Department of Computer Science
&
Engineering

PROJECT REPORT

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Acknowledgement

Acknowledgement is not mere formality but a genuine opportunity to thank all those people without that active support in this project would not be able to be possible.

We are thankful to **Ms. Ujjwal Maan** for their valuable time they devoted to us and give us a lot of knowledge and help regarding our project. During our 5th semester in the curriculum of B. Tech. we are also thankful to our respected Head of Department **Ms. Sugandha Singh** and Teachers for their expert guidance. It is a great experience for us and we gained a lot here.

Words defeat us in expressing our deep sense of gratitude for our class mates, whose continual support and guidance enabled us all the challenges posed by this project, who provided us all the relevant information and the necessary Hardware, Software and new ideas that really helped us a lot. Special thanks are due to all other staff, Colleagues and friends for all the encouragement, inspiration and motivation.

I am whole heartedly thankful to my Project Guide at **CMC Limited**, **Ms. Nupur** for his guidance throughout the project with their technical help and suggestions. I am also grateful to them for their cooperation in providing the team with all resources.

I owe my regards to the entire faculty of the department of **B.tech** at **PDM- College of Engineering , Bahadurgarh** from where I have learnt the Basics of Computer and whose informal discussions and informal guidance was a beacon light for me in the entire duration of this work.

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ABSTRACT

To automate the process of Fairs/trade shows “Fair Planner” is being developed. The basic intent of “Fair Planner” is to provides the centralized solutions for business owners who promote their business by participating in the trade fair. “Fair Planner” will be providing the end users with the support to maintain details of the Fair being organized. All the details such as fair type (e.g electronics fair, garment fair etc.), number of booths/stalls available, cost factors involved, advertising opportunities available, participating company details etc. will be managed by “Fair Planner”. It is developed using Java technologies.

METHODOLOGIES

1. Software development life cycle is used.

2. Waterfall model is used to make project.

3.Proper Data Flow Diagrams are made to understand the project easily.etc.

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CHAPTER 1

INTRODUCTION

1.1 JAVA

1.1.1 INTRODUCTION TO JAVA

Java is an object-oriented programming language with a built-in application programming interface (API) that can handle graphics and user interfaces and that can be used to create applications or applets. Because of its rich set of API's, similar to Macintosh and Windows, and its platform independence, Java can also be thought of as a platform in itself. Java also has standard libraries for doing mathematics.

Much of the syntax of Java is the same as C and C++. One major difference is that Java does not have pointers. However, the biggest difference is that you must write object oriented code in Java.

In Java we distinguish between applications, which are programs that perform the same functions as those written in other programming languages, and applets, which are programs that can be embedded in a Web page and accessed over the Internet. Our initial focus will be on writing applications. When a program is compiled, a byte code is produced that can be read and executed by any platform that can run Java.

Java is one of the most job seeking programming languages in the recent I.T industry. Object-Oriented Programming (OOP) is an approach to program organization and development, which attempts to eliminate some of the pitfalls of conventional programming methods by incorporating the best of structured programming features with several new concepts. It is a new way of organizing and developing programs and has nothing to do with any particular language.

1.1.2 HISTORY OF JAVA

Java is a programming language originally developed by Sun Microsystems and released in 1995 as a core component of Sun's Java platform. The language derives much of its syntax from C and C++ but has a simpler object model and fewer low-level facilities. Java applications are typically compiled to byte code which can run on any Java virtual machine (JVM) regardless of computer architecture.

The original and reference implementation Java compilers, virtual machines, and class libraries were developed by Sun from 1995. As of May 2007,in compliance with the specifications of the Java Community Process, Sun made available most of their Java technologies as free software under the GNU General Public License. Others have also developed alternative implementations of these Sun technologies, such as the GNU Compiler for Java and GNU Class path. The Java language was created by James Gosling in June 1991 for use in a set top box project. The

language was initially called *Oak*, after an oak tree that stood outside Gosling's office - and also went by the name *Green* - and ended up later being renamed to *Java*, from a list of random words. Gosling's goals were to implement a virtual machine and a language that had a familiar C/C++ style of notation.

Primary goals: There were five primary goals in the creation of the Java language:

- It should use the object-oriented programming methodology.
- It should allow the same program to be executed on multiple operating systems.
- It should contain built-in support for using computer networks.
- It should be designed to execute code from remote sources securely.
- It should be easy to use by selecting what were considered the good parts of other object-oriented languages.

1.1.3 FEATURES OF JAVA

- **Compiled and Interpreted:**

Mostly a computer programming language is either compiled or interpreted. Java combines both these approaches thus making Java a two-stage system. First, Java compiler translates source code into what is known as byte code instructions. Byte codes are not machine instruction and therefore in the second stage, Java interpreter generates machine code that can be directly executed by the machine that is running the java program.

- **Platform-Independent**

Java programs can be easily moved from one computer system to another, anywhere and anytime. Changes and upgrades in operating systems, processors and system resources will not force any changes in java programs.

- **Portable:**

Java ensures portability in two ways. First, Java compiler generates byte code instruction that can be implemented on any machine. Secondly, the size of the primitive data types is machine independent.

- **Robust:**

Java is a robust language. It provides many safeguards to ensure reliable code. It has strict compile time and run time checking for data types. It is designed as a garbage-collected language relieving the programmers virtually all memory management problems. Java also incorporates the concepts of exception handling which captures series errors and eliminates any risk of crashing the system.Java systems not only verify all memory access but also ensure that no viruses are communicated with an applet. The absence of pointers in java ensures that programs cannot gain access to memory locations without proper authorization.

- **Distributed:**

Java is designed as a distributed language for creating applications on networks. It has the ability to share both data and programs. Java applications can open and access remote objects on Internet as easily as they can do in local system. This enables multiple programmers at multiple remote locations to collaborate and work together on a single project.

- **Simple:**

There are various features that make the java as a simple language. Programs are easy to write and debug because java does not use the pointers explicitly. It is much harder to write the java programs that can crash the system but we cannot say about the other programming languages. Java provides the bug free system due to the strong memory management. It also has the automatic memory allocation and deallocation system.

- **Object Oriented:**

To be an Object Oriented language, any language must follow at least the four characteristics.

- **Inheritance:**

It is the process of creating the new classes and using the behavior of the existing classes by extending them just to reuse the existing code and adding the additional features as needed.

- **Encapsulation:**

It is the mechanism of combining the information and providing the abstraction.

- **Polymorphism:**

As the name suggest one name multiple form, Polymorphism is the way of providing the different functionality by the functions having the same name based on the signatures of the methods.

- **Dynamic binding:**

Sometimes we don't have the knowledge of objects about their specific types while writing our code. It is the way of providing the maximum functionality to a program about the specific type at runtime.

As the languages like Objective C, C++ fulfils the above four characteristics yet they are not fully object oriented languages because they are structured as well as object oriented languages. But in case of java, it is a fully Object Oriented language because object is at the outer most level of data structure in java. No stand alone methods, constants, and variables are there in java. Everything in java is object even the primitive data types can also be converted into object by using the wrapper class.

- **Dynamic:**

While executing the java program the user can get the required files dynamically from a local drive or from a computer thousands of miles away from the user just by connecting with the Internet.

- **Secure:**

Java does not use memory pointers explicitly. All the programs in java are run under an area known as the sand box. Security manager determines the accessibility options of a class like reading and writing a file to the local disk. Java uses the public key encryption system to allow the java applications to transmit over the internet in the secure encrypted form. The byte code Verifier checks the classes after loading.

- **Performance:**

Java uses native code usage, and lightweight process called threads. In the beginning interpretation of byte code resulted the performance slow but the advance version of JVM uses the adaptive and just in time compilation technique that improves the performance.

- **Multithreaded:**

As we all know several features of Java like Secure, Robust, Portable, dynamic etc; you will be more delighted to know another feature of Java which is Multithreaded. Java is also a multithreaded programming language. Multithreading means a single program having different threads executing independently at the same time. Multiple threads execute instructions according to the program code in a process or a program. Multithreading works the similar way as multiple processes run on one computer. Multithreading programming is a very interesting concept in Java. In multithreaded programs not even a single thread disturbs the execution of other thread. Threads are obtained from the pool of available ready to run threads and they run on the system CPUs.

1.2 MySQL(DATABASE)

1.2.1 MySQL

The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation.

MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack (and other 'AMP' stacks). LAMP is an acronym for "LINUX, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL.

1.2.2 INTERFACES

MySQL is a relational database management system (RDBMS), and ships with no GUI tools to administer MySQL databases or manage data contained within the databases. Users may use the included command line tools, or use MySQL "front-ends", desktop software and web applications that create and manage MySQL databases, build database structures, back up data, inspect status, and work with data records. The official set of MySQL front-end tools,

MySQL Workbench running on OS X

Graphical

The official MySQL Workbench is a free integrated environment developed by MySQL AB, that enables users to graphically administer MySQL databases and visually design database structures. MySQL Workbench replaces the previous package of software, MySQL GUI Tools. Similar to other third-party packages, but still considered the authoritative MySQL front end, MySQL Workbench lets users manage database design & modeling, SQL development (replacing MySQL Query Browser) and Database administration (replacing MySQL Administrator).

MySQL Workbench is available in two editions, the regular free and open source Community Edition which may be downloaded from the MySQL website, and the proprietary Standard Edition which extends and improves the feature set of the Community Edition.

Third-party proprietary and free graphical administration applications (or "front ends") are available that integrate with MySQL and enable users to work with database structure and data visually. Some well-known front ends, in alphabetical order, are:

- Adminer – a free MySQL front end written in one PHP script, capable of managing multiple databases, with many CSS skins available.
- DBEdit – a free front end for MySQL and other databases.
- HeidiSQL – a full featured free front end that runs on Windows, and can connect to local or remote MySQL servers to manage databases, tables, column structure, and individual data records. Also supports specialised GUI features for date/time fields and enumerated multiple-value fields.
- LibreOffice Base – LibreOffice Base allows the creation and management of databases, preparation of forms and reports that provide end users easy access to data. Like Microsoft Access, it can be used as a front-end for various database systems, including Access databases (JET), ODBC data sources, and MySQL or PostgreSQL.
- Navicat – a series of proprietary graphical database management applications, developed for Windows, Macintosh and Linux.
- OpenOffice.org – OpenOffice.org Base can manage MySQL databases if the entire suite is installed. Free and open-source.
- phpMyAdmin – a free Web-based front end widely installed by web hosts, since it is developed in PHP and is included in the LAMP stack, MAMP, XAMPP and WAMP software bundle installers.
- Webmin – a free Web-based management utility and a MySQL front end, developed in Perl with some parts written in Java.
- SQLBuddy – a free Web-based front end, developed in PHP.
- SQLyog – commercial, but there is also a free 'community' edition available.
- Toad for MySQL – a free development and administration front end for MySQL from Quest Software
- Chive – is a free, open source, web-based database management tool designed as an alternative to phpMyAdmin.

Other available proprietary MySQL front ends include dbForge Studio for MySQL, DBStudio, Epictetus, Microsoft Access, Oracle SQL Developer, SchemaBank, SQLPro SQL Client, Toad Data Modeler and DaDaBIK.

Command line

MySQL ships with many command line tools, from which the main interface is 'mysql' client. Third parties have also developed tools to manage MySQL servers.

- MySQL Utilities – a set of utilities designed to perform common maintenance and administrative tasks. Originally included as part of the MySQL Workbench, the utilities are now a stand-alone download available from Oracle.

- Percona Toolkit – a cross-platform toolkit for MySQL, developed in Perl.[32] Percona Toolkit can be used to prove replication is working correctly, fix corrupted data,

automate repetitive tasks, and speed up servers. Percona Toolkit is included with several Linux distributions such as CentOS and Debian, and packages are available for Fedora and Ubuntu as well. Percona Toolkit was originally developed as Maatkit, but as of late 2011, Maatkit is no longer developed.

Programming

MySQL works on many system platforms, including AIX, BSDi, FreeBSD, HP-UX, eComStation, i5/OS, IRIX, Linux, OS X, Microsoft Windows, NetBSD, Novell NetWare, OpenBSD, OpenSolaris, OS/2 Warp, QNX, Oracle Solaris, Symbian, SunOS, SCO OpenServer, SCO UnixWare, Sanos and Tru64. A port of MySQL to OpenVMS also exists.

MySQL is written in C and C++. Its SQL parser is written in yacc, but it uses a home-brewed lexical analyzer. Many programming languages with language-specific APIs include libraries for accessing MySQL databases. These include MySQL Connector/Net for integration with Microsoft's Visual Studio (languages such as C# and VB are most commonly used) and the JDBC driver for Java. In addition, an ODBC interface called MyODBC allows additional programming languages that support the ODBC interface to communicate with a MySQL database, such as ASP or ColdFusion. The HTSQL – URL-based query method also ships with a MySQL adapter, allowing direct interaction between a MySQL database and any web client via structured URLs.

1.2.3 FEATURES

MySQL is offered under two different editions: the open source MySQL Community Server and the commercial Enterprise Server. MySQL Enterprise Server is differentiated by a series of commercial extensions which install as server plugins, but otherwise shares the version numbering system and is built from the same code base.

Major features as available in MySQL 5.6:

- A broad subset of ANSI SQL 99, as well as extensions
- Cross-platform support
- Stored procedures, using a procedural language that closely adheres to SQL/PSM
- Triggers
- Cursors
- Updatable views
- Online DDL when using the InnoDB Storage Engine.
- Information schema
- Performance Schema
- A set of SQL Mode options to control runtime behavior, including a strict mode to better adhere to SQL standards.
- X/Open XA distributed transaction processing (DTP) support; two phase commit as part of this, using the default InnoDB storage engine
- Transactions with savepoints when using the default InnoDB Storage Engine. The NDB Cluster Storage Engine also supports transactions.

- ACID compliance when using InnoDB and NDB Cluster Storage Engines
- SSL support
- Query caching
- Sub-SELECTs (i.e. nested SELECTs)
- Built-in Replication support (i.e. Master-Master Replication & Master-Slave Replication) with one master per slave, many slaves per master. Multi-master replication is provided in MySQL Cluster, and multi-master support can be added to unclustered configurations using Galera Cluster.
- Full-text indexing and searching
- Embedded database library
- Unicode support
- Partitioned tables with pruning of partitions in optimizer
- Shared-nothing clustering through MySQL Cluster
- Multiple storage engines, allowing one to choose the one that is most effective for each table in the application.
- Native storage engines InnoDB, MyISAM, Merge, Memory (heap), Federated, Archive, CSV, Blackhole, NDB Cluster.
- Commit grouping, gathering multiple transactions from multiple connections together to increase the number of commits per second.

The developers release minor updates of the MySQL Server approximately every two months. The sources can be obtained from MySQL's website or from MySQL's Bazaar repository, both under the GPL license.

1.2.4 LIMITATIONS

Like other SQL databases, MySQL does not currently comply with the full SQL standard for some of the implemented functionality, including foreign key references when using some storage engines other than the default of InnoDB.

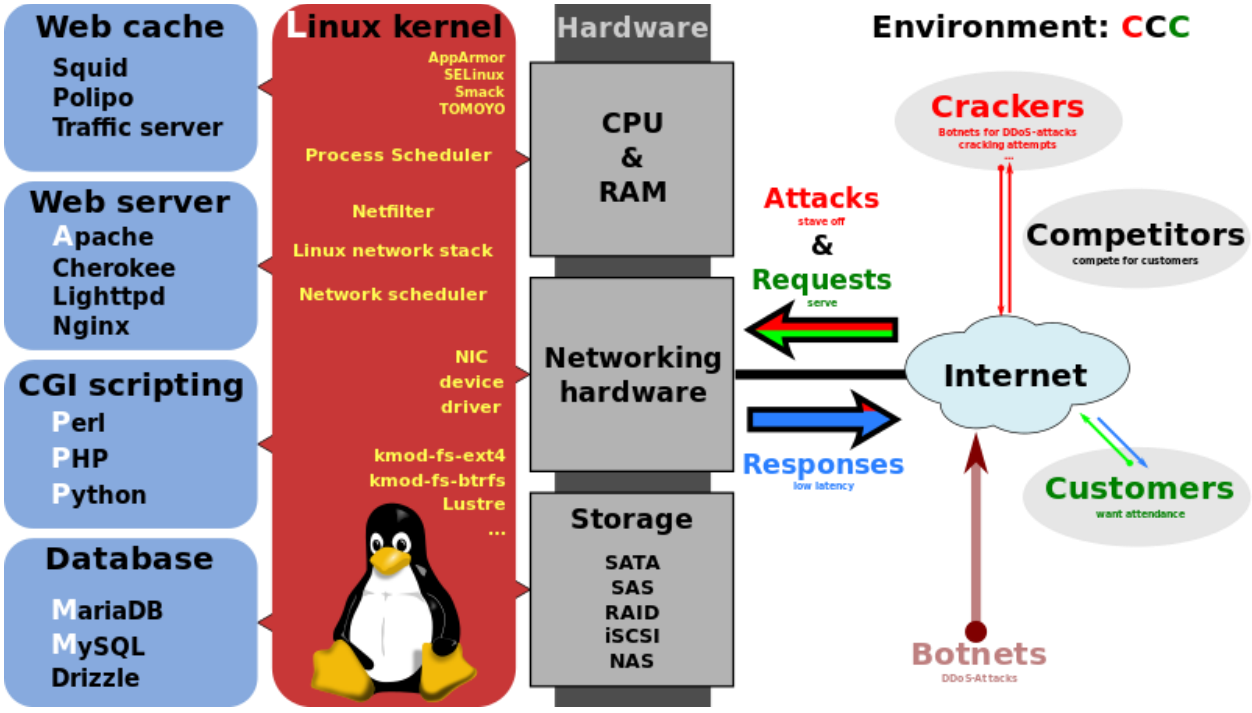
Up until MySQL 5.7, triggers are limited to one per action / timing, meaning that at most one trigger can be defined to be executed after an INSERT operation, and one before INSERT on the same table. No triggers can be defined on views.

MySQL, like most other transactional relational databases, is strongly limited by hard disk performance. This is especially true in terms of write latency.[43] Given the recent appearance of very affordable consumer grade SATA interface solid-state drives that offer zero mechanical latency, a fivefold speedup over even an eight drive RAID array can be had for a smaller investment.

1.2.5 DEPLOYMENT

MySQL can be built and installed manually from source code, but this can be tedious so it is more commonly installed from a binary package unless special customizations are required. On most Linux distributions the package management system can download and install MySQL with

minimal effort, though further configuration is often required to adjust security and optimization settings.



The LAMP software bundle (here additionally with Squid). A high performance and high-availability solution for a hostile environment

Though MySQL began as a low-end alternative to more powerful proprietary databases, it has gradually evolved to support higher-scale needs as well. It is still most commonly used in small to medium scale single-server deployments, either as a component in a LAMP-based web application or as a standalone database server. Much of MySQL's appeal originates in its relative simplicity and ease of use, which is enabled by an ecosystem of open source tools such as phpMyAdmin. In the medium range, MySQL can be scaled by deploying it on more powerful hardware, such as a multi-processor server with gigabytes of memory.

There are however limits to how far performance can scale on a single server ('scaling up'), so on larger scales, multi-server MySQL ('scaling out') deployments are required to provide improved performance and reliability. A typical high-end configuration can include a powerful master database which handles data write operations and is replicated to multiple slaves that handle all read operations.[47] The master server synchronizes continually with its slaves so in the event of failure a slave can be promoted to become the new master, minimizing downtime. Further improvements in performance can be achieved by caching the results from database queries in memory using memcached, or breaking down a database into smaller chunks called shards which can be spread across a number of distributed server clusters.

1.2.6 BACKUP

- File system snapshot or volume manager snapshot – backups are performed by using an external tool provided by the operating system (such as LVM) or storage device, with additional support from MySQL for ensuring consistency of such snapshots.
- mysqldump – a logical backup tool included with both community and enterprise editions of MySQL. Supports backup from all storage engines.
- MySQL Enterprise Backup – a hot backup utility included as part of the MySQL Enterprise subscription from Oracle. Offers native InnoDB hot backup, as well as backup for other storage engines.
- XtraBackup – open source MySQL hot backup software. Some notable features include hot, non-locking backups for InnoDB storage, incremental backups, streaming, parallel-compressed backups, throttling based on the number of I/O operations per second, etc.

1.2.7 HIGH AVAILABILITY

Ensuring high availability requires a certain amount of redundancy in the system. For database systems, the redundancy traditionally takes the form of having a primary server acting as a master, and using replication to keep secondaries available to take over in case the primary fails. This means that the "server" that the application connects to is in reality a collection of servers, not a single server. In a similar manner, if the application is using a sharded database, it is in reality working with a collection of servers, not a single server. In this case, a collection of servers is usually referred to as a farm.

One of the projects aiming to provide high availability for MySQL is MySQL Fabric, an integrated system for managing a collection of MySQL servers, and a framework on top of which high availability and database sharding is built. MySQL Fabric is open-source and is intended to be extensible, easy to use, and to support procedure execution even in the presence of failure, providing an execution model usually called resilient execution. MySQL client libraries are extended so they are hiding the complexities of handling failover in the event of a server failure, as well as correctly dispatching transactions to the shards. As of September 2013, there is currently support for Fabric-aware versions of Connector/J, Connector/PHP, Connector/Python, as well as some rudimentary support for Hibernate and Doctrine. As of May 2014, MySQL Fabric is in the general availability stage of development.

1.3 Introduction of Project

- **1.3.1 Fair Planner**

  A trade show is a meeting venue where buyers, sellers, and other participants of a particular industry meet to interact for mutually beneficial business ventures and for sales of their products. A well organized annual trade show can boost sales for existing businesses and it can also be a launching pad for new products, with a higher impact for recognition and sales. Effective marketing is crucial to the success of a business.

Innovative technology, superior marketing skills and attractive product displays can be used in an individual booth or stall to attract buyers and long term customers.

Trade shows are platforms for revitalizing opportunities for the success of a business. It is a venue for exchanging business cards and creating new relationships, for accelerated business success. For consumers and business owners, trade shows become crucial for understanding the latest trends in the industry and for getting an insight into competitor's products and services.

To automate the process of Fairs/trade shows “Fair Planner” is being developed. The basic intent of “Fair Planner” is to provides the centralized solutions for business owners who promote their business by participating in the trade fair. “Fair Planner” will be providing the end users with the support to maintain details of the Fair being organized. All the details such as fair type (e.g electronics fair, garment fair etc.), number of booths/stalls available, cost factors involved, advertising opportunities available, participating company details etc. will be managed by “Fair Planner”.

It is developed using Java technologies.

- **1.3.2 Input Requirements of the System**

1. Login.
2. User Details
3. Company Details
4. Fair Type Details
5. Fair Details
6. Fair Stall Detail

- **1.3.3 Output Requirements of the System**

1. Listing of all Users.
2. Listing of all Company.
3. Listing of all Fair Types
4. Listing of all Fair Information.
5. Listing of all Fair Stalls Information.
6. Listing of Company Fair Participation.

- **1.3.4 Technologies to be used**

1. **Java** :Java is Platform Independent, Secure, Object Oriented, Scalable, and Robust Programming Language It consists of two parts
 JVM stands for Java Virtual Machine, which is run time environment to execute the java programs.

 Java API (Application Programming Interface) that consists of inbuilt classes used in java programs.

2. **JDBC** (Java Database Connectivity) is an API, which is used for the communication of java programs with different databases.

3. Windows Programming

 Swings: Swings in java is a rich set of components for building GUIs and adding interactivity to java applications. Swing includes all the components that you would expect
from a modern GUI toolkit that is table controls, list controls, tree controls, buttons and labels. The basic architecture of swing is MVC. And are entirely made in java.

4. Jasper Reports

 Jasper Reports is an open source reporting engine. Using Jasper Reports reports can generated in any type of application i.e. console application, desktop application, web application, enterprise application.

5. MySQL

 MySQL is used as database, used to store data. It is RDBMS.

- **1.3.5 Hardware Requirements**

1. Intel P4 processor with minimum 2.0Ghz Speed
2. RAM: Minimum 512MB
3. Hard Disk: Minimum 20GB

CHAPTER 2

MAIN OBJECTIVE

Trade shows are platforms for revitalizing opportunities for the success of a business. It is a venue for exchanging business cards and creating new relationships, for accelerated business success. For consumers and business owners, trade shows become crucial for understanding the latest trends in the industry and for getting an insight into competitor's products and services.

To automate the process of Fairs/trade shows "Fair Planner" is being developed. The basic intent of "Fair Planner" is to provides the centralized solutions for business owners who promote their business by participating in the trade fair. "Fair Planner" will be providing the end users with the support to maintain details of the Fair being organized. All the details such as fair type (e.g electronics fair, garment fair etc.), number of booths/stalls available, cost factors involved, advertising opportunities available, participating company details etc. will be managed by "Fair Planner".

It is developed using Java technologies.

- **2.1 Objective**

The objective of the system would be to:
1. Keep the information of all employees.
2. Keep the information of all Fair Types.
3. Keep the information of all Fairs.
4. Keep the information of all Fair Stalls under a given Fair.
5. Maintain the information of company fair participation.

- **2.2 Business Functions Provided in Proposed System**

1. **Login**: To access this application, users would be required to login through a login screen. After authentication would be able to access only those areas for which permissions are given.

2. **User Maintenance**: That allows adding or updating the details of all users who are using Fair Planner to their allocated rights.

3. **Company Maintenance**: That allows adding or updating the details of all companies.

4. **Information Maintenance**:
 That allows the user to add or update the details of Fair Type.
 That allows the user to add or update the details of Fairs.
 That allows the user to add or update the details of Fair Stalls.

5. **Company Fair Participation**: That allows adding or updating the details of company Fair Participation.

- **2.3 Users of the System**

The users of this system will be the users of the organization. The systems are menu driven to facilitate the users. The system is developed with the participation of users, which will help them to understand the system easily.
Following are the users:

1. **Administrator**:
User of type administrator will manage the administration part of the application. Also, he is allowed to manage all the users exists in the system.

2. **Operator**:
User of type operator will manage the operational part of the application.

CHAPTER 3

METHODOLOGY & PLANNING OF WORK

3.1 SOFTWARE DEVELOPMENT LIFE CYCLE:-

Every software development consists several phases, have certain predefined works and at the end of each phase document is prepared. This phase is based on certain Software Development Model.

3.1.1 Software Development Model:-

Software engineering is a discipline that integrates process, methods, and tools for the development of computer software. To solve actual problems in an industry setting, software engineer or a team of software engineers must incorporate a development strategy that encompasses, methods, and tools. This strategy is often referred to as a process model or a software-engineering paradigm.

A number of different process models for the software engineering have been proposed, each exhibiting strengths and weaknesses, but all having a series of generic phases in common. Some of the commonly used software process models are:

- The linear sequential model
- The prototyping model
- The RAD model
- The incremental model
- The spiral model

A particular process model for software engineering is chosen on the nature of the project and the application at hand, the methods and the tools to be used, and the controls are required.

3.1.2 Software Requirement Analysis:

The requirements gathering process is intensified and focused specifically on software. To understand the nature of the program(s) to be built, the software engineer (“analyst”) must understand the information domain for the software, as well as required function, behaviour, performance, and interfacing. Requirements for the both the system and the software are documented and reviewed with the customer.

3.1.3 Design:

Software design is actually a multi-step process that focuses on four distinct attributes of a program: data structures, software architecture, interface representations, and procedural (algorithm) detail. The design process translates requirement into a representation of the software that can be assessed for quality before code generation begins.

3.1.4 Code Generation:

The design must be translated in to a machine-readable form. The testing process focuses on the logical internals of the software, assuring that all statements have been tested and on the functional externals that is, conducting tests to uncover errors and ensure that defined inputs will produce actual results that agree with required results.

3.1.5 Testing:

Once code has been generated, program testing begins. The testing process focuses on the logical internals of the software, assuring that all statements have been tested and on the functional externals that is, conducting tests to uncover errors and ensure that defined inputs will produce actual results that agree with required results.

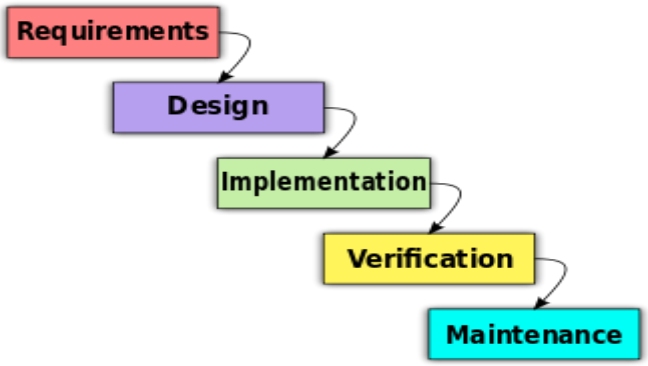
3.1.6 Maintenance:

Software will undoubtedly undergo change after it is delivered to the customer (A possible exception is embedded software).Change will occur because errors have been encountered, because the software must be adapted to accommodate change in its external environment (e.g. A change required because of a new operating system or peripheral device), or because the customer requires functional or performance enhancements.

3.2 PLANNING OF WORK:-

There are 4 members in our team. All will have to work as a team. So, this project will be a result of full dedication and teamwork towards assigned work to each of the member. We all will try our maximum to make this proposed project as per planned. All modules will be developed in coordination with each other.

3.2.1 WATERFALL MODEL USED IN PROJECT:-



3.2.2 Requirements:

Requirements Specification is a complete description of the behaviour of a system to be developed. It includes a set of use cases that describes all the interactions the user will have with the software.

Requirements of this project are:

1. JDK 1.7
 NetBeans 7.2.1

2. Database
 MySQL Database Server 5.5

3. Reports
 JasperReports 4.7

4. Jdbc Driver for MySQL Database Server
 mysql-connector-java-5.1.22-bin.jar

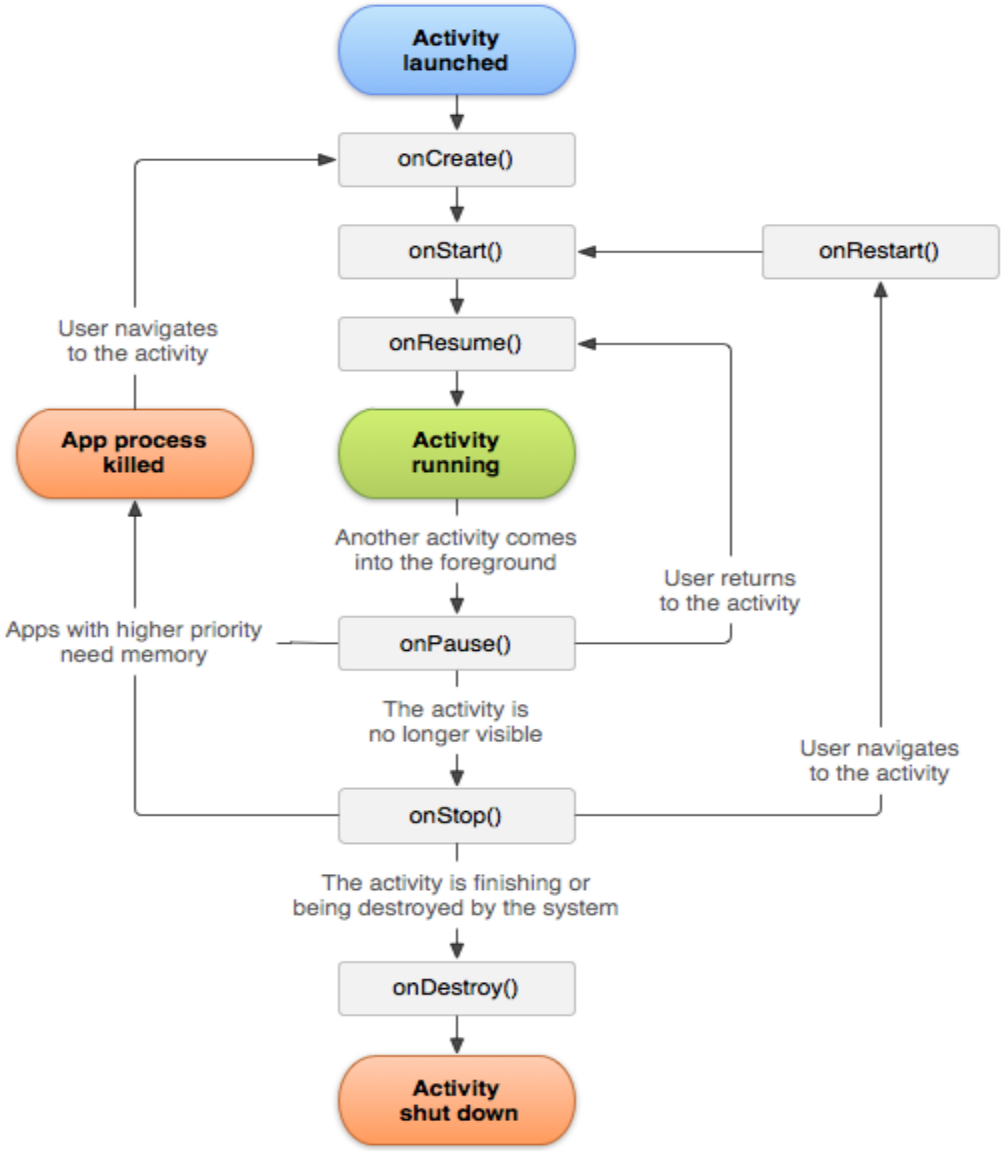
5. Operating System
 Windows Vista / XP sp3 / Win 8 / Linux Fedora

3.2.3 Design:-

Software design is a process of problem solving and planning for a software solution. After the purpose and specifications of software are determined, software developers will design or employ designers to develop a plan for a solution.

3.2.4 Implementation:-

System Implementation generally benefits from high levels of user involvement and management support. User participation in the design and operation of information systems has several positive results. Java is used as a platform for the implementation of this application.



3.2.5 Verification:-

In this model the implemented product is tested by using various test cases. The model is checked for both correct & incorrect inputs. Here speed & accuracy matters. The developed product is verified that whether it is according to the user's given specification or not.

3.2.6 Maintenance:-

Software maintenance in software engineering is the modification of a software product after delivery to correct faults, to improve performance or other attributes. For maintenance always update the dictionary with new versions.

3.3 DESIGN SOLUTIONS

3.3.1 Design of Project:-

Before start developing this project, you must first analyze your needs and requirements. We make a list of primary needs that we want our application to satisfy. Also, list down the secondary needs. The intent is the biggest source of online trade and commerce that has revolutionized business activities across the globe. It helps in easy transaction which enables direct access to both service providers and clients for effective exchange of goods and services.

3.3.2 Data Flow Diagram:-

DFD's have the purpose of clarifying system requirements and identifying major transactions that will become programs in system design. A DFD is also known as "Bubble Chart" has the purpose of clarifying system requirements and identifying major transactions that will become programs in system design. So it's a starting point of the design phase that functionality decomposes the requirements specifications down lines. The bubbles represent data transformation and lines represent data flows in the system.

3.3.3 DFD Symbols:-

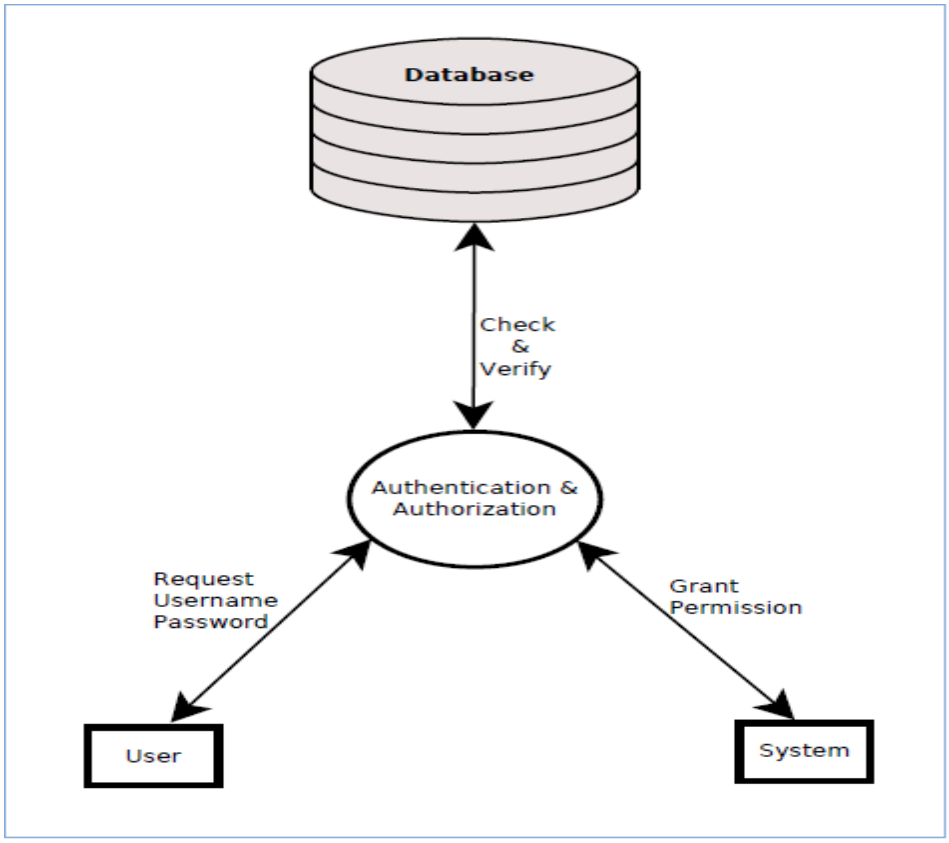
In DFD there are four symbols:

- A **CYLINDER** defines the originator or the destination of the system data.
- An **ARROW** identifies the data flows in motion. It's a pipeline through which information flows.
- A **CIRCLE** or a **BUBBLE** represents the process that transforms incoming data flow(s) into outgoing dataflow(s).

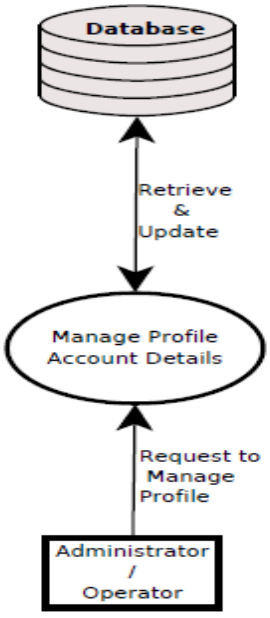
Note that DFD describes what does flow (logical) rather than how they are processed. So it does not depend on hardware, software, data structures, or file organization. The key question that we are trying to answer is what major transformations must occur for input to be correctly transformed into output.

3.3.4 Data Flow Diagrams of Project:

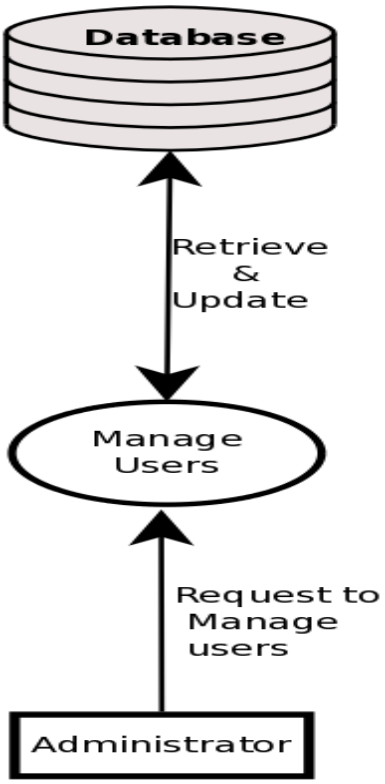
(A) Login



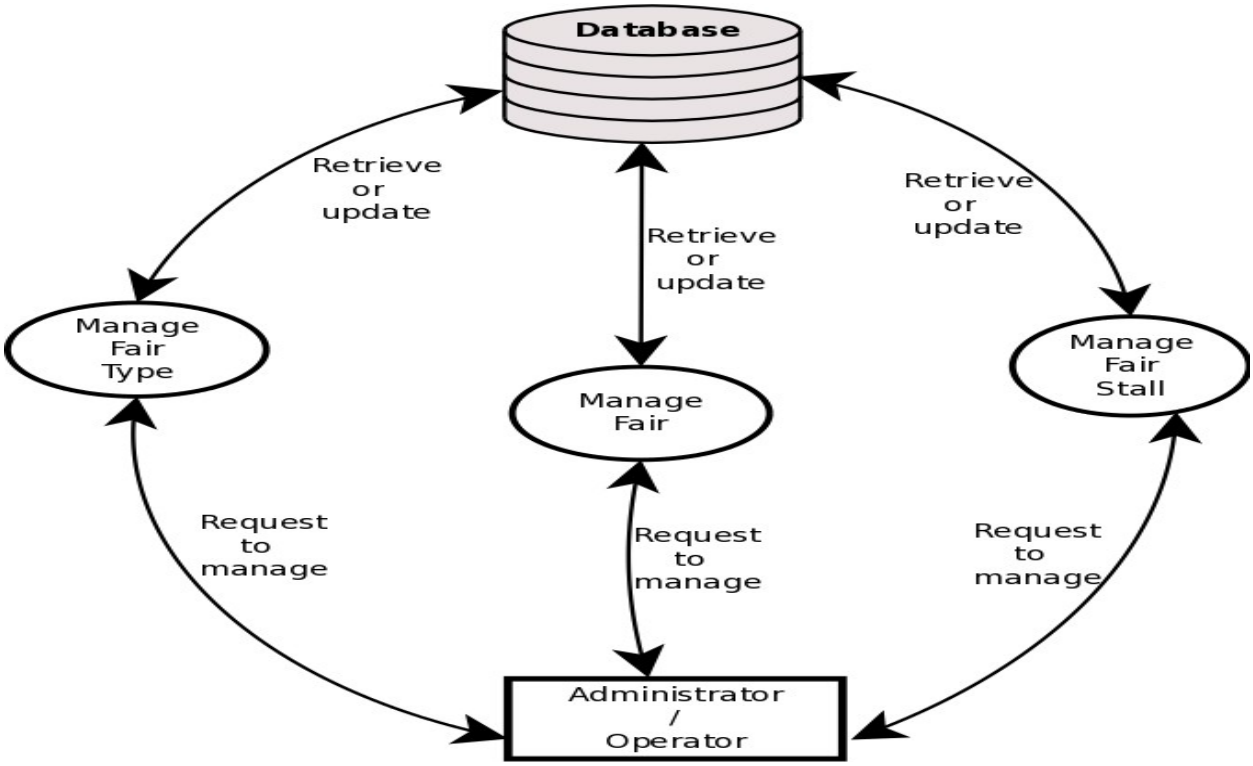
(B) Manage Profile



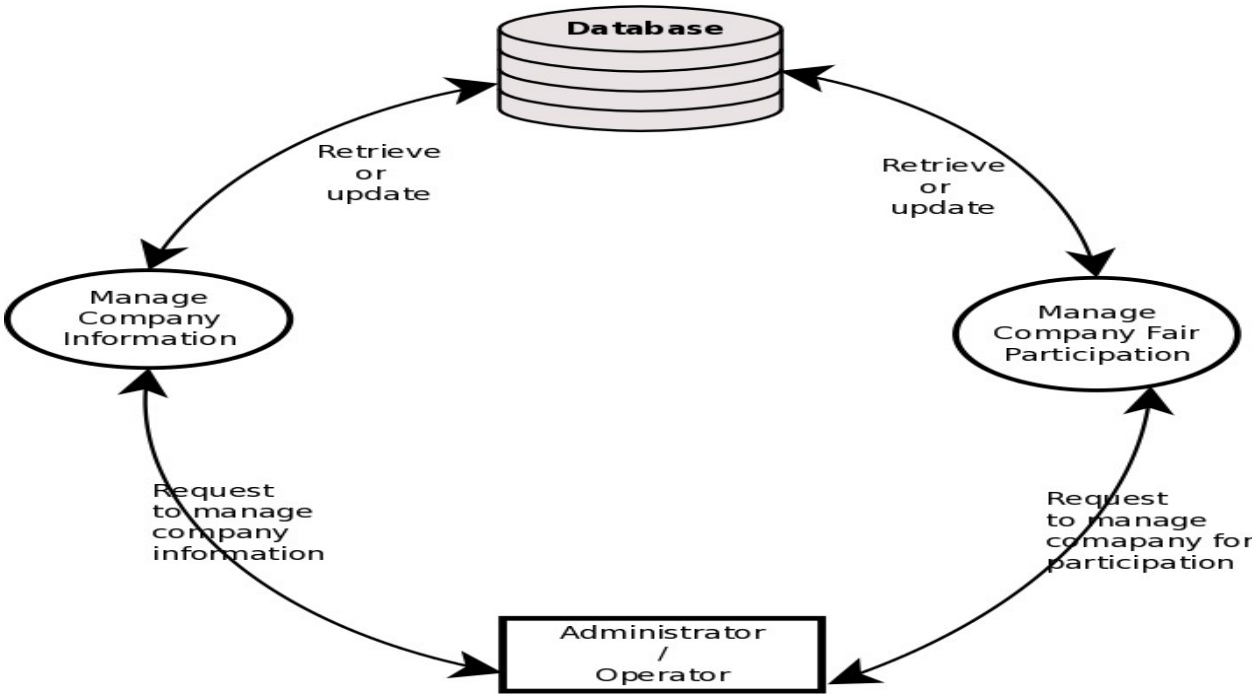
(C) Manage Users



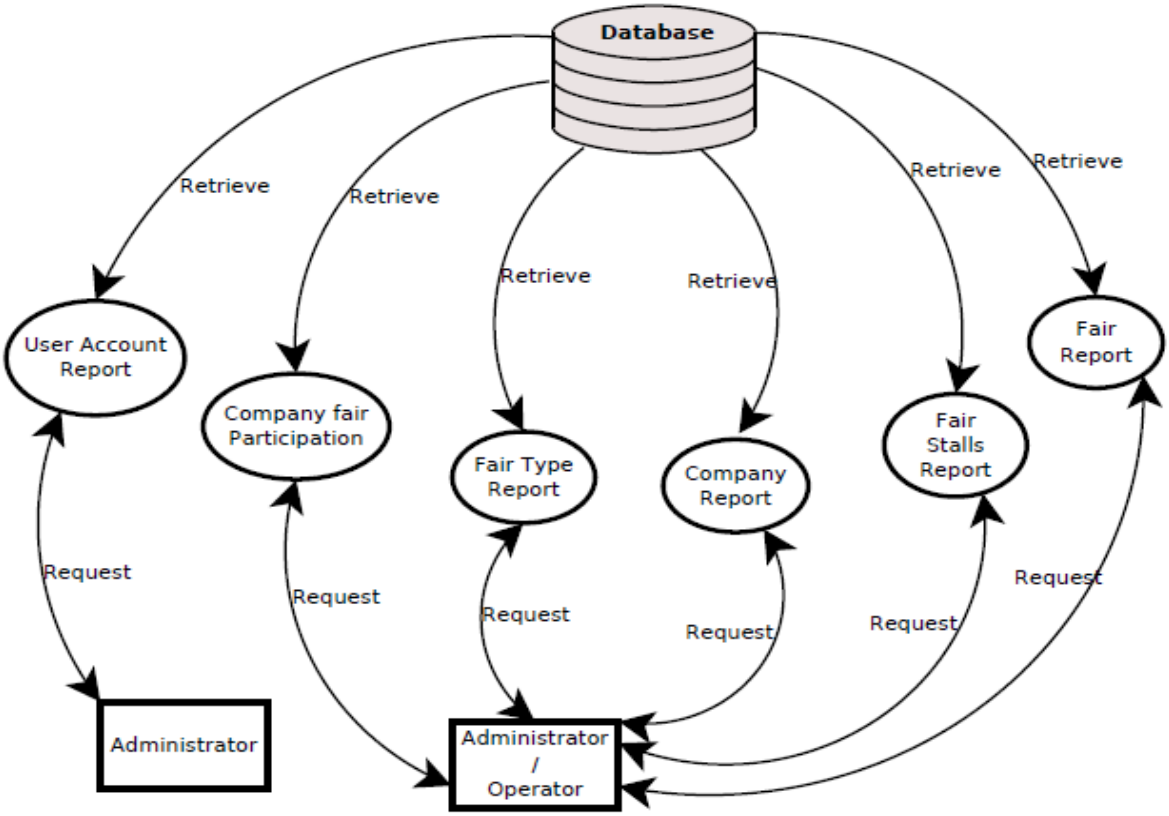
(D) Information Maintenance



(E) Company Information Maintenance



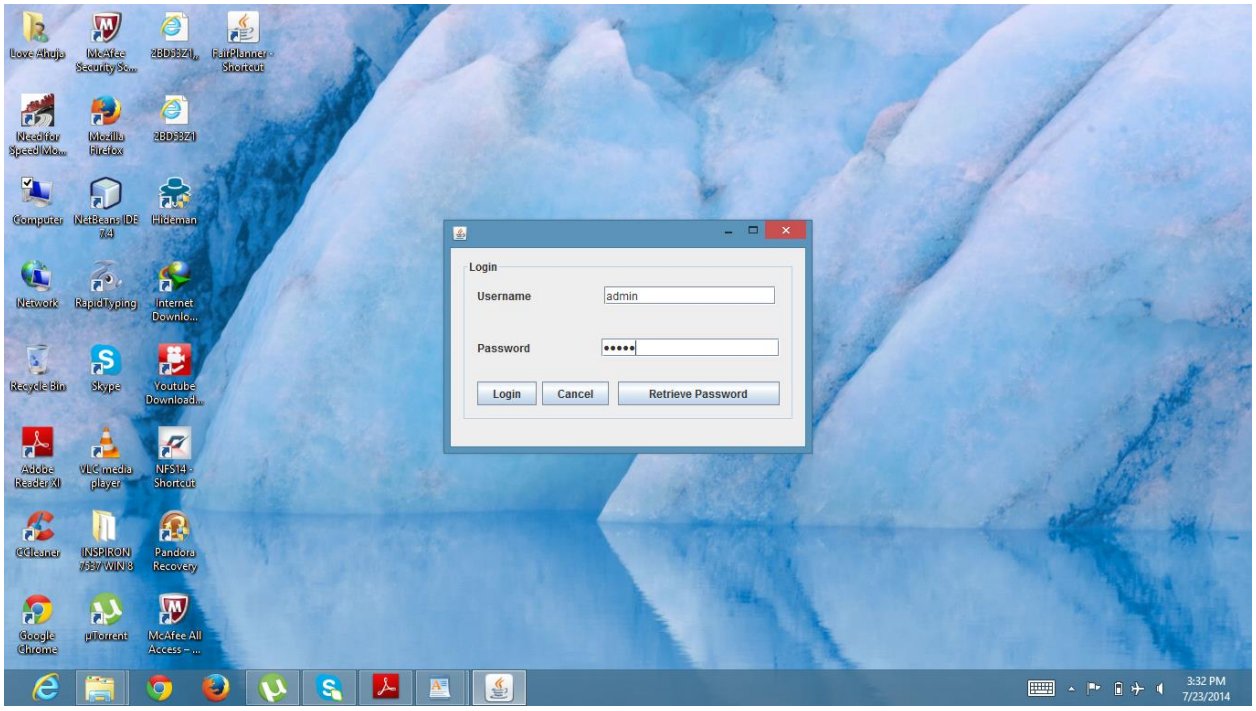
(F) Reports



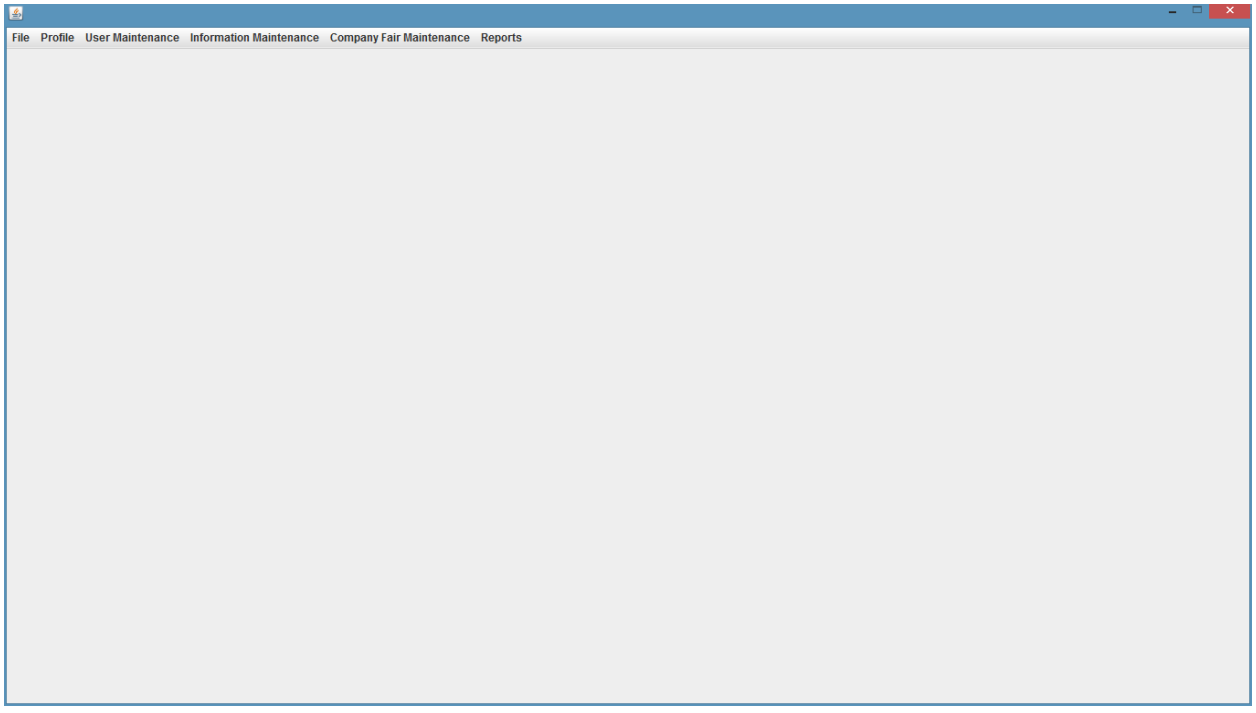
CHAPTER 4

RESULTS

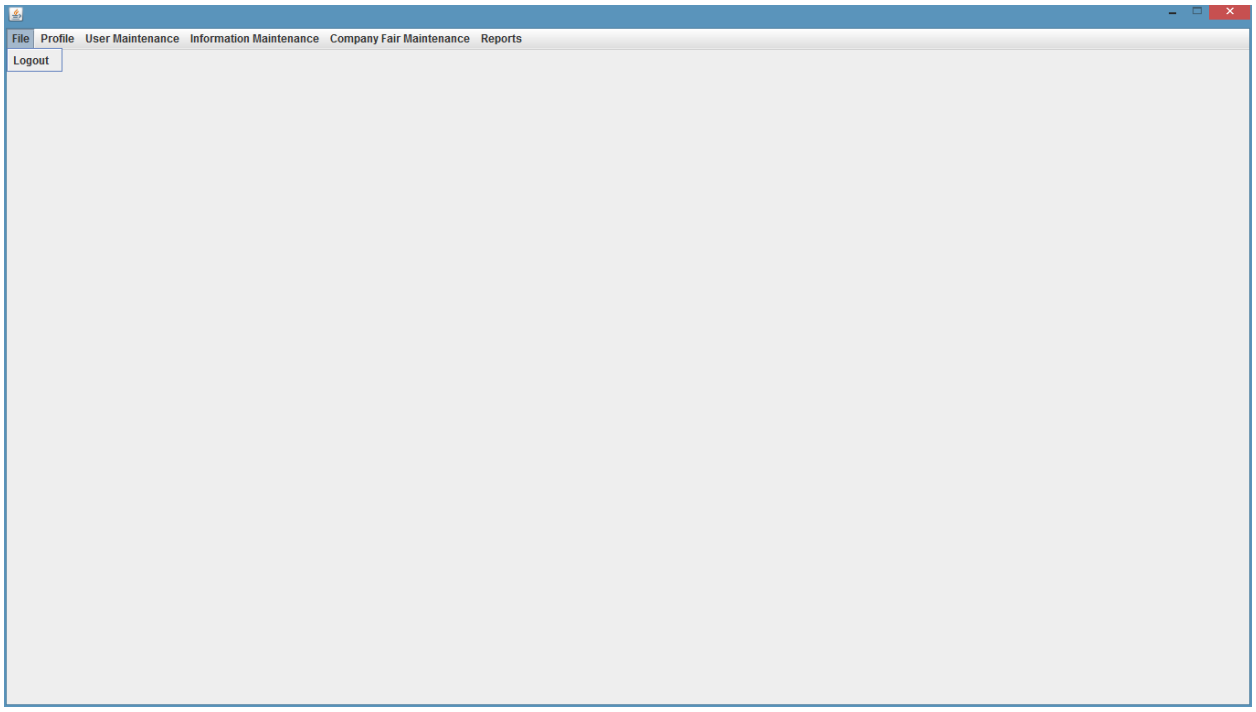
- **4.1.1 Login Screen**



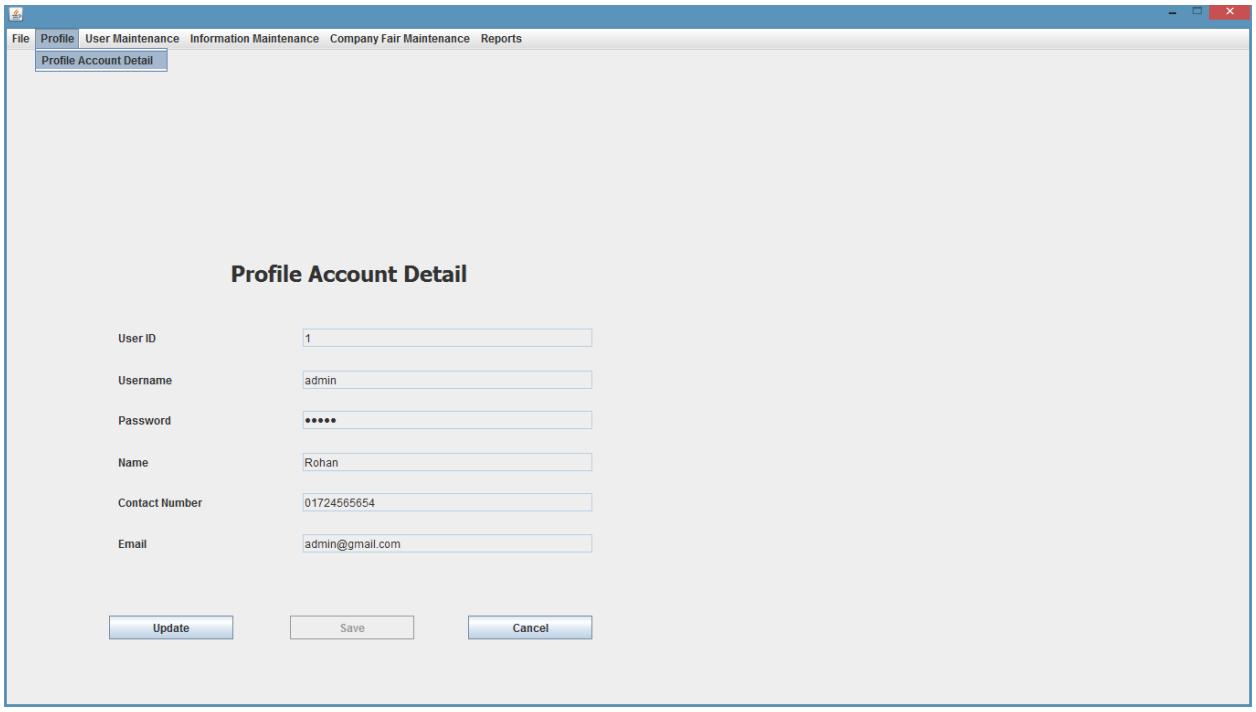
- **4.1.2 Main Frame**



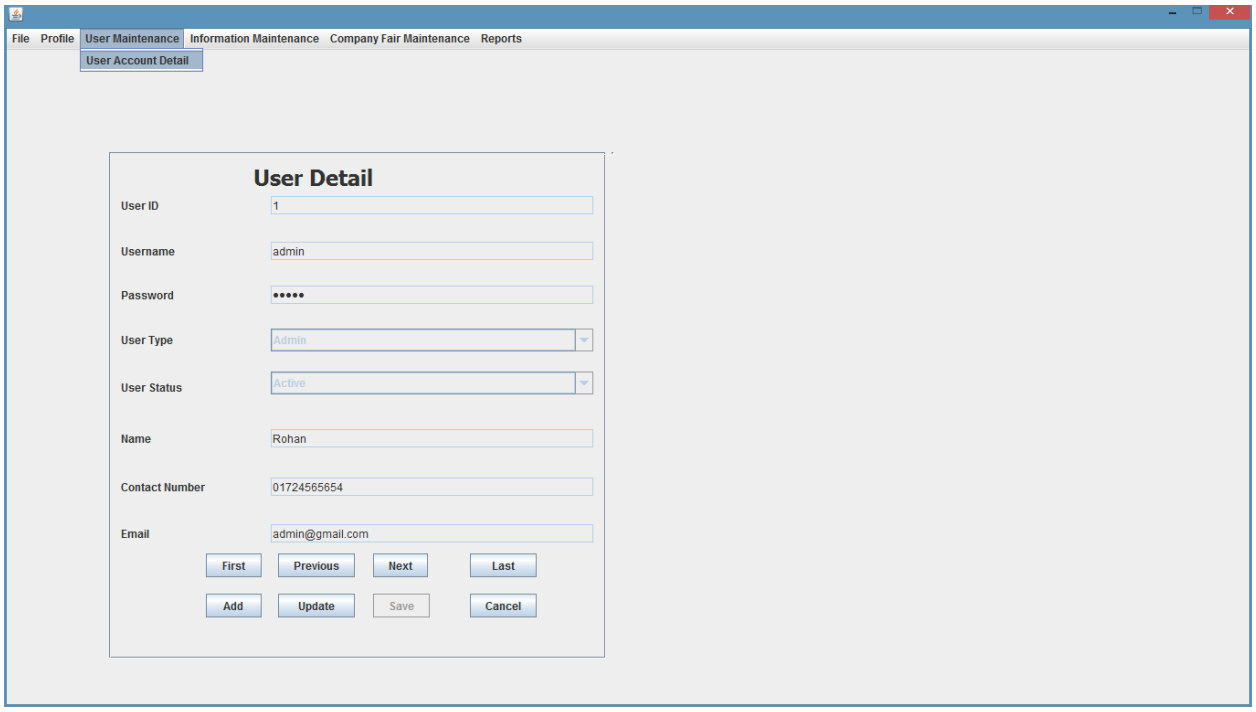
- **4.1.3 Logout**



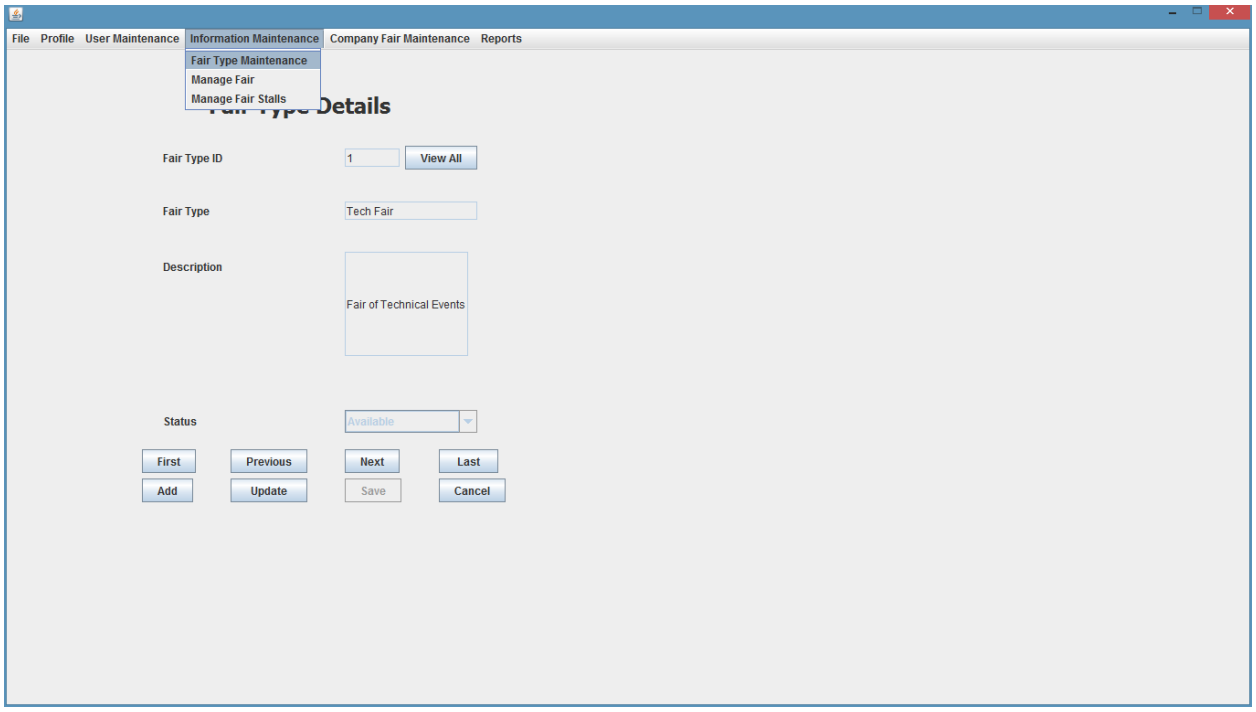
- **4.1.4 User Account Detail**



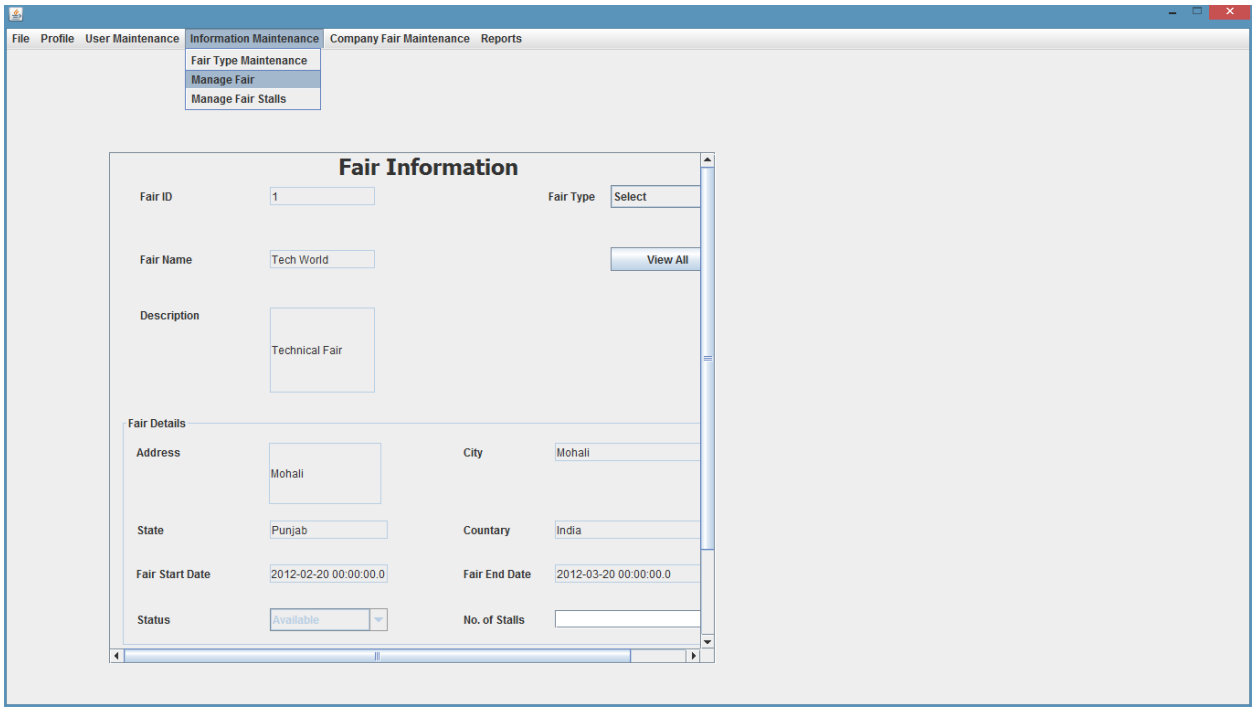
- **4.1.5 User Detail**



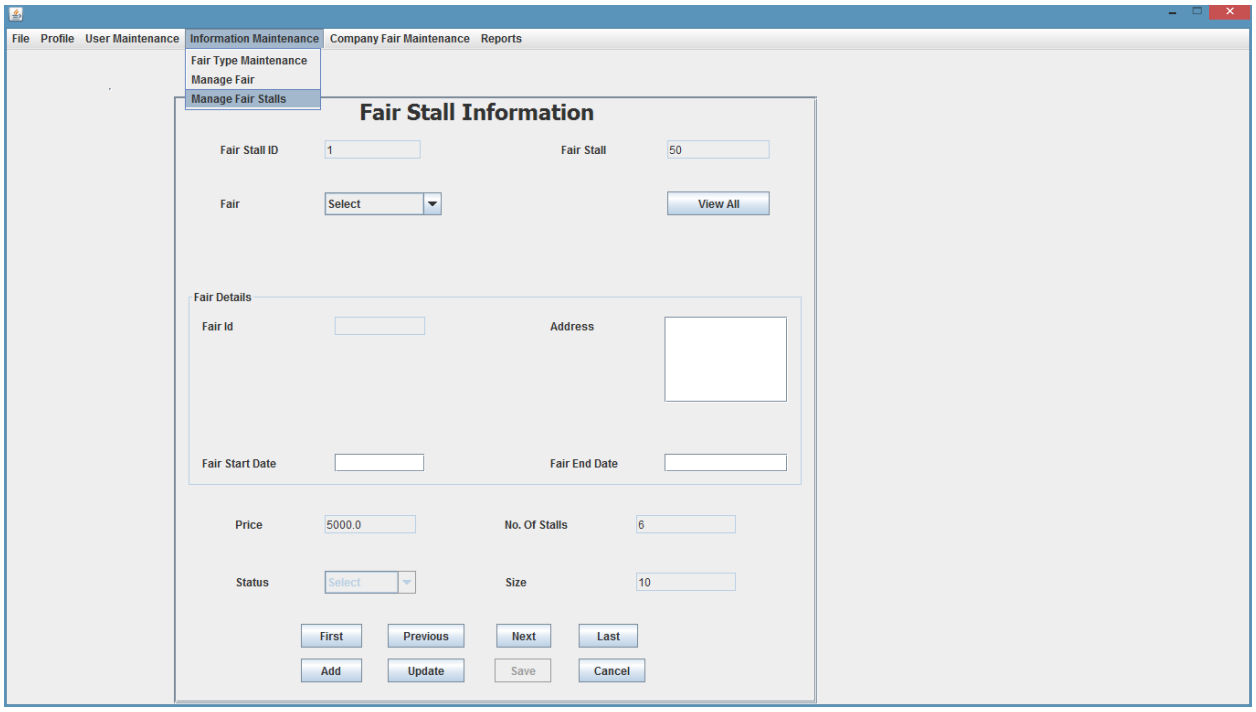
- **4.1.6 Fair Type Maintenance**



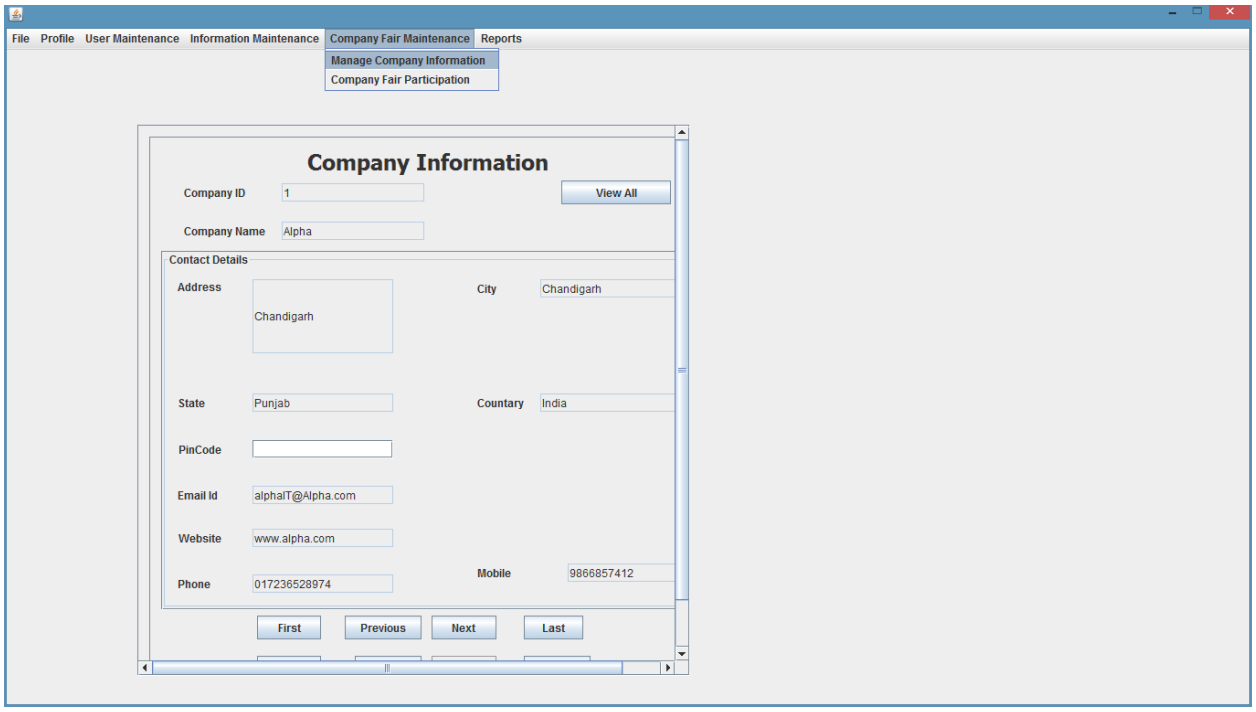
- **4.1.7 Manage Fair Information**



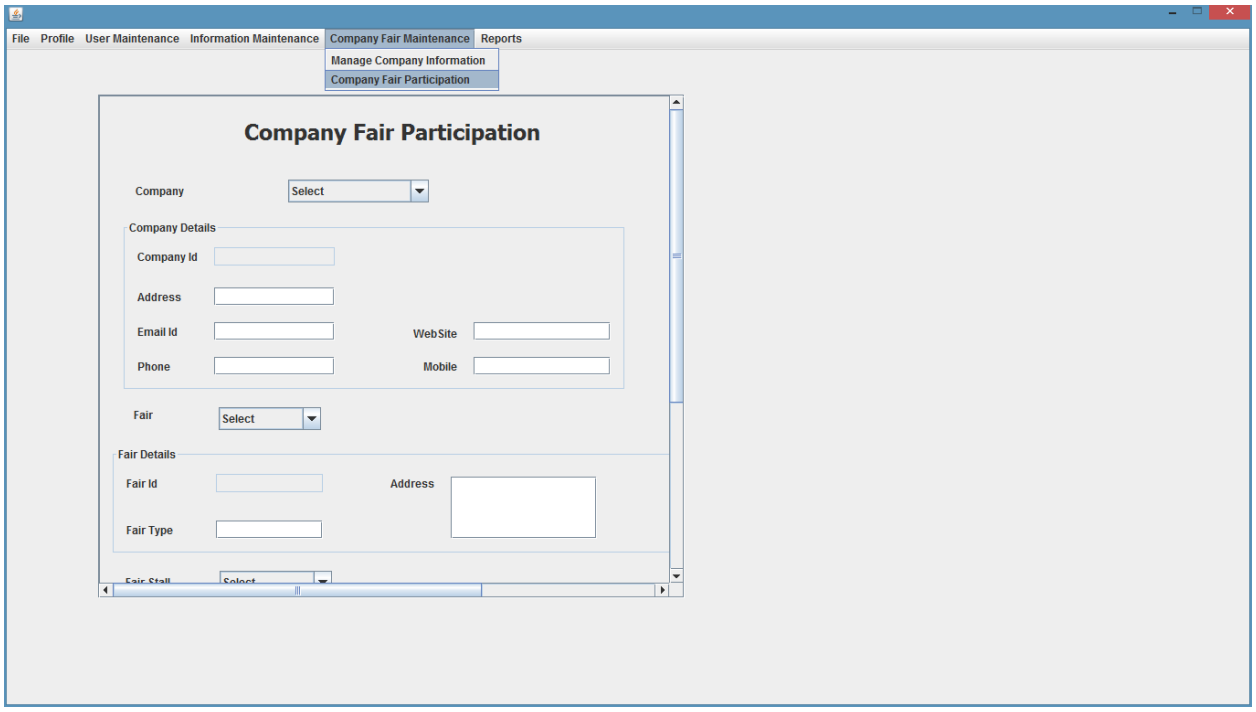
- **4.1.8 Fair Stall Information**



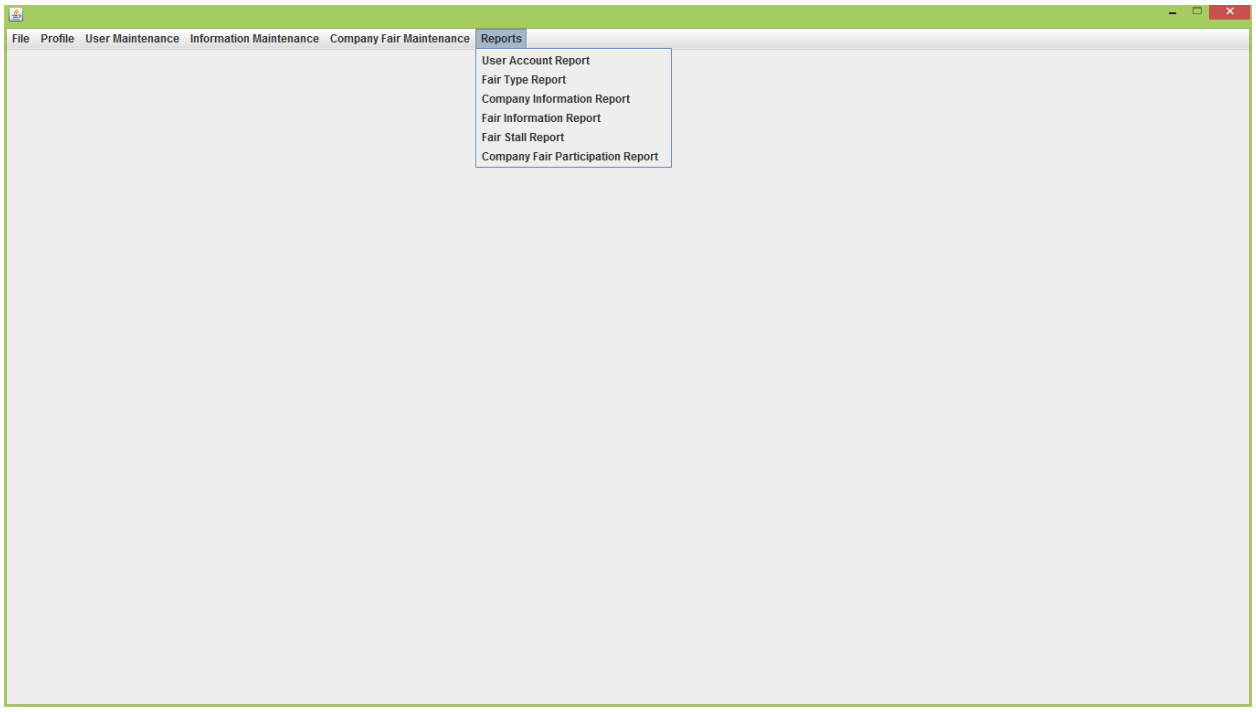
- **4.1.9 Company Fair Information**



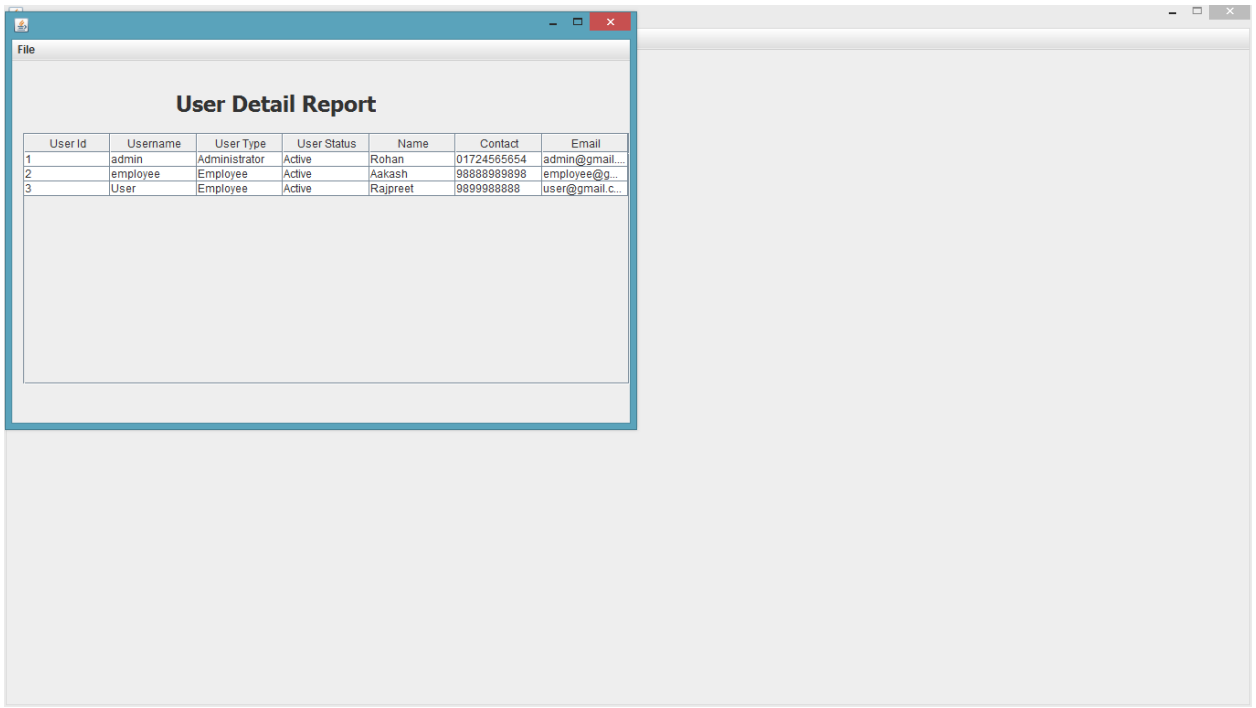
- **4.1.10 Company Fair Participation**



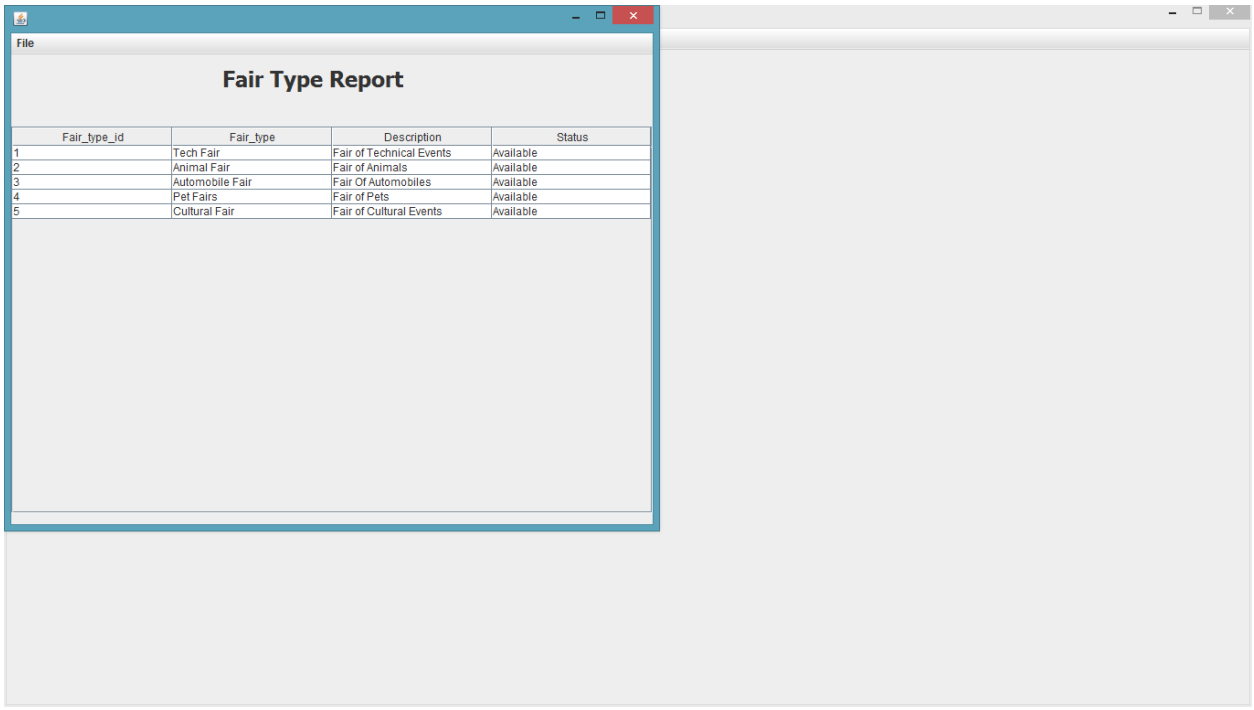
- **4.1.11 Reports**



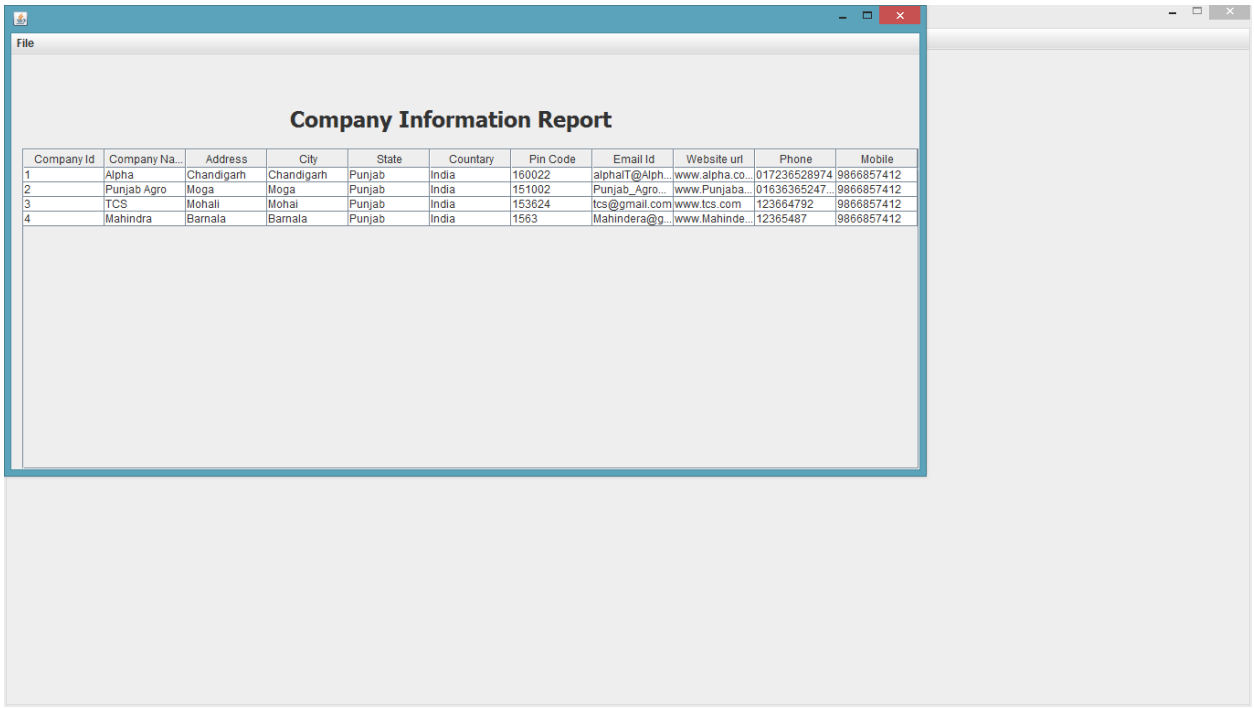
- **4.1.12 User Detail Report**



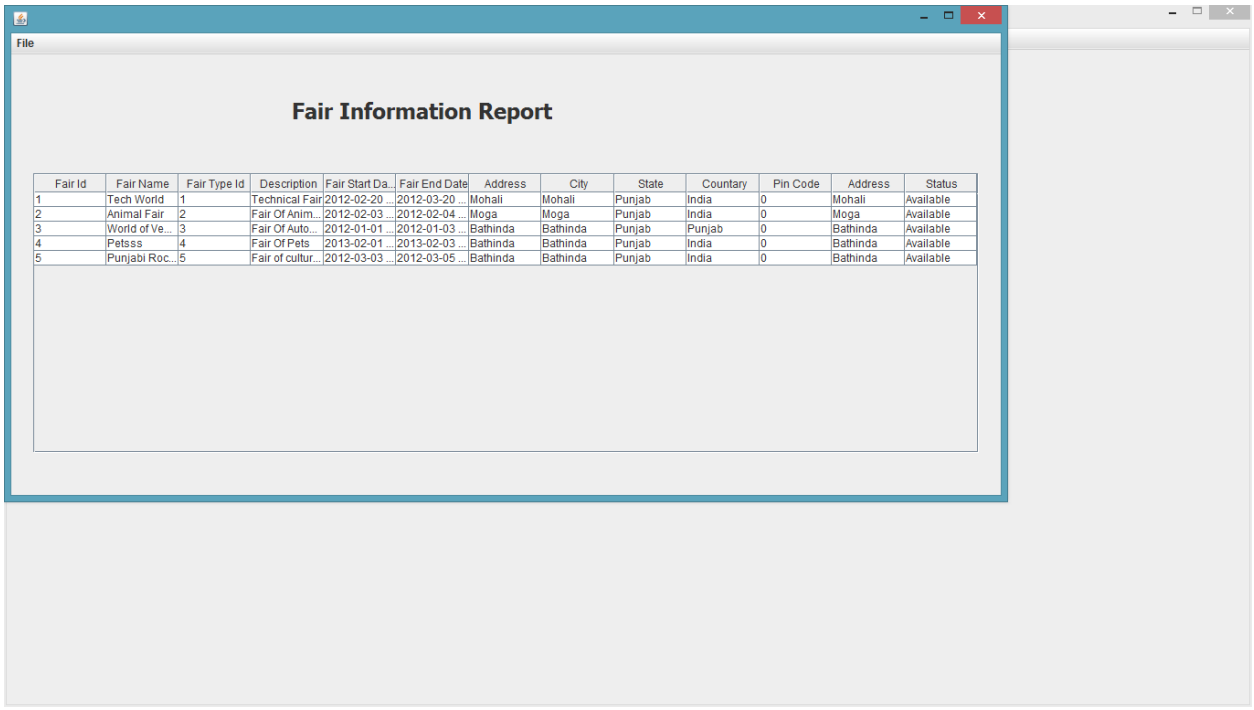
- **4.1.13 Fair Type Report**



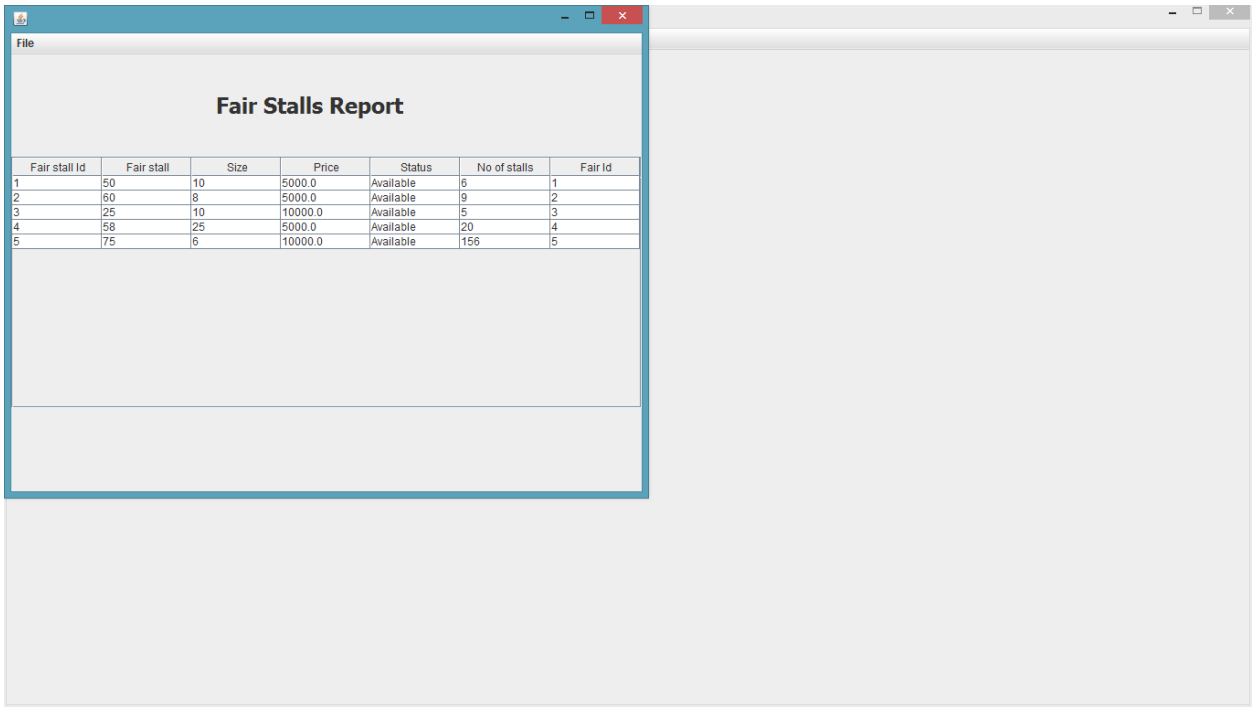
- **4.1.14 Company Information Report**



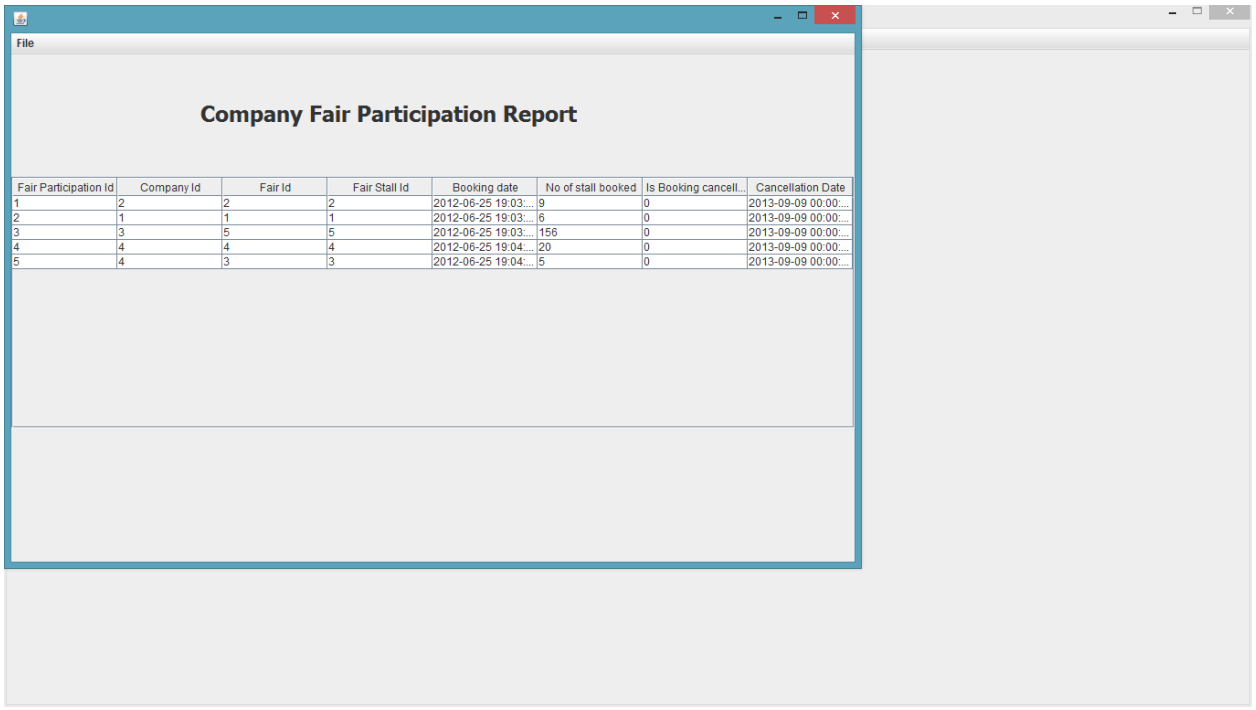
- **4.1.15 Fair Information Report**



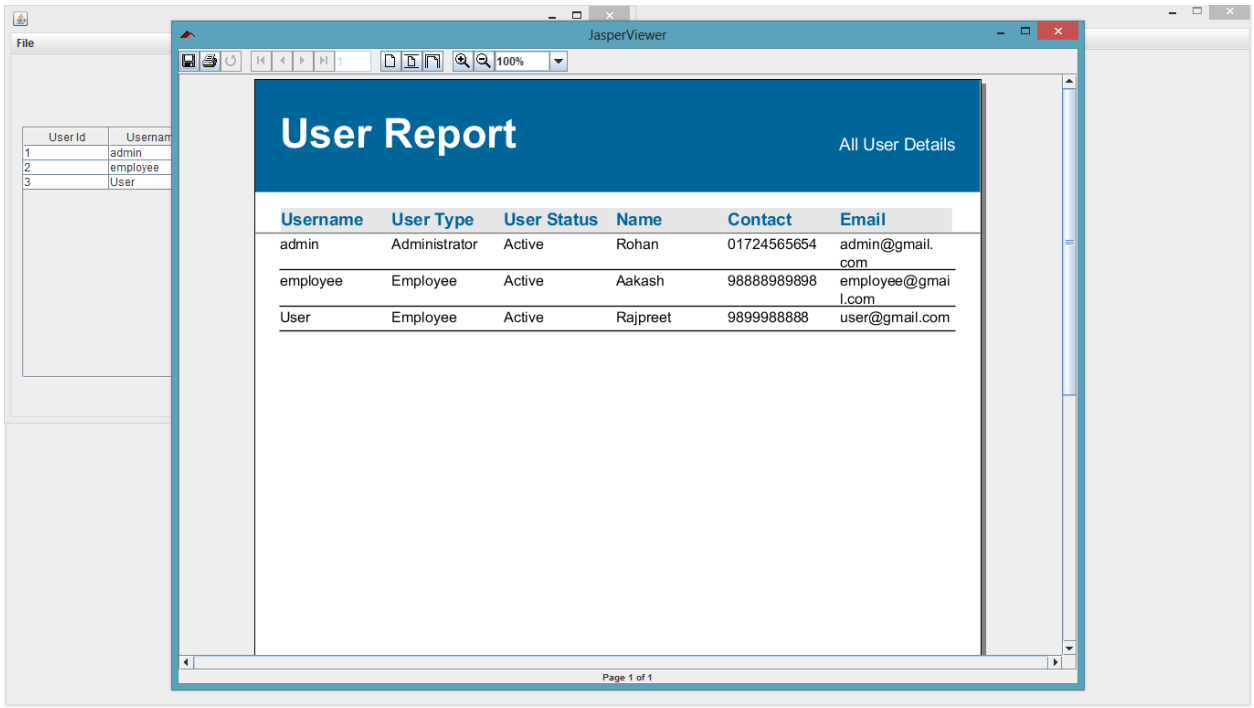
- **4.1.16 Fair Stalls Report**



- **4.1.17 Company Fair Participation Report**



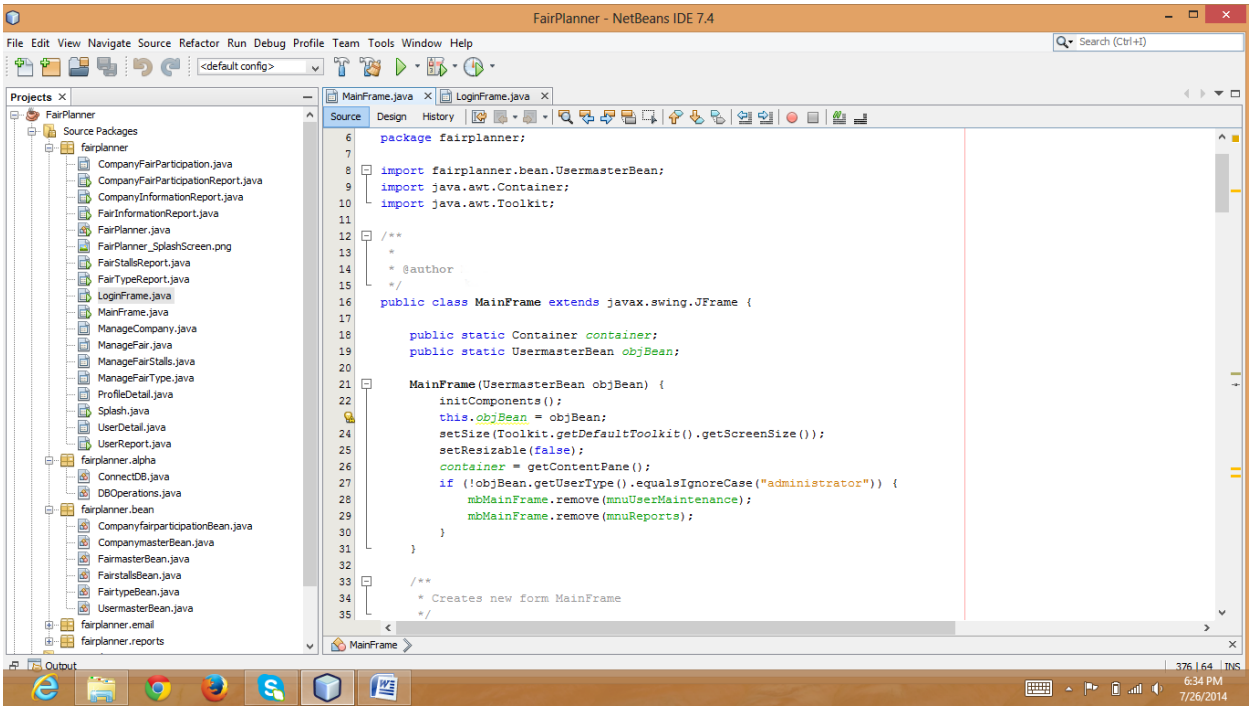
- **4.1.18 Jasper Viewer**



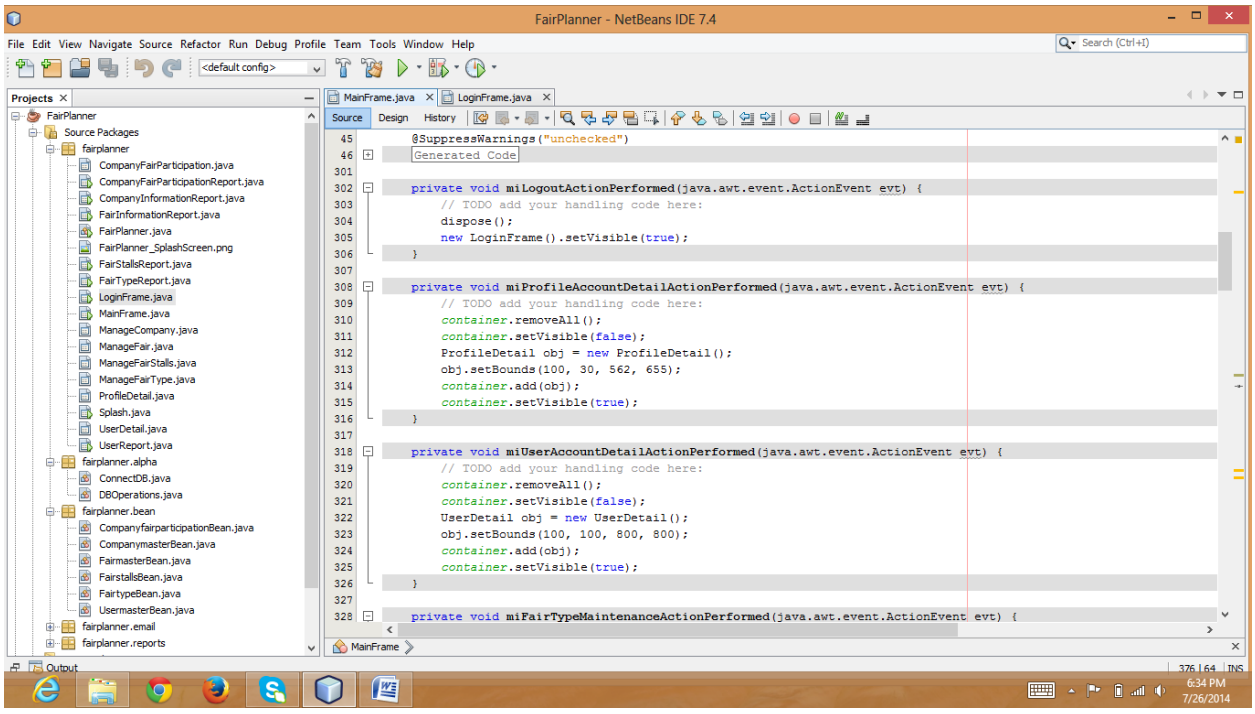
CHAPTER 5
CODING

5.1.1 MAIN FRAME CODING

5.1.1(a)

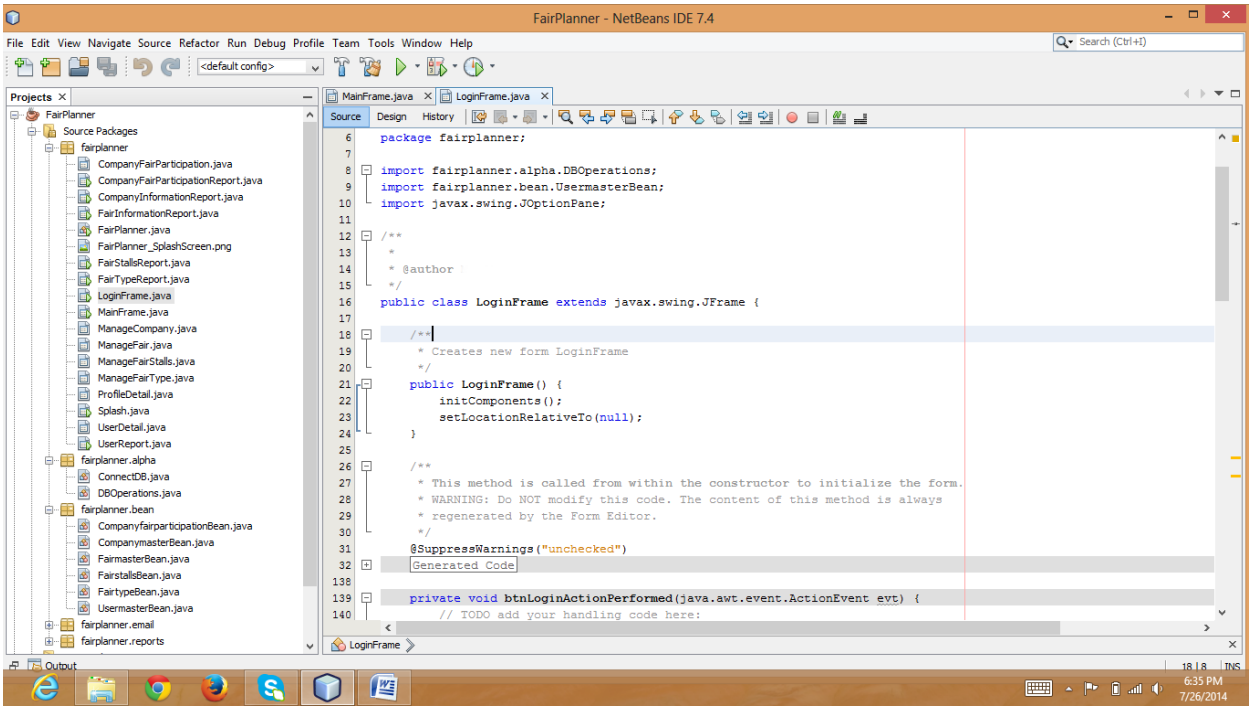


5.1.1(b)



5.1.2 LOGIN FRAME CODING

5.1.2(a)



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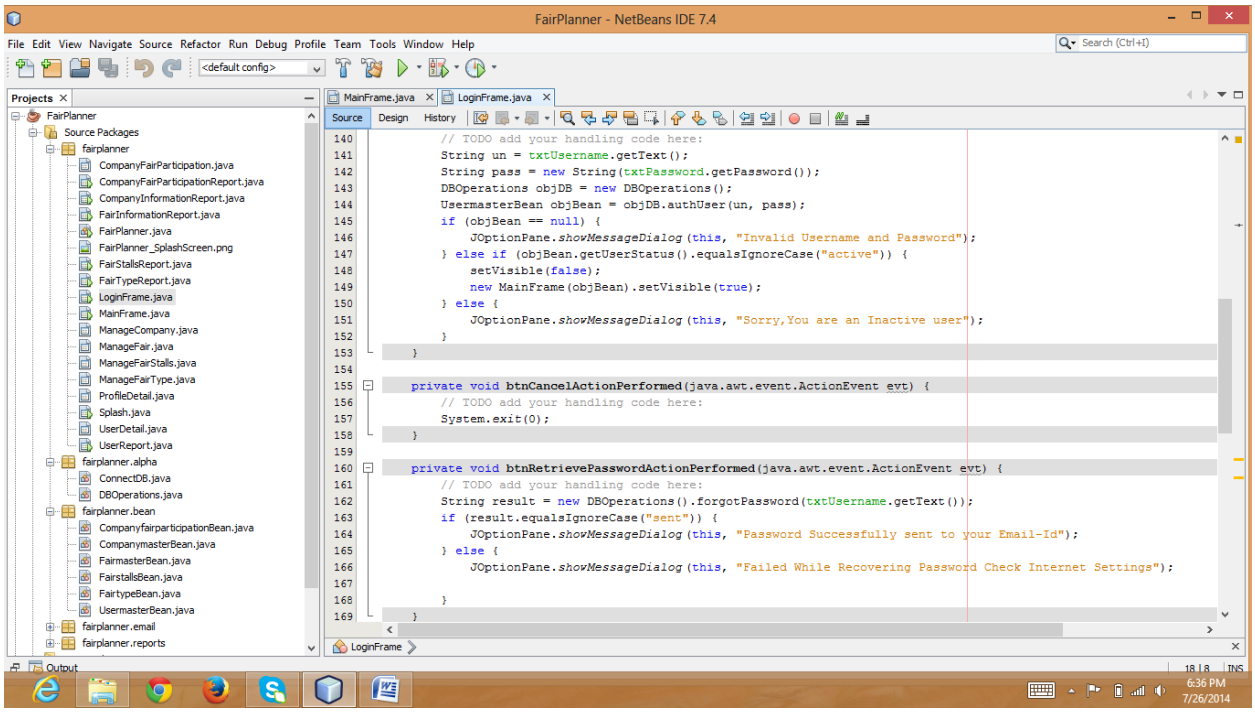

CHAPTER 6

CONCLUSION

A trade show is a meeting venue where buyers, sellers, and other participants of a particular industry meet to interact for mutually beneficial business ventures and for sales of their products. A well organized annual trade show can boost sales for existing businesses and it can also be a launching pad for new products, with a higher impact for recognition and sales. Effective marketing is crucial to the success of a business. Innovative technology, superior marketing skills and attractive product displays can be used in an individual booth or stall to attract buyers and long term customers.

Trade shows are platforms for revitalizing opportunities for the success of a business. It is a venue for exchanging business cards and creating new relationships, for accelerated business success. For consumers and business owners, trade shows become crucial for understanding the latest trends in the industry and for getting an insight into competitor's products and services.

To automate the process of Fairs/trade shows “Fair Planner” is being developed. The basic intent of “Fair Planner” is to provides the centralized solutions for business owners who promote their business by participating in the trade fair. “Fair Planner” will be providing the end users with the support to maintain details of the Fair being organized. All the details such as fair type (e.g electronics fair, garment fair etc.), number of booths/stalls available, cost factors involved, advertising opportunities available, participating company details etc. will be managed by “Fair Planner”.

CHAPTER 7

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BOOKS

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