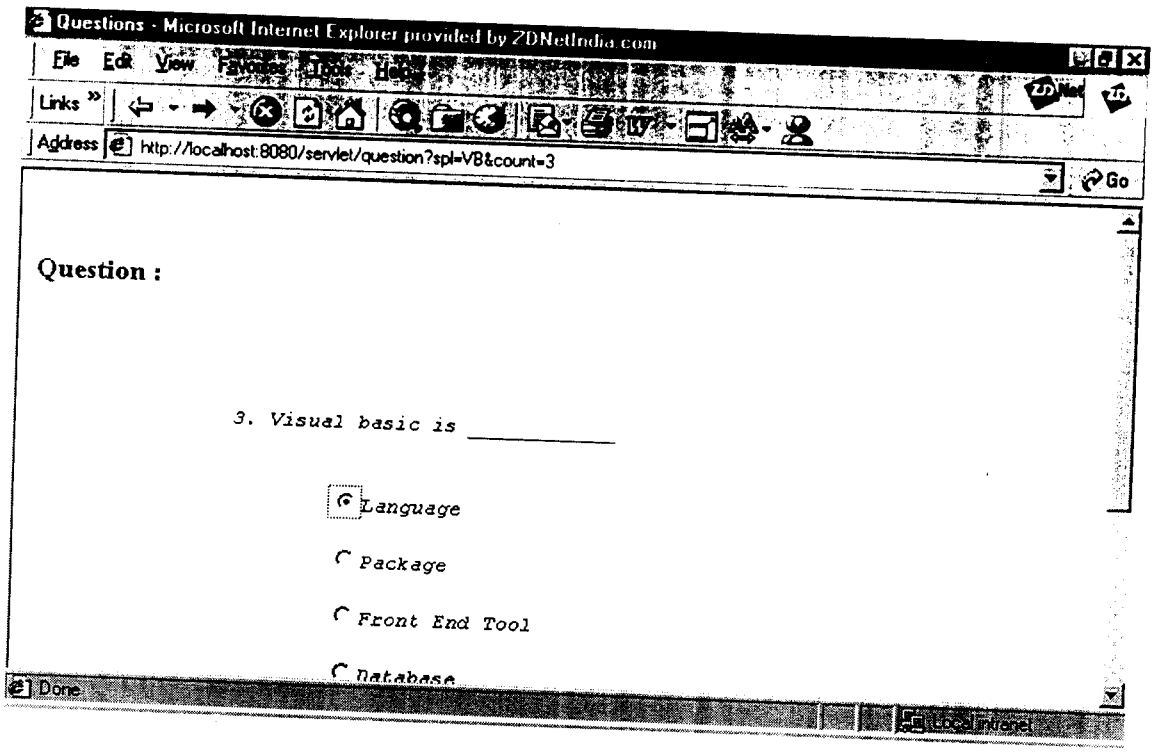

Instructions - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View
Links
Address http://localhost:8080/servlet/instruct?spl=VB
Kindly follow the instructions
1. The time duration alloted to you is 45 minutes,marks
will be awarded only to those questions answered within
this duration.
2. You can use materials for reference during examination
3. Minimum passing mark is 70%
4. On obtaining the passing marks,certificates will be
sent to the address mentioned during your registration.
Done


Instructions - Microsoft Internet Explorer provided by ZDNetIndia.com
Address http://localhost:8080/servlet/instruct?spl=VB
this duration.
2. You can use materials for reference during examination
3. Minimum passing mark is 70%
4. On obtaining the passing marks,certificates will be
sent to the address mentioned during your registration.
Start Now
Done


Sky Online Examinations - Password Changing Screen - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address
http://localhost:8080/PasswordChange.html
Go
Sky Online Examinations-Change My Password
User Name :
ramesh
Old Password :
New Password :
Update Me
Sky Online Examinations
Contact US @ Skyexams.com
Done
Local intranet


Password Change - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address
C:\online\passchange.html
Go
Your Password has been changed
HOME
Done
My Computer


Specialization - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit
Links
Address
http://localhost:8080/servlet/splview
Go
Choose the specilization in which you
prefer to take up test
VB
Oracle
C++
Java
PB
Done


Questions - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
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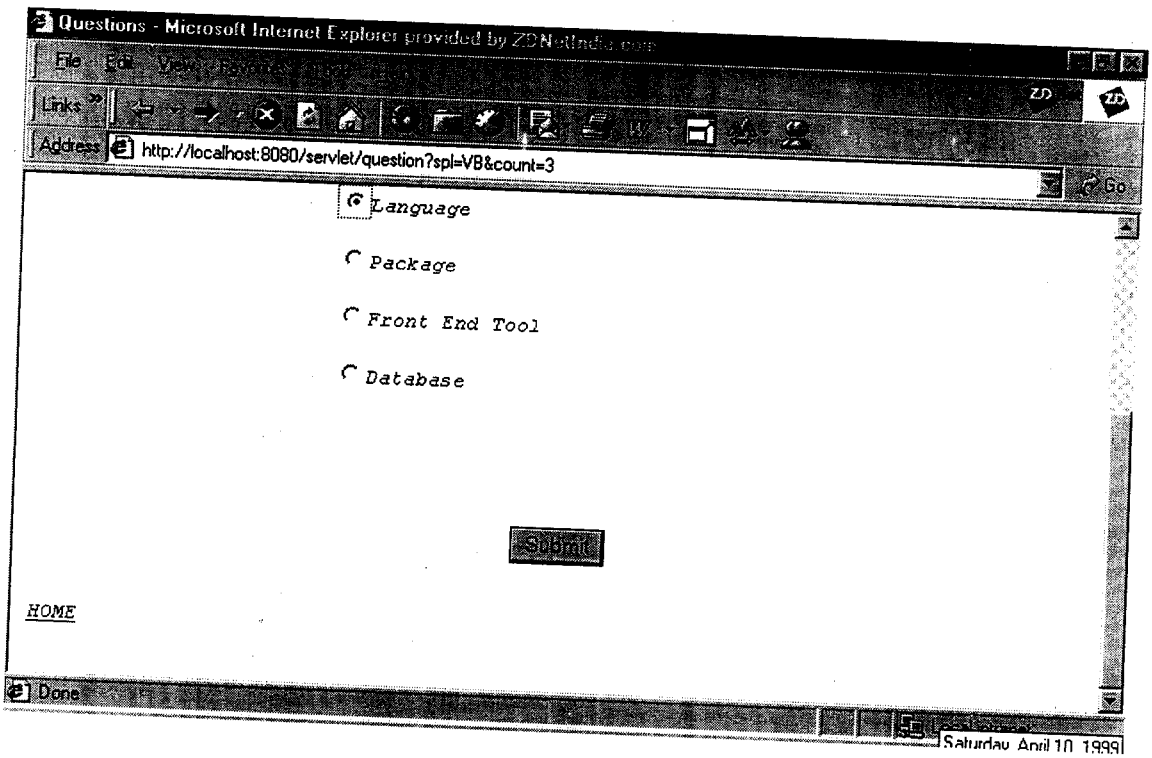
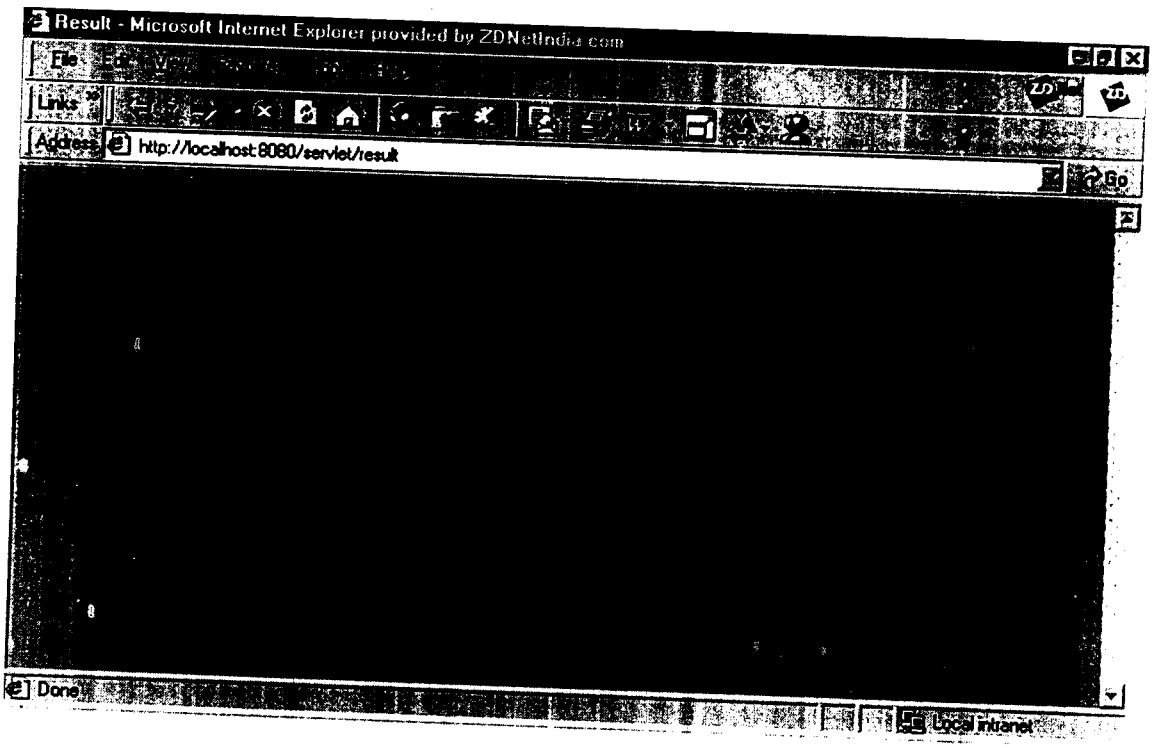
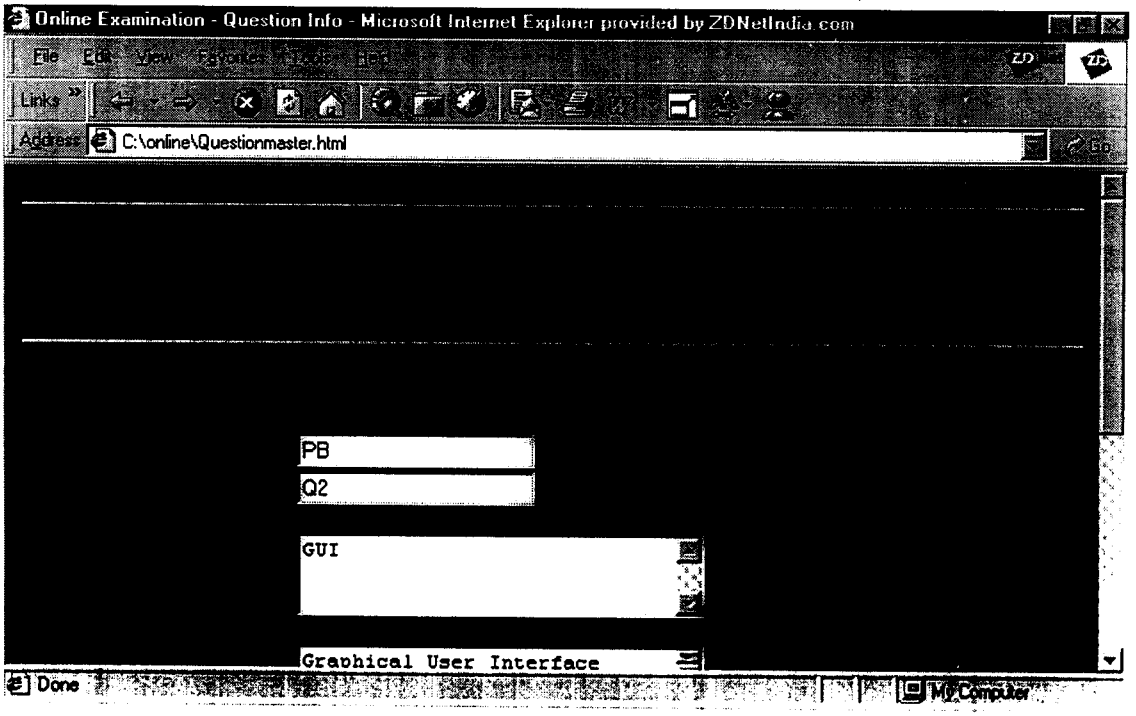
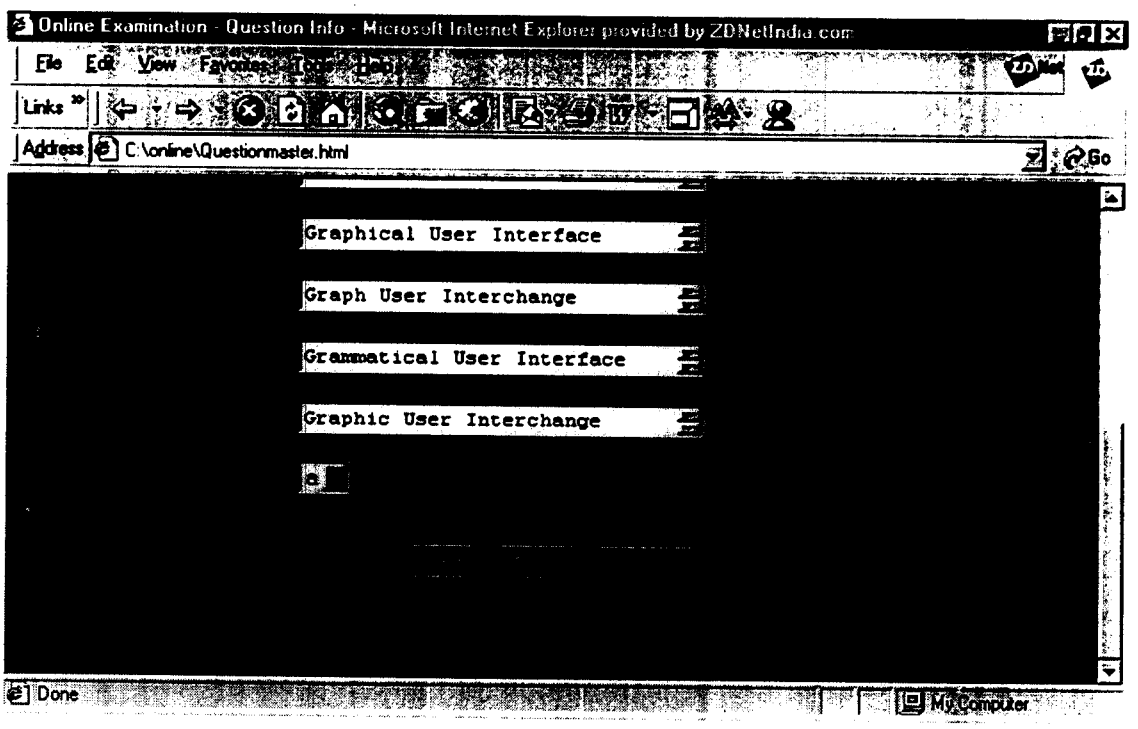
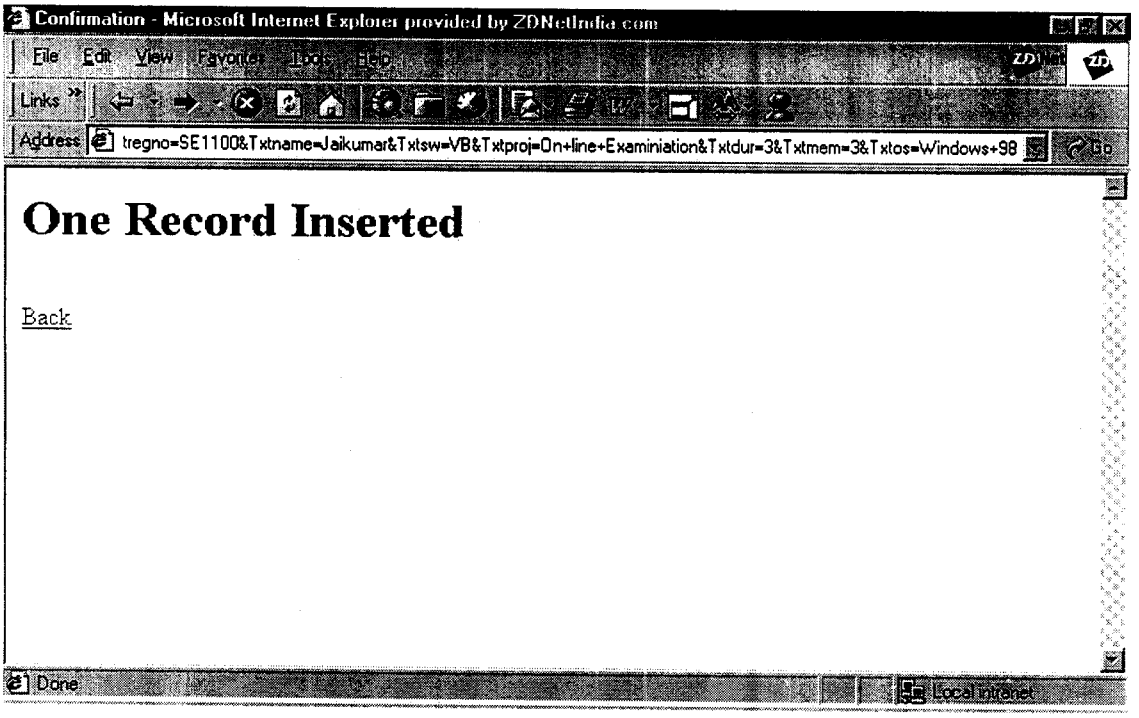
Go
Question :
3. Visual basic is _____
Language
Package
Front End Tool
Database
Done

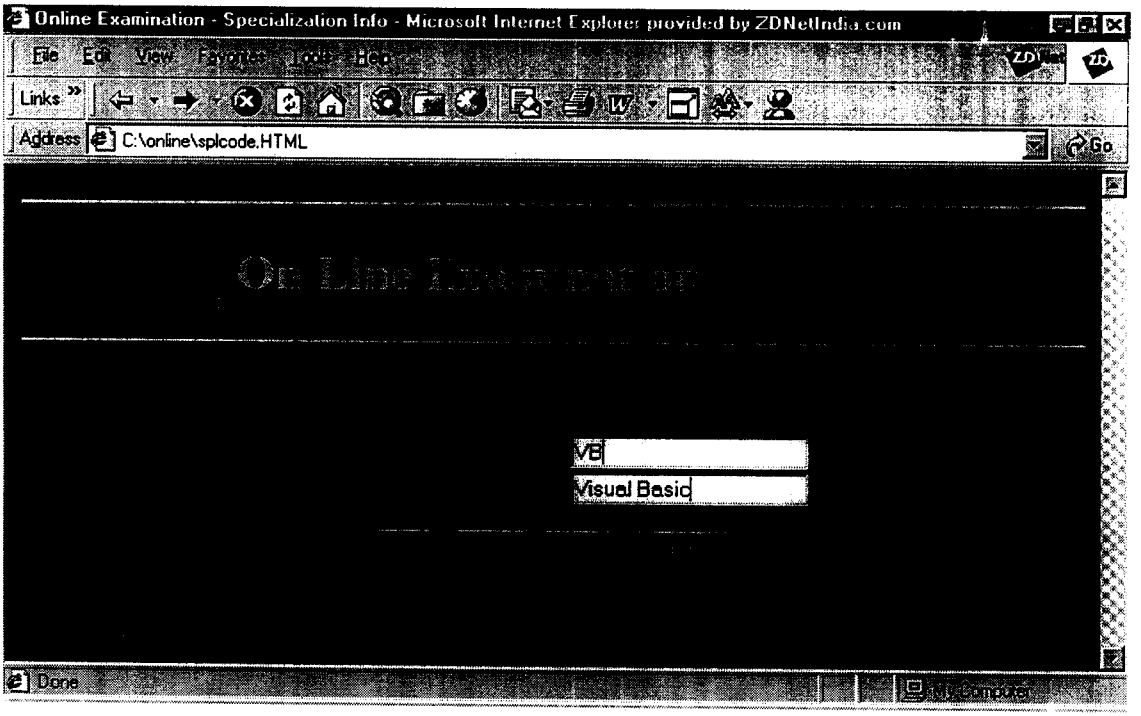

Questions - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/servlet/question?spl=VB&count=3
Go
Language
Package
Front End Tool
Database
Submit
HOME
Done
Saturday, April 10, 1999

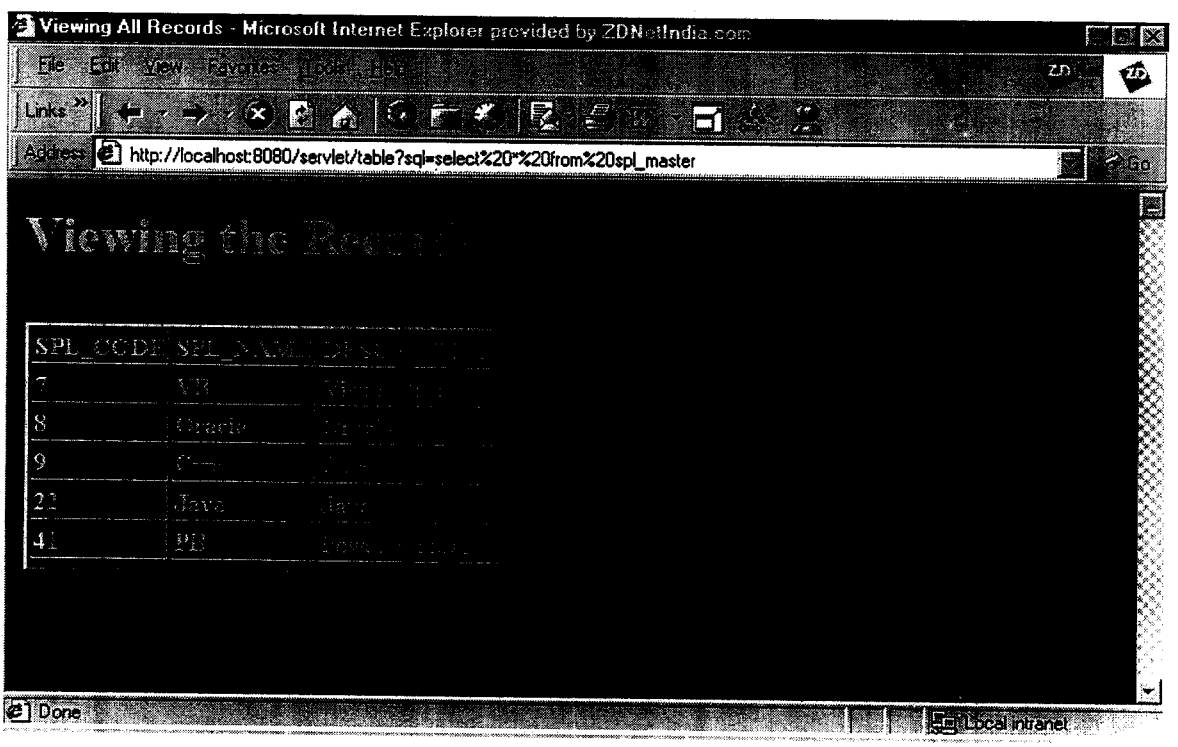

Result - Microsoft Internet Explorer provided by ZDNetIndia.com
File
Links
Address
http://localhost:8080/servlet/result
Go
Done
Local intranet

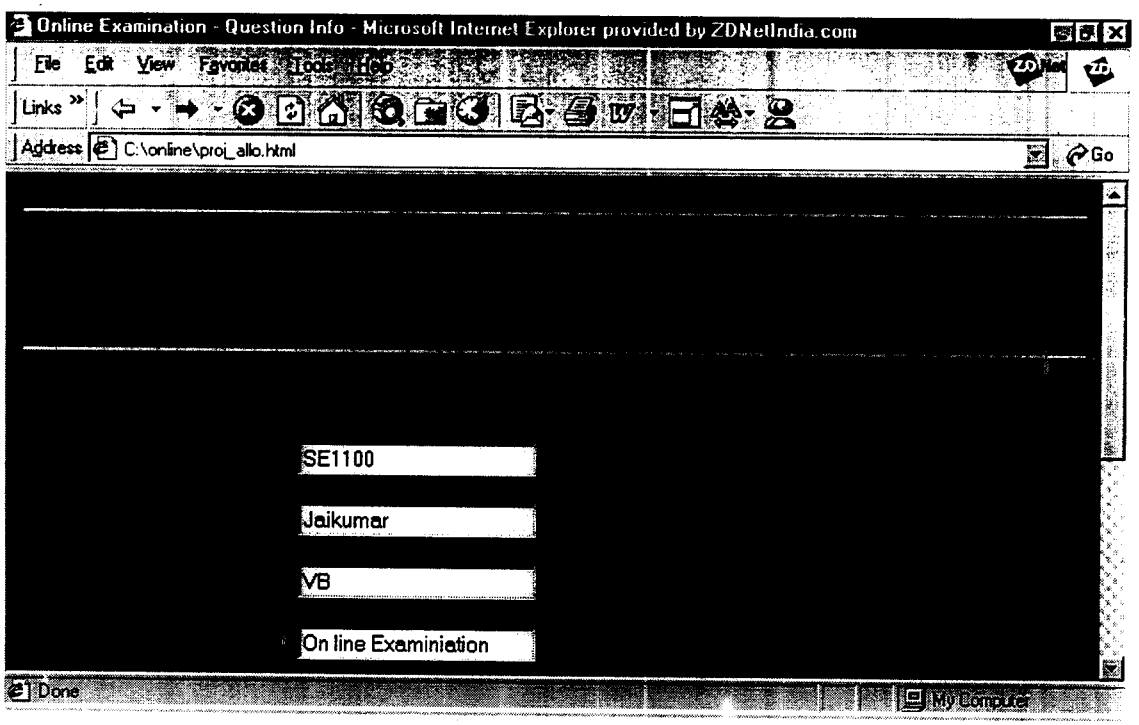

Online Examination - Question Info - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address C:\online\Questionmaster.html
PB
Q2
GUI
Graphical User Interface
Done
My Computer


Online Examination - Question Info - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address C:\online\Questionmaster.html
Go
Graphical User Interface
Graph User Interchange
Grammatical User Interface
Graphic User Interchange
Done
My Computer


Confirmation - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address
tregno=SE1100&Txtname=Jaikumar&Txtsw=VB&Txtproj=On+line+Examiniation&Txtdur=3&Txtmem=3&Txtos=Windows+98
One Record Inserted
Back
Done
Local intranet


Online Examination - Specialization Info - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address C:\online\splcode.HTML
Go
VB
Visual Basic
Done


Viewing All Records - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address http://localhost:8080/servlet/table?sql=select%20*%20from%20spl_master
Go
Viewing the Records
SPL_CODE
7
8
9
22
41
Done
Local intranet


Online Examination - Question Info - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
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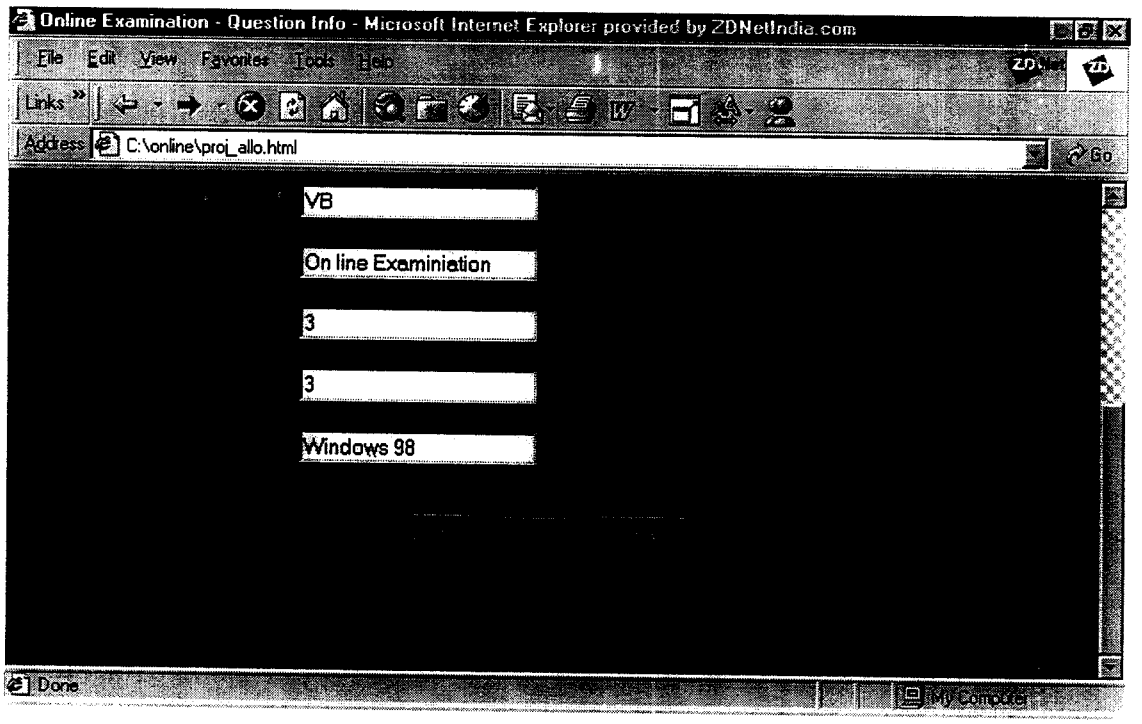
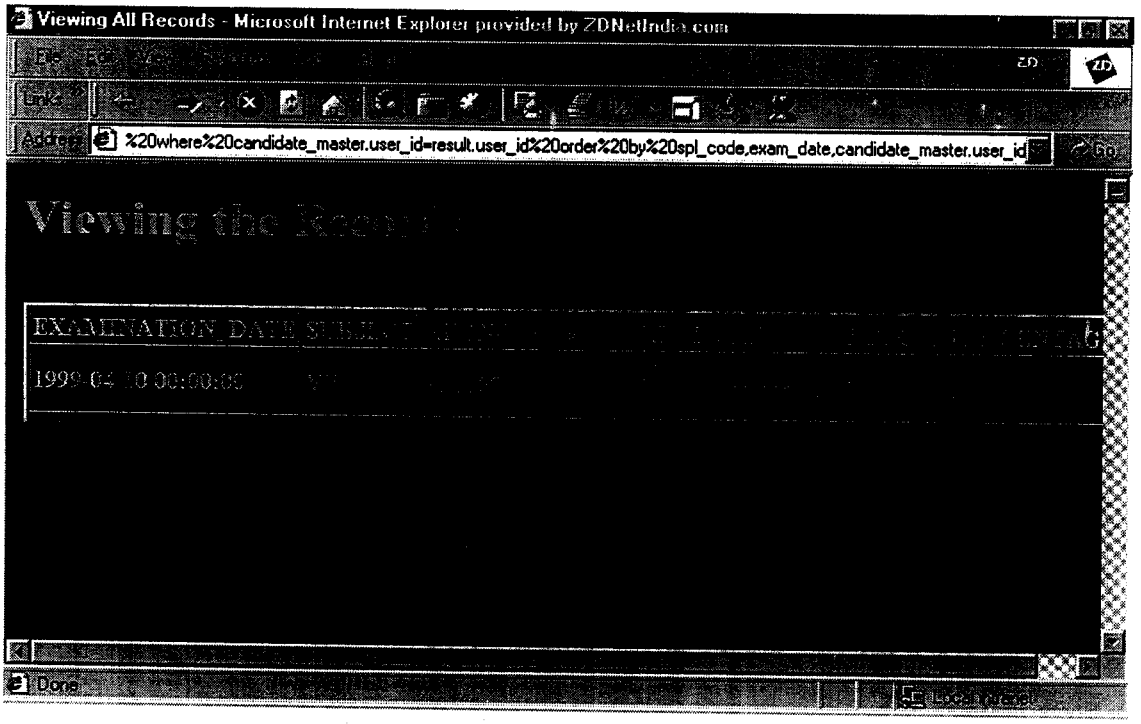
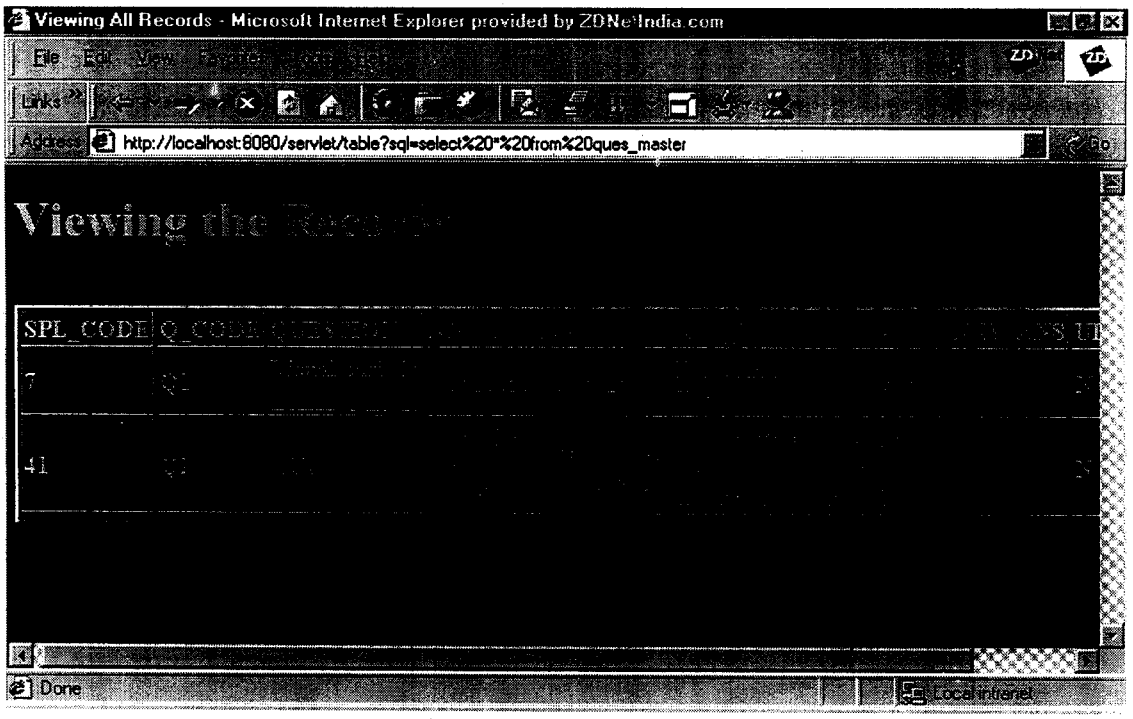
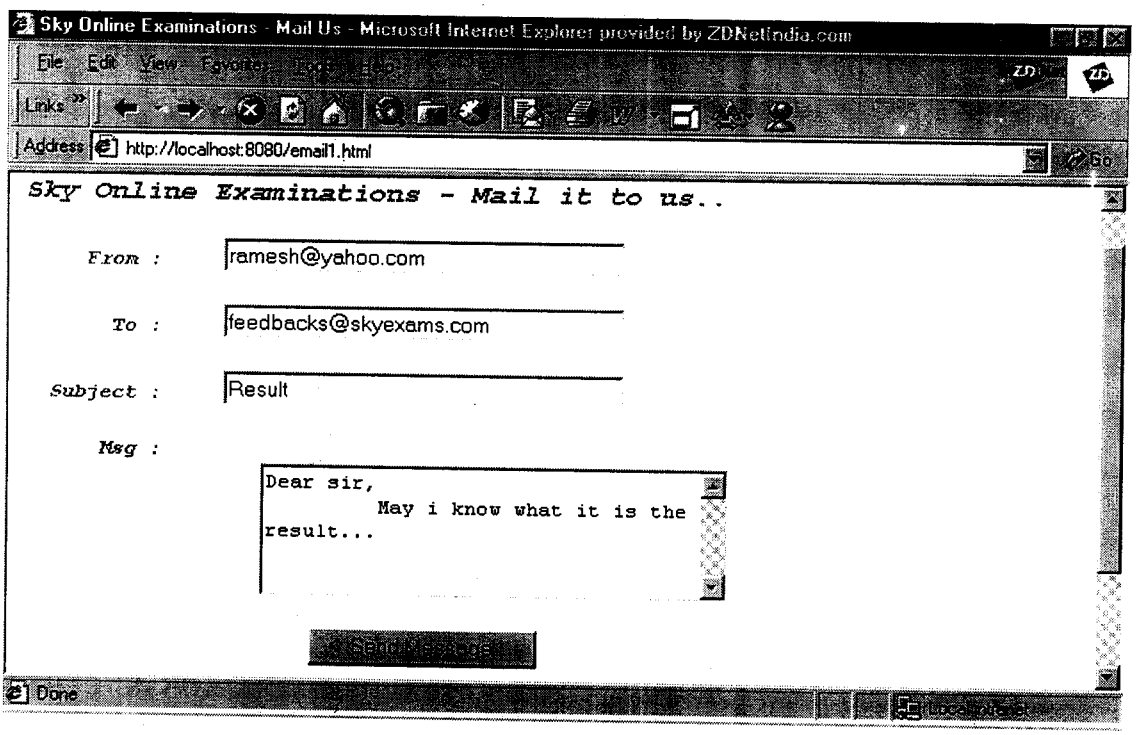
Go
SE1100
Jaikumar
VB
On line Examiniation
Done
My Computer


Online Examination - Question Info - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address C:\online\proj_allo.html
Go
VB
On line Examiniation
3
3
Windows 98
Done
My Computer


Viewing All Records - Microsoft Internet Explorer provided by ZDNetIndia.com
%20where%20candidate_master.user_id=result.user_id%20order%20by%20spl_code,exam_date,candidate_master.user_id
Viewing the Records
EXAMINATION DATE
1999-04-10 00:00:00
Done


Viewing All Records - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View
Links
Address
http://localhost:8080/servlet/table?sql=select%20*%20from%20ques_master
Viewing the
SPL_CODE
7
41
Done
Local intranet


Sky Online Examinations - Mail Us - Microsoft Internet Explorer provided by ZDNetIndia.com
File Edit View Favorites Tools Help
Links
Address
http://localhost:8080/email1.html
Sky Online Examinations - Mail it to us..
From :
ramesh@yahoo.com
To :
feedbacks@skyexams.com
Subject :
Result
Msg :
Dear sir,
May i know what it is the result...
Send Message
Done

# *BIBLIOGRAPHY*

# BIBLIOGRAPHY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