

INCIDNET MANAGEMENT SYSTEM

S. DHIVYA

11PCA06

**A Project Report submitted to
Avinashilingam Institute for Home Science and Higher Education for Women,
Coimbatore-641043**

**In Partial Fulfillment of the Requirements for the Master's Degree in
Computer Applications**

March, 2014

INCIDNET MANAGEMENT SYSTEM

S. DHIVYA

11PCA06

**A Project Report Submitted to
Avinashilingam Institute for Home Science and Higher Education for Women,
Coimbatore-641043**

**In Partial Fulfillment of the Requirements for the Master's Degree in
Computer Applications**

March, 2014

Signature of the Supervisor

Signature of the Head of the Department

Signature of the External Examiner

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

I would like to express my sincere thanks to God Almighty, for his constant love and grace that he has showered upon me.

I am very grateful to **Dr.T.S.K.MeenakshiSundaram, M.A., M.Phil., Ph.D., Chancellor**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for his support and encouragement during the course of my study.

I heartily thank **Dr. (Mrs.).SheelaRamachandran M.Sc., P.G. Dip., Ph.D., Vice Chancellor**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for extending all resources that facilitated the conduct of the present study.

I express my humble gratitude to **Dr. (Mrs.). GowriRamakrishnan M.Sc., M.Phil., Ph.D., Registrar**, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for providing all facilities necessary for the study.

I am also thankful to **Dr. (Mrs.). R. Parvatham M.Sc., Dip.Ed. M.Phil., Ph.D., Dean Faculty of Science**, for granting the facility required.

I wish to place on record my deep sense of gratitude to **Dr.(Mrs.).G.Padmavathi M.Sc., M.Phil., Ph.D.**, Professor and Head, Department of Computer Science, for providing all the facilities to complete the project.

I owe great deal of gratitude to my esteemed guide **Dr.(Mrs.)I. Elizabeth Shanthi M.Sc., M.Phil., Ph.D., Associative Professor**, Department of Computer Science, for imparting the tremendous assistance and well-timed support for triumph of my project.

I take this unique opportunity to express my sincere thanks to my project Coordinator **Mrs.N.Valliammal M.Sc., M.Phil. Assistant Professor, Department of Computer Science**, for her kind advice and knowledgeable suggestion, which helped me to complete my project successfully.

I would like to express my sincere gratitude to all the staff members of the Department of Computer Science, Avinashilingam Institute for Home Science and Higher Education for Women University, for their constant encouragement and for the opportunity to do my project in this esteemed university.

Finally, I take pride to thank my beloved parents, my family members and my friends without whose support, encouragement and kind blessings I would not have succeeded in my endeavor.

Synopsis

SYNOPSIS

The aim of this project is to develop an Incident Management application on the Web which can be used by all service provider companies in the real world. The web interface is used by users/helpdesk/IT experts who have problems/solutions with the service providers and they use the web interface to post their problems/solutions through their respective accounts. This project focuses on developing a web application that is developed using JSP/MYSQL where the users and service providers can login to the application and resolve the problem according to the service level agreement.

The first goal of the incident management process is to restore a normal service operation as quickly as possible and to minimize the impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained. Incidents that cannot be resolved quickly by the help desk will be assigned to specialist technical support groups. A resolution or work-around should be established as quickly as possible in order to restore the service.

Thus “Incident Management System” resolves the service management problems within the stipulated time.

CONTENTS

S.NO	PARTICULARS	PAGE NO
1.	INTRODUCTION	
	1.1 Problem Definition	1
	1.2 Overview of the Project	2
	1.3 Organization Profile	2
2.	SYSTEM SPECIFICATION	
	2.1 Hardware Specification	3
	2.2 Software Specification	3
	2.3 About the Software	4
3.	SYSTEM ANALYSIS	
	3.1 Existing System	10
	3.2 Proposed System	11
4.	SYSTEM DESIGN	
	4.1 Input Design	12
	4.2 Output Design	12
5.	SYSTEM DEVELOPMENT	
	5.1 Modules	13
	5.2 Module Description	13
6.	SYSTEM IMPLEMENTATION	

	6.1 System Testing	16
	6.1.1 Testing Methodologies	16
	6.2 System Implementation	22
	6.2.1 Implementation Procedure	22
7.	CONCLUSION	23
8.	SCOPE FOR FUTURE ENHANCEMENT	24
9.	BIBLIOGRAPHY	25
10.	APPENDIX	
	System Flow Diagram	26
	Data Flow Diagram	27
	Use Case Diagram	29
	Table design	30
	Screenshots	32

introduction

1. INTRODUCTION

The first goal of the incident management process is to restore a normal service operation as quickly as possible and to minimize the impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained. Incidents that cannot be resolved quickly by the help desk will be assigned to specialist technical support groups. A resolution or work-around should be established as quickly as possible in order to restore the service.

The aim of this project is to develop an Incident Management application on the Web which can be used by all service provider companies in the real world. The project has web interfaces. The web interface is used by users/helpdesk/IT experts who have problems/solutions with the service providers and they use the web interface to post their problems/solutions through their respective accounts.

This project focuses on developing a web application that is developed using JSP/MYSQL where the users and service providers can login to the application and resolve the problem according to the service level agreement.

1.1 PROBLEMDEFINITION

Incident means any event which is not part of the standard operation of a service and which causes or may cause an interruption to, or a reduction in, the quality of that service.Examples of categories of Incidents are:

- **Application**
 - Service not available
 - Application bug/query preventing **Customer** from working
 - Disk-usage threshold exceeded
- **Hardware**
 - System down
 - Automatic alert
 - printer not printing
 - configuration inaccessible
- Service requests

- Request for information/advice/documentation
- Forgotten password.

1.2 OVERVIEW OF THE PROJECT

The primary goal of the Incident Management process is to restore normal service operation as quickly as possible and minimize the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained. 'Normal service operation' is defined here as service operation within ServiceLevelAgreement (SLA) limits.

1.3 ORGANISATION PROFILE

ACCELER SERVICES is an integrated software production company. Founded in the year 2011 by Mr. Navin to cater the growing IT demands.

Acceler is a consulting, technology and outsourcing service provider, serving clients in more than 10 countries. Integrating unparalleled experience comprehensive capabilities across all industries and business functions on different technologies.

Acceler collaborate with clients to help them finding a way for current and future. Acceler has a proven track record in implementing effective business solutions with at most customer satisfaction.

Unique features:

- Solid industry fundamentals
- Comprehensive end-to-end solutions
- Track record of superior execution
- Process transparency
- Resilient and secure infrastructure
- Diverse customer base

System specification

2. SYSTEM SPECIFICATION

This section describes the hardware and software specification needed for both development and implementation phases of the project.

2.1 HARDWARE REQUIREMENTS:

- ✓ Processor : Intel Pentium IV 1 GHz.
- ✓ RAM : 1 GB
- ✓ Operating System : Windows 7
- ✓ Hard disk : 2 GB

2.2 SOFTWARE REQUIREMENTS:

- ✓ Operating System : Windows XP/Linux OS
- ✓ Front End : JSP
- ✓ Back End : MySQL
- ✓ IDE : Net Beans 1.7.3
- ✓ Web server : Apache

2.3 ABOUT THE SOFTWARE

Java Server Page

JavaServer Pages (JSP) is a technology for developing web pages that support dynamic content which helps developers insert java code in HTML pages by making use of special JSP tags, most of which start with `<%` and end with `%>`.

A JavaServer Pages component is a type of Java servlet that is designed to fulfill the role of a user interface for a Java web application. Web developers write JSPs as text files that combine HTML or XHTML code, XML elements, and embedded JSP actions and commands.

Using JSP, you can collect input from users through web page forms, present records from a database or another source, and create web pages dynamically.

JSP tags can be used for a variety of purposes, such as retrieving information from a database or registering user preferences, accessing JavaBeans components, passing control between pages and sharing information between requests, pages etc.

Advantages:

- Easy to implement.
- More secure.
- User friendly.
- JSP, by using java as scripting language, is not limited to a specific vendor platform.
- JSP, as an integral part of the j2ee architecture, has full access to server-side resources.

JAVA

Introduction

Java programming language was originally developed by Sun Microsystems, which was initiated by James Gosling and released in 1995 as core component of Sun Microsystems's Java platform (Java 1.0 [J2SE]).Sun Microsystems has renamed the new J2 versions as Java SE, Java EE and Java ME respectively. Java is guaranteed to be Write Once, Run Anywhere. JAVA is a programming language and environment that was designed to solve a number of problems in modern programming practice. It started as a part of a larger project to develop advanced software for consumer electronics. These are small reliable portable distributed real-time embedded systems.

Object Oriented

In java everything is an Object. Java can be easily extended since it is based on the Object model.

Platform Independent

Unlike many other programming languages including C and C++ when Java is compiled, it is not compiled into platform specific machine, rather into platform independent byte code. This byte code is distributed over the web and interpreted by virtual Machine (JVM) on whichever platform it is being run.

Simple

Java is designed to be easy to learn. If it understands the basic concept of OOP java would be easy to master.

Secure

With Java's secure feature it enables to develop virus-free, tamper-free systems. Authentication techniques are based on public-key encryption.

Architecture- neutral

Java compiler generates an architecture-neutral object file format which makes the compiled code to be executable on many processors, with the presence Java runtime system.

Portable

Java is being architectural neutral and having no implementation dependent aspects of the specification makes Java portable. Compiler and Java is written in ANSI C with a clean portability boundary which is a POSIX subset.

Robust

Java makes an effort to eliminate error prone situations by emphasizing mainly on compile time error checking and runtime checking.

Multi-threaded

With Java's multi-threaded feature it is possible to write programs that can do many tasks simultaneously. This design feature allows developers to construct smoothly running interactive applications.

Interpreted

Java byte code is translated on the fly to native machine instructions and is not stored anywhere. The development process is more rapid and analytical since the linking is an incremental and light weight process.

High Performance

With the use of Just-In-Time compilers Java enables high performance.

Distributed

Java is designed for the distributed environment of the internet.

Dynamic

Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry extensive amount of run-time information that can be used to verify and resolve accesses to objects on run-time.

Advantages of Java

Java has significant advantages over other languages and environments that make it suitable for just about any programming task.

The advantages of Java are as follows:

- Java is easy to learn.

Java was designed to be easy to use and is therefore easy to write, compile, debug, and learn than other programming languages.

- Java is object-oriented.

This allows you to create modular programs and reusable code.

- Java is platform-independent.

One of the most significant advantages of Java is its ability to move easily from one computer system to another. The ability to run the same program on many different systems is crucial to World Wide Web software, and Java succeeds at this by being platform-independent at both the source and binary levels.

Because of Java's robustness, ease of use, cross-platform capabilities and security features, it has become a language of choice for providing worldwide Internet solutions.

BACK END

MYSQL

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:

MySQL is released under an open-source license. So you have nothing to pay to use it.

MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.

MySQL uses a standard form of the well-known SQL data language.

MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.

MySQL works very quickly and works well even with large data sets.

MySQL is very friendly to PHP, the most appreciated language for web development. MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

Advantages:

MySQL is the widely used open source database. MySQL is the backend database of most of the websites. The advantages of MySQL are:

- MySQL is an open source database system. Hence it can be downloaded and used by the developer for free.
- MySQL is robust and it provides excellent performance due to usage of MyISAM.
- MySQL occupies very less disk space.
- MySQL can be easily installed in all major operating systems like Microsoft Windows, Linux, UNIX.
- MySQL can be easily learnt using the tutorials that are available on internet.
- Though MySQL is open source, it offers most of the features provided by Oracle and other leading databases.
- MySQL is best suited for small and medium applications.
- Since MySQL is acquired by Sun, Java is soon expected to include enhanced MySQL connectivity.

SYSTEM ANALYSIS

3. SYSTEM ANALYSIS

System analysis is the general term that refers to an orderly and structured procedure for identifying and solving problems. It involves the study of existing system to understand how they function. This knowledge will helps to identify what the new system should include.

3.1 EXISTING SYSTEM:

In the existing system the incidents can be submitted through only phone calls so we cannot able to have a direct contact with developers. Time delays on reaching the correct destination for their services. These issues can be overcome on our proposed system.

Drawbacks of existing system

- ⦿ No one to manage and escalate Incidents - hence Incidents may become more severe than necessary and adversely affect **IT** service quality.
- ⦿ Specialist support staff being subject to constant interruptions, making them less effective.
- ⦿ Business staff being disrupted as people asks their colleagues for advice.
- ⦿ Frequent reassessment of Incidents from first principle rather than reference to existing solutions.
- ⦿ Lack of coordinated management information.
- ⦿ Lost, or incorrectly or badly managed Incidents.

3.2 PROPOSED SYSTEM:

In a proposed system the incidents can be solved within allocated time due to this there is no time delay and can deliver the services at the correct time to the clients. New technique SLA

is implemented in this project. A service-level agreement is an agreement between two or more parties, where one is the customer and the others are service providers. This can be a legally binding formal or an informal "contract". Contracts between the service provider and other third parties are often called SLA.

Advantages of proposed system:

For the business as a whole:

- Reduced business impact of **Incidents** by timely resolution, thereby increasing effectiveness
- The proactive identification of beneficial system enhancements and amendments
- The availability of business-focused management information related to the **SLA**.

For the **IT** organization in particular:

- Improved monitoring, allowing performance against **SLAs** to be accurately measured
- Better staff utilization, leading to greater efficiency
- Elimination of lost or incorrect Incidents and service requests
- Improved **User** and **Customer** satisfaction.

SYSTEM design

4. SYSTEM DESIGN

Once the software requirements have been analyzed and specified, tests that are required in the building and verifying the software is done. Each activity transforms information in a number

that ultimately result in validated computer software. These are some main characteristics that serve as guide for evaluation of good design.

- The design must implement all of explicit requirements contained in the analysis model, and it must accommodate all the implicit requirements desired by the customer.
- The design must be readable, understandable guide for those who generate code and for those who test and subsequently support the software.

System design is thus process of planning a new system or replace or the complement of the existing system. The design based on the limitations of the existing system and the requirements specification gathered in the phase of system analysis.

4.1. Input Design

The quality of the project is mainly determined form the errorless input given to the software rather than the processing of input. There should be proper data validation so that even if the user enters wrong information it should prompt them to enter the correct information. The software must have the capability of handling the incorrect data format given to it and correct it to the expected format. The correct input will alone produce an output that will satisfy the user.

4.2. Output Design

The output is a very important part in a software design. The output produced must be useful to the user. Users generally merit the system analyst works closely with the user through an interactive process, until the result is considered to be satisfactory. Therefore, an effective output design is an important feature of design specification. Output is information delivered to users through the information system.

SYSTEM DEVELOPMENT

5. SYSTEM DEVELOPMENT

5.1 MODULES:

The project consist of five modules namely,

1. Incident identification and logging.
2. Classification and initial support.
3. Investigation and diagnosis.
4. Resolution and recovery.
5. Incident closure.

5.2 MODULES DESCRIPTION:

5.2.1 INCIDENT IDENTIFICATION AND LOGGING:

When an incident occurs the incident can be posted through the web interface. Each user will have separate account. The user account details contain name, phone number, email, project name, issue type, subject, category and priority Table 1.1(issue details). The end user enters the details and submits the issue (Fig 1.3).

Incidents can be referred as any failure or interruption to an IT service or a Configuration Item/Asset. These can get from web interface, event management and phone calls.

5.2.2 CLASSIFICATION AND INITIAL SUPPORT:

The main aim of incident classification is to collect all the information that may be used to resolve it. The classification process should implement at least the following steps:

- **Categorization:** a category is assigned (this may in turn be subdivided into several levels) depending on the type of incident and the workgroup responsible for resolving it. The services affected by the incident are identified.

Examples of categories incidents are:

- **Application**
 - Service not available
 - Application bug/query preventing **Customer** from working
 - Disk-usage threshold exceeded
 - **Hardware**
 - System down
 - Automatic alert
 - printer not printing
 - configuration inaccessible
 - **Service requests**
 - Request for information/advice/documentation
 - Forgotten password.
- **Establishing the level of priority:** the incident is assigned a level of priority, based on high, low, or medium, depending on its impact and urgency.
 - **Allocation of resources:** if the Service Engineer cannot resolve the incident in the first instance, it will designate the technical support personnel responsible for resolving it (second level).
 - **Monitoring the status and the expected response time:** an incident is associated with the incident (for example, logged, open, on hold, resolved, closed) and the resolution time for the incident is estimated based on the relevant SLA and the priority.
 - **Service Level Agreement:** SLA is a service contract between service providers to customers based on the customer requirement contract will be created.

5.2.3 INVESTIGATION AND DIAGNOSIS

Investigation and diagnosis relates to assessing incident details, collecting and analyzing the information and resolution, then routing the incident to line support. Incident investigation and diagnosis is the third step in the incident management process. It follows incident escalation.

Incident Escalation

The process for getting more resources is called escalation. There are two types of escalation:

- Functional escalation passes the incident to another party within the same unit.
- Hierarchical escalation passes the incident to someone higher in the hierarchy so more resources can be requested.

When the support engineer is unable to resolve the incident, (i.e. when it is not a known error) the incident can be referred to the second-level support. The incident will get escalated to the third-level support when the second-level support is not able to resolve it within the due by time. Service Level Agreement helps in prioritizing the incident and enabling this timely escalation as in fig 10.1

5.2.4 RESOLUTION AND RECOVERY

The Recovery of incidents is very critical when it has affected any of the services. After identifying the issue and resolving the incident, make the resolution that you add as a part of the Knowledge Base or Solutions. This helps you in giving a quicker response time when another user comes in with the same problem. Giving an immediate resolution to the incidents will also help in giving a good customer satisfaction.

Resolution and recovery is the completing of the incident, using a solution or workaround, or raising a request for change.

5.2.5 INCIDENT CLOSURE

Incident closure is confirming the resolution with the report of the incident and closing the incident. At times the user might also not respond back even if the issue is resolved. The incidents will get closed after the specified number of days where there is no response from the user.

SYSTEM implementation

6.

SYSTEM TESTING AND IMPLEMENTATION

6.1 System Testing

Software testing is the process done to uncover the errors and represents the ultimate review of specification, design and code generation. Once the source code has been generated, software must test to uncover as many errors as possible before delivering to the customer. In order to find the highest possible number of errors, tests must be conducted systematically and test cases must be designed using disciplined techniques.

6.1.1 Testing Methodologies

- **Black Box Testing:**

Black box testing also known as behavioral testing is a software testing technique in which the internal workings of the item being tested are not known to the tester. For example, when black box testing is applied to software engineering, the tester would only know the legal inputs and what the expected outputs should be, but not how the program actually arrives at those outputs. It is because of this, black box testing can be considered as the testing with respect to the specifications, and no other knowledge of the program is necessary.

Black Box testing attempts to find errors in the following categories:-

- Incorrect or missing functions.
- Interface errors.
- Errors in data structures or external database access.
- Initialization and termination errors.

- **White Box Testing:**

White box tester will know the functionality and internal the project logic. This type of testing ensures that

- All independent paths have been exercised at least once.
- All logical decisions have been exercised on their true and false sides.
- All loops are executed at their boundaries and within their operational bounds.
- All internal data structures have been exercised to assure their validity.

To follow the concept of white box testing have tested in each form All conditions are exercised to check their validity. All loops are executed on their boundaries.

- **Unit Testing:**

The procedure level testing is made first. By giving improper inputs, the errors occurred are noted and eliminated. For example: In the password manager the length of the password cannot be less than 8 characters.

LOGIN:

Every user will have a customized home page with his/her profile management facilities. The user can login by using their user id and password.

Test case id: ID01

Input for test case: Login

Test case description: It maintain authentication by providing user id and passwords of all the users access in the system.

S.No	Field name	Field Description	Expected Output	Actual Output
1	Username	It provides Username for user	VARCHAR	VARCHAR
2	Password	It provides Password for user	VARCHAR	VARCHAR

REGISTRATION:

It contains the entire client details like their personal details. Below table contains the registration details of clients.

Test case id: ID02

Input for test case: Registration

Test case description: It maintains the issue details like their name, address, username, password etc.

S.No	Field name	Field Description	Expected Output	Actual Output
1	Id	It provides register id for clients.	VARCHAR	VARCHAR

2	First Name	It provides first name of the client	TEXT	TEXT
3	Last Name	It provides last name of the client	TEXT	TEXT
4	Address	It provides address of the clients.	VARCHAR	VARCHAR
5	Username	It provides username of the clients.	VARCHAR	VARCHAR
6	Password	It provides password of the clients.	VARCHAR	VARCHAR

REPORT AN ISSUE

It contains the entire client issue details. Below table contains the issue details of clients.

Test case id: ID03

Input for test case: Report an issue

Test case description: It maintains the issue details like their name, number, project name, issue type, subject, category and priority etc.

S.No	Field name	Field Description	Expected Output	Actual Output
------	------------	-------------------	-----------------	---------------

1	Id	It provides register id for clients.	VARCHAR	VARCHAR
2	Name	It provides name of the client	TEXT	TEXT
3	Email	It provides email of the client	VARCHAR	VARCHAR
4	Project name	It provides project name.	VARCHAR	VARCHAR
5	Issue type	It provides type of issue.	VARCHAR	VARCHAR
6	Subject	It provides subject of the issue.	VARCHAR	VARCHAR
7	Category	It indicates category of the issue.	VARCHAR	VARCHAR
8	Priority	It indicates type of priority.	VARCHAR	VARCHAR
9	Status	It indicates status of the issue	VARCHAR	VARCHAR
10	File upload	It indicates upload the issue file.	VARCHAR	VARCHAR

ALLOCATE TECHNICIAN:

This table contains the technician and allocated projects.

Test case id: ID04

Input for test case: Allocate Technician

Test case description: It maintain allocated technician project details.

S.No	Field name	Field Description	Expected Output	Actual Output
1	Technician	It provides Technician for projects	VARCHAR	VARCHAR
2	Project name	It contains project name	VARCHAR	VARCHAR

- **Integration Testing:**

Bottom up is the traditional strategy used to integrate the components of software system into a functioning as a whole top-down integration starts with the main routine and one or two immediate subroutine in the system structure. After combining all modules the functionality of the modules were tested. It depends on their action between the modules and the outcome is up to the requirements.

Testing is done for each module. After testing all the modules, the modules is integrated and testing of the final system is done with the test data, specially designed to show that the system will operate successfully in all its aspects conditions.

- **Acceptance Testing:**

It involves planning and execution of functional tests, performance test and stress. Test in order to demonstrate that the implemented system satisfies the requirements. The software is installed and tested with the real time data. It is known that the user finds it easy to interact with the software and no stress identified.

- **Validation Testing:**

The final step involves validation testing, which determines whether the software function as the user expected. The end-user rather than the system developer conduct this test most software developers as a process called “Alpha and Beta testing” to uncover that only the end-user seems able to find.

The compilation of the entire project is based on the full satisfaction of the end users. In the project, validation testing is made in various forms; the correct answer only will be accepted in the answer box. The answers other than the four given choices will not be accepted.

6.2. System Implementation

A software application in general is implemented after navigating the complete life cycle method of a project. Various life cycle processes such as requirement analysis, design phase, verification, testing and finally followed by the implementation phase result in a successful project management. System implementation is an important stage of theoretical design is turned into practical system.

6.2.1 Implementation Procedure

Implementation is the stage of the project when the theoretical design is turned out into a working system. Thus it can be considered to be the most critical stage in achieving a successful new system and in giving the user, confidence that the new system will work and be effective.

The implementation stage involves careful planning, investigation of the existing system and it's constraints on implementation, designing of methods to achieve changeover and evaluation of changeover methods.

conclusion

7. CONCLUSION

This application provides extremely good solution to solve the current issues in Incident Management system. It provides more control over the existing system. It helps to save time and effort to manage the system.

It enables the customer to report issues via website instead of calling a developer. It helps to reduce the cost involved in the phone call explanations. It is also true that the best possible levels of service quality and availability are maintained that allows the management to track the issues filed and it helps to improve the quality of the project.

Here the incident priority has been allocated and it will be recovered by the developer depending on its priority and solution.

This incident management project records all the incidents happened in an organization, mainly in the financial sector and track them to closure with the optimize Service Level Agreement.

Scope for future enhancement

8. SCOPE FOR FUTURE ENHANCEMENT

The project “Incident management system” has been developed with giving due care of the drawback of existing system. It is designed in such a way to remove all problems in the existing system.

The application is planned to be hosted in cloud such that this application can be available to different domainslike:

- ⦿ Banking
- ⦿ Chit funds
- ⦿ Mutual funds
- ⦿ Insurance companies
- ⦿ Share market etc...

The scope of the project is still extendable. The software has been tested successfully and it is also easily upgradable.

bibliography

9. BIBLIOGRAPHY

BOOK REFERENCES:

- [1] “MySQL COOKBOOK”, Paul DuBois, 2nd Edition, 2006, O'Reilly Media
- [2] “HTML, XHTML & CSS”, Elizabeth Castro,6th Edition, 2006, Peachpit Press
- [3] “JSP: THE COMPLETE REFERENCE”, Steven Holzner,5th Edition,2002,Tata McGraw-Hill Companies,Inc
- [4] “Core Servlets and Java Server Pages: Core Technologies”, Marty Hall, 2nd Edition, Larry Brown, Prentice Hall

WEB REFERENCES:

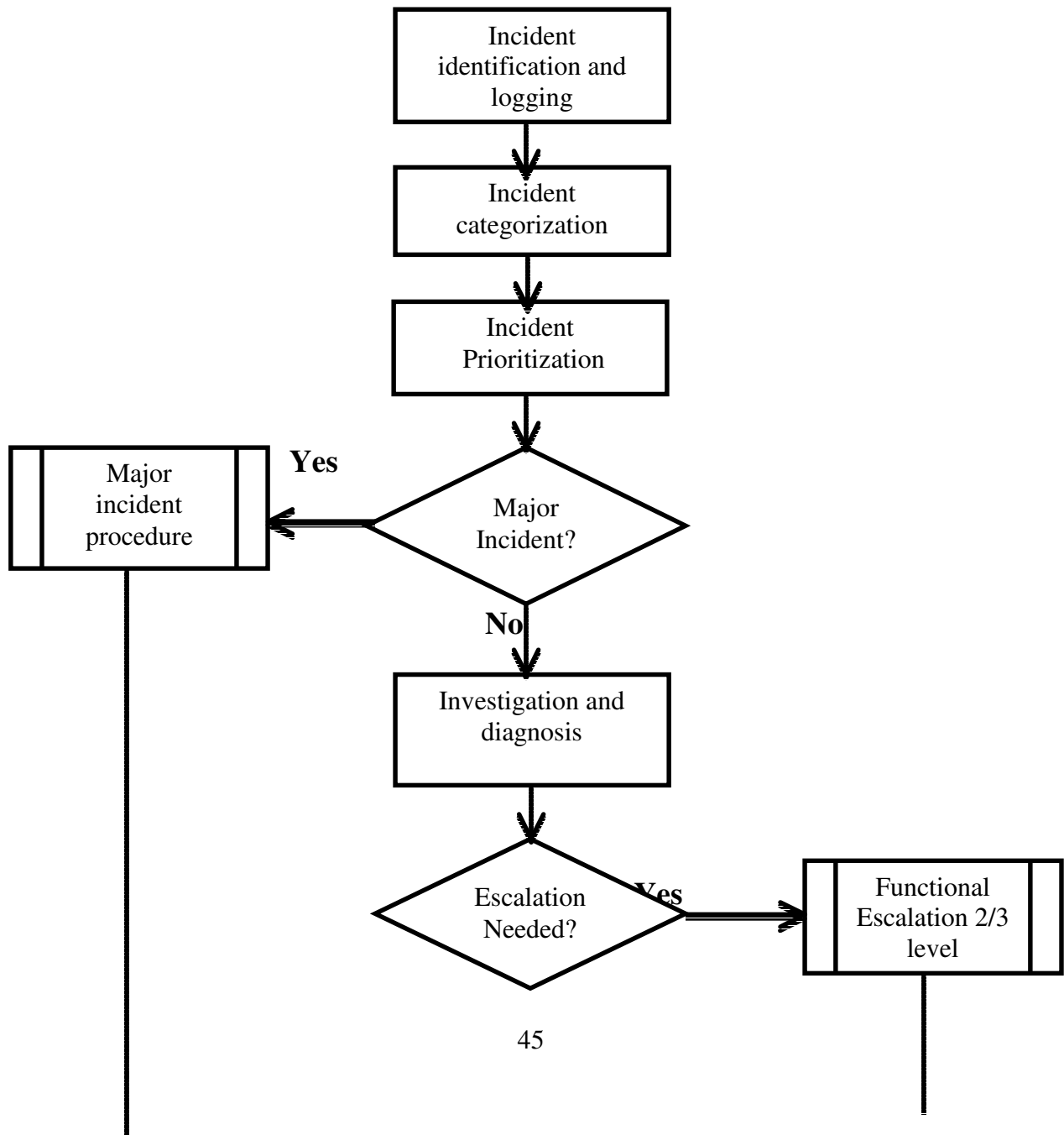
- [1] <http://www.w3schools.com/html/default.asp>
- [2] <http://www.w3schools.com/jsp/default.asp>
- [3] <http://dev.mysql.com/doc/refman/5.0/en/tutorial.html>

[4] http://www.tutorialspoint.com/jsp/jsp_sending_email.html

[5] http://www.tutorialspoint.com/jsp/jsp_overview.html

10.APPENDIX

Fig 10.1 SYSTEM FLOW DIAGRAM



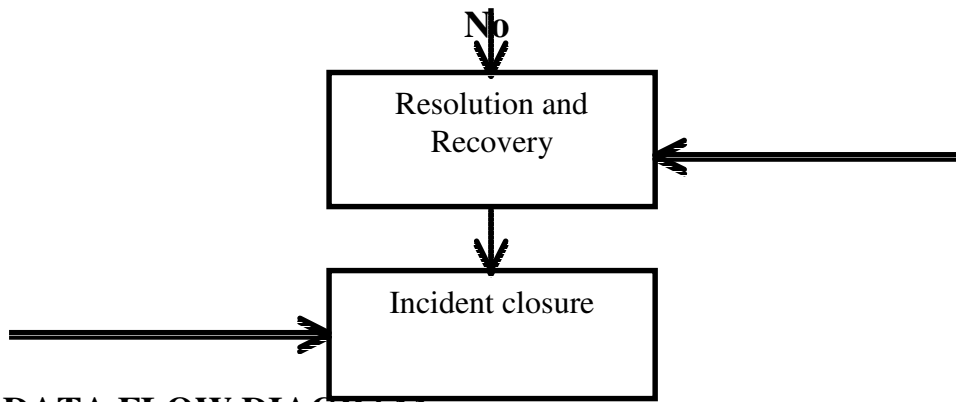
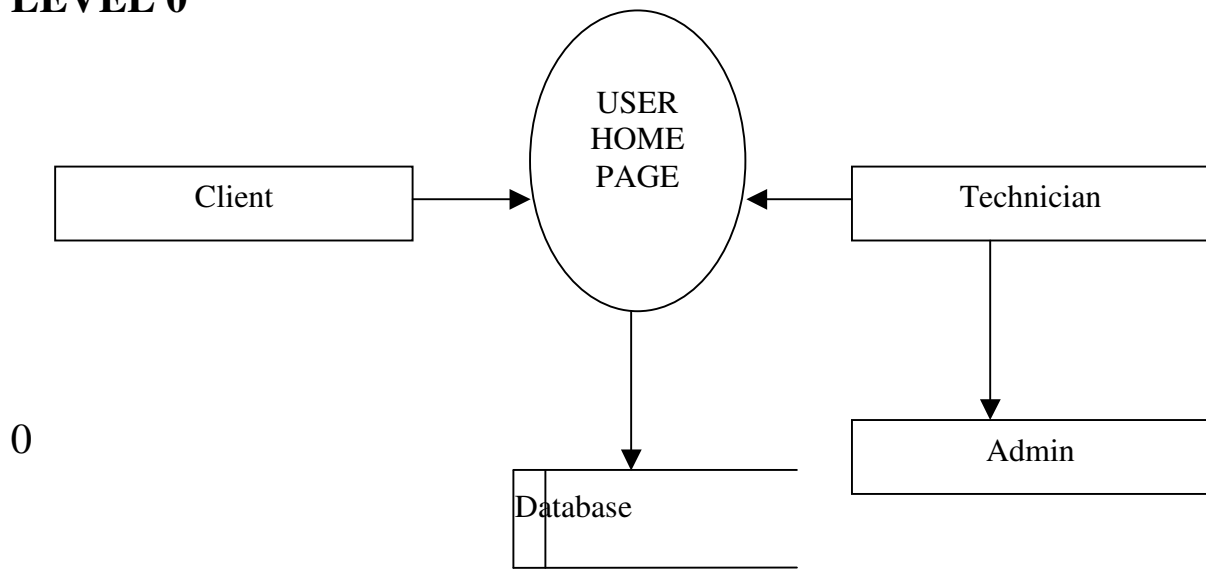
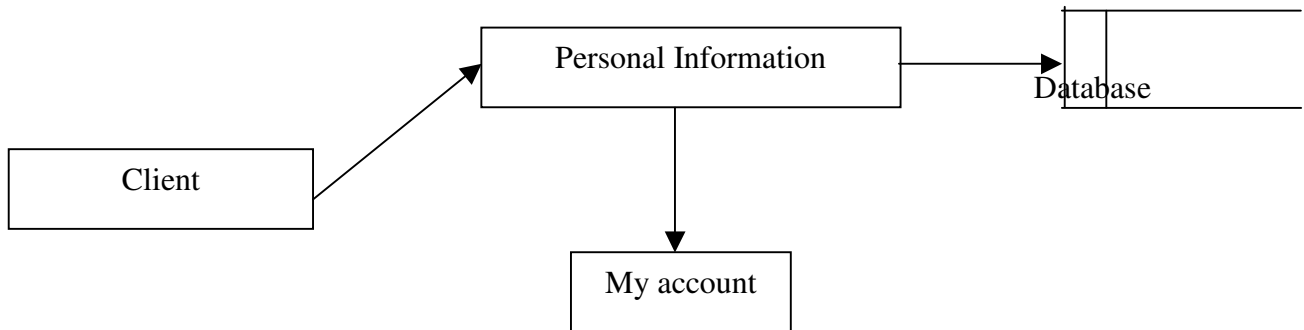


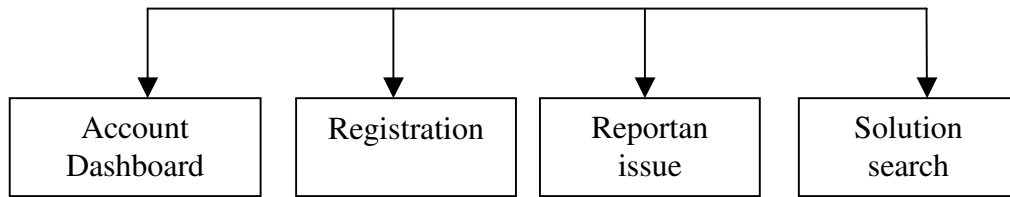
Fig 10.2 DATA FLOW DIAGRAM:

LEVEL 0

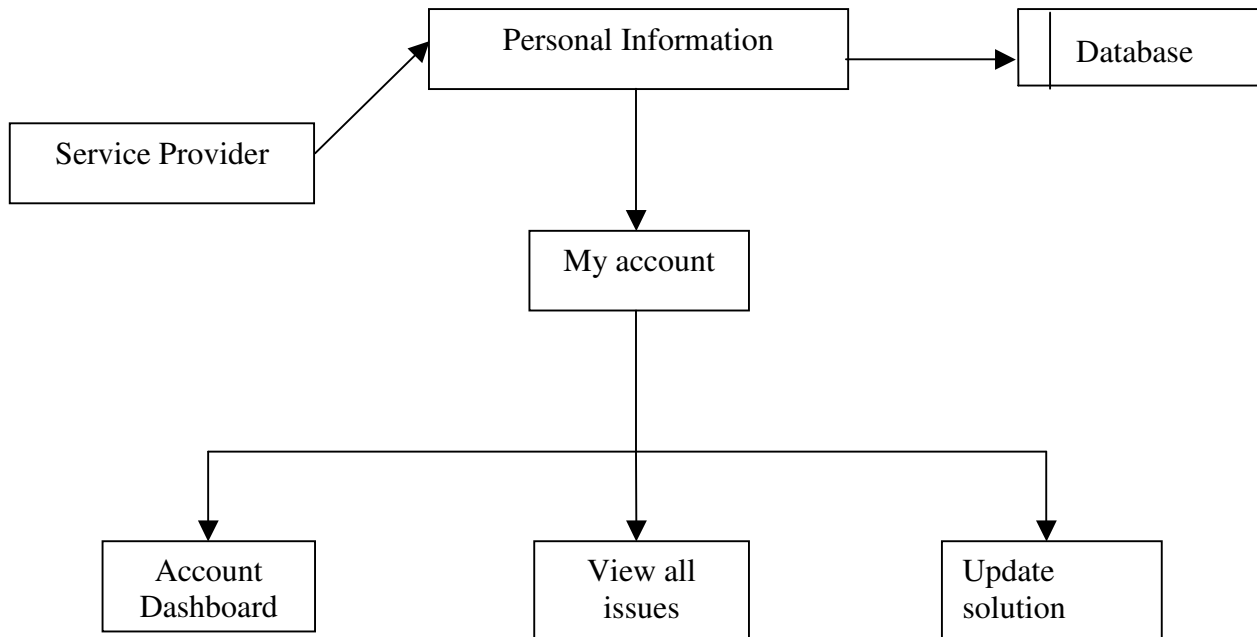


LEVEL 1

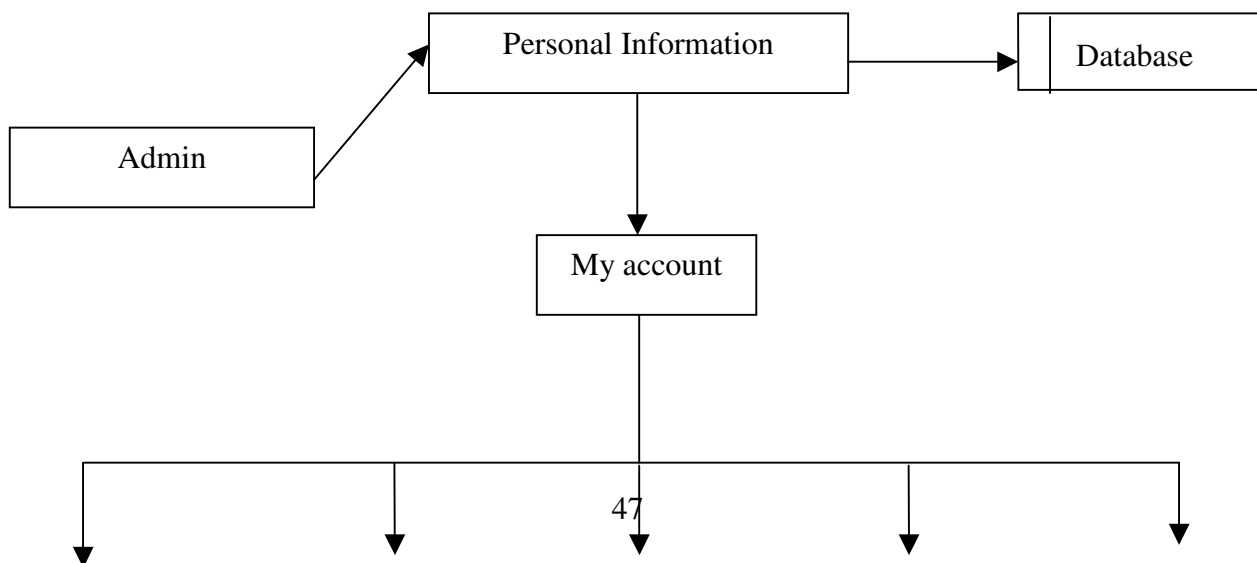




LEVEL 2



LEVEL 3



Account Dashboard

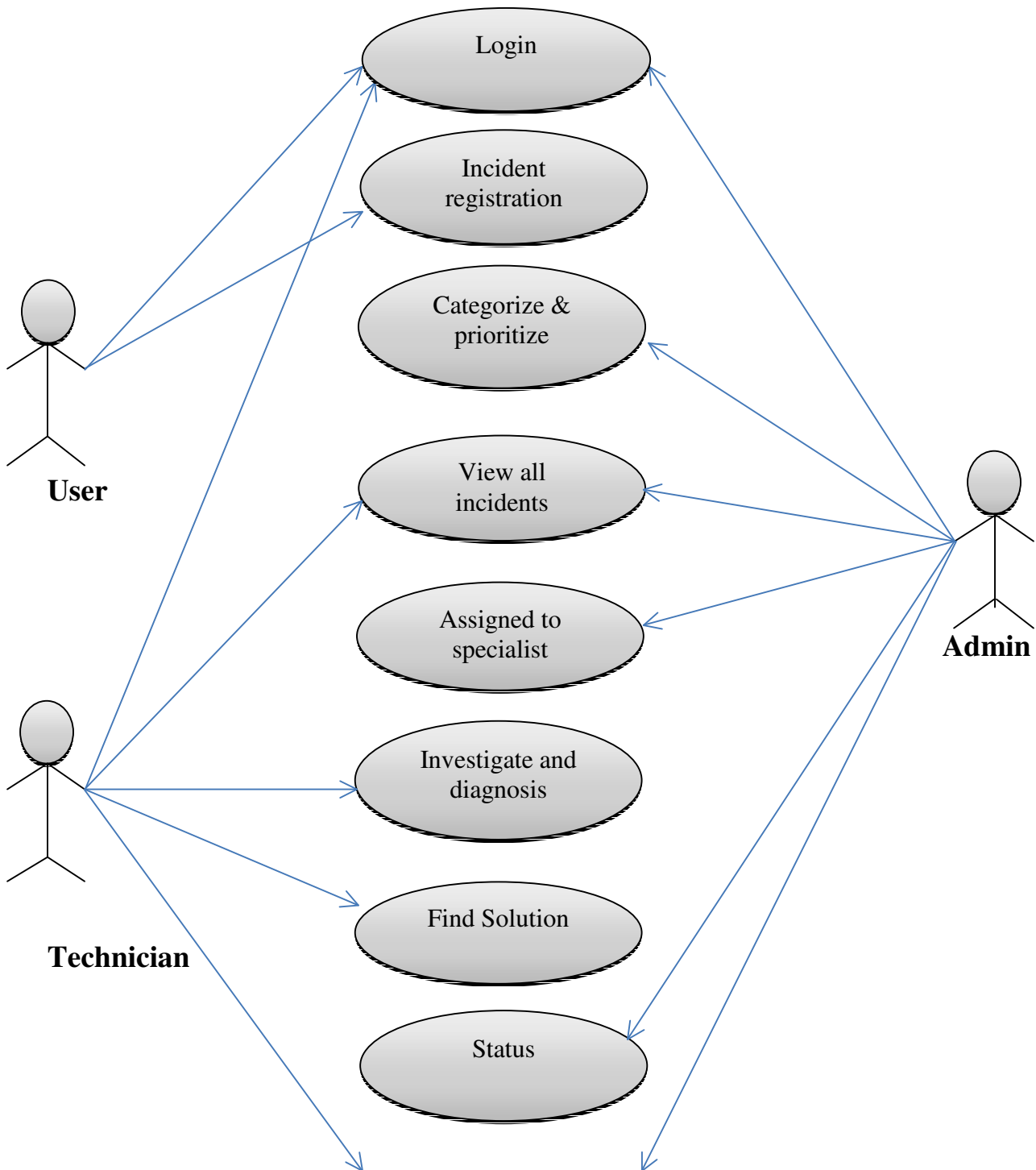
View issue details

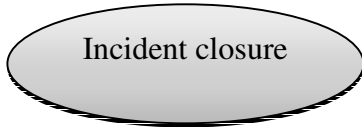
Allocate Technician

View Tickets status

Sending mail

Fig 10.3 USE CASE DIAGRAM





10.4 TABLE DESIGN

TABLE 1.1

TABLE NAME: issue details

Primary key: project_id

This table contains information about the login details.

FIELD NAME	DESCRIPTION
Project_id	Int(50)
Name	Varchar(50)
Email	Varchar(50)
project name	Varchar(50)
Subject	Varchar(50)
Issuetype	Varchar(50)
Priority	Varchar(50)
Status	Varchar(50)
Date	Varchar(50)
Fileinput	Varchar(50)
Solution	Varchar(50)

TABLE 1.2

TABLE NAME: Login

Primary key: id

This table contains information about the login details.

FIELD NAME	DESCRIPTION
Username	Varchar(50)
Password	Varchar(50)

TABLE 1.3

TABLE NAME: Registration

PRIMARYKEY: id

This table contains information about the registration details.

FIELD NAME	DESCRIPTION
Id	Int(50)
Firstname	Varchar(50)
Lastname	Varchar(50)
Address	Varchar(50)
Username	Varchar(50)
Password	Varchar(50)

TABLE 1.4

TABLE NAME: Technician

PRIMARYKEY: id

This table contains information about the technician details.

FIELD NAME	DESCRIPTION
-------------------	--------------------

Id	Int(50)
project name	Varchar(50)
Technician	Varchar(50)

11. SCREEN SHOTS

Figure 1.1 Registrations:

A screenshot of a web registration form. The form has a title "Registration" in a light brown box. Below the title are five input fields: the first contains "divya", the second "subramanian", the third "cbe", the fourth "customer", and the fifth contains six asterisks. At the bottom of the form is a blue "Register" button.

Figure 1.2 Customer login:

Please login with your Username and Password.

Remember me

Figure 1.3 Report an issue:

- MAIN
- Report an issue
- View Tickets
- solution
- Logout

Home / Forms

Report An Issue

Name

Contact Number

Email

Project name

Issue type

Subject

Category

Priority

Status

File input
 No file chosen

Figure 1.4 Solution Search:

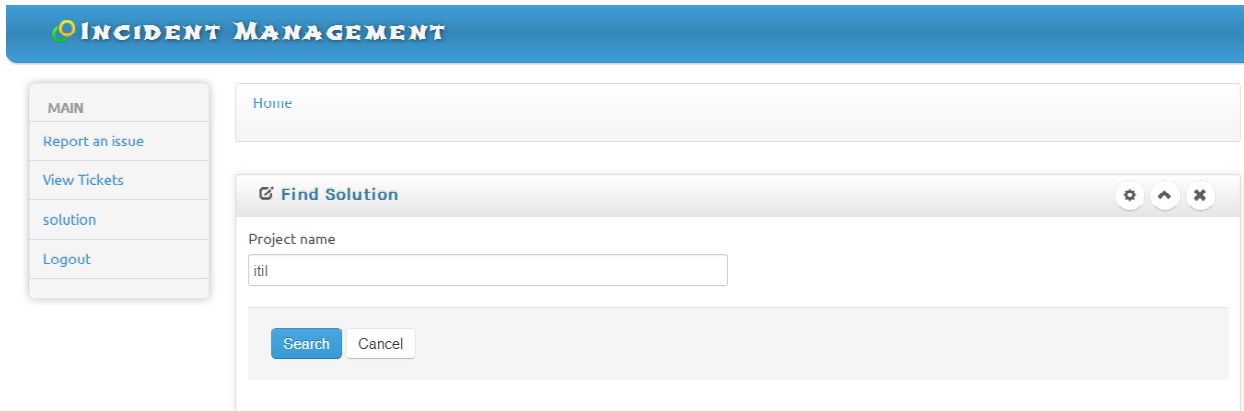


Figure 1.5 Solution:



Figure 1.6 Admin Login:

Please login with your Username and Password.

Remember me

Figure 1.7 ViewAll Requests:

INCIDENT MANAGEMENT admin ▾

MAIN

[View Issue details](#)

[Allocate Technician](#)

[Alert](#)

[Sending mail](#)

[Logout](#)

Home

All my Requestes ⚙️ ⬆️ ✖️

Projec.UId	Projec.LName	Subjec.L	Issue type	Category	Priority	Date
1	itil	cant run netbeans	Bug Report	Network	High	2014-03-06 12:13:04.0
2	cybersinage	problem	Dug Report	software	Hlgh	2014-03-07 03:19:45.0
3	printer	printer is not proper	Bug Report	Printer problem	High	2014-03-05 10:41:22.0
4	e service	not saved in database	Bug Report	Software	Low	2014 03 08 10:43:39.0
5	mail casting	mail cant send	Bug Report	Software	Low	2014-03-06 10:43:53.0
6	install	install windows 8 os	Bug Report	Operating systems	Medium	2014-03-07 13:31:23.0
7	idle time management	cant display idle time	Bug Report	Software	Medium	2014-03-08 13:32:43.0

Figure 1.8 Allocate technician:

55

INCIDENT MANAGEMENT admin ▾

MAIN

[View Issue details](#)

[Allocate Technician](#)

[Alert](#)

[Sending mail](#)

[Logout](#)

Home

Allocate Technicians ⚙️ ⬆️ ✖️

ProjectId	ProjectName	Category	
1	itil	Network	Allocate technicians
2	cybersinage	software	Allocate technicians
3	printer	Printer problem	Allocate technicians
4	e service	Software	Allocate technicians
5	mail casting	Software	Allocate technicians
6	install	Operating systems	Allocate technicians
7	idle time management	Software	Allocate technicians

Figure 1.9 Project name: printer Technician: mahe

INCIDENT MANAGEMENT admin ▾

MAIN

[View Issue details](#)

[Allocate Technician](#)

[Alert](#)

[Sending mail](#)

[Logout](#)

Home

Allocate technician ⚙️ ⬆️ ✖️

Project name
printer

Technician

[Save changes](#) [Cancel](#)

ProjectName	Technician
printer	mahe

Figure 1.10 ViewTicket Status:

INCIDENT MANAGEMENT Technician

Home

All Requestes

ProjectId	ProjectName	Subject	Issue type	Category	Priority	Status	Date
1	itil	cant run netbeans	Bug Report	Network	High	Closed	2014-03-06 12:13:04.0
2	cybersinage	problem	Bug Report	software	High	Closed	2014-03-07 03:19:45.0
3	printer	printer is not proper	Bug Report	Printer problem	High	Closed	2014-03-05 10:41:22.0
4	e service	not saved in database	Bug Report	Software	Low	Open	2014-03-08 10:43:39.0
5	mail casting	mail cant send	Bug Report	Software	Low	Closed	2014-03-06 10:43:53.0
6	install	install windows 8 os	Bug Report	Operating systems	Medium	Open	2014 03 07 13:31:23.0
7	idle time management	cant display idle time	Bug Report	Software	Medium	Open	2014-03-08 13:32:43.0

Figure 1.11 Tickets crossed service level agreement:

INCIDENT MANAGEMENT admin

Home

Ticket Alerts

Tickets crossed Service Level Agreement

ProjectId	Email	ProjectName	Subject	Issue type	Category	Priority	Status	Date
4	haya.chat@gmail.com	e service	not saved in database	Bug Report	Software	Low	Open	2014-03-08 10:43:39.0
6	anand91.cbe@gamil.com	install	install windows 8 os	Bug Report	Operating systems	Medium	Open	2014-03-07 13:31:23.0
7	vishnu.prithivi06500@gamil.com	idle time management	cant display idle time	Bug Report	Software	Medium	Open	2014-03-08 13:32:43.0

Figure 1.12 Sending mail:

The screenshot shows a web application interface for 'INCIDENT MANAGEMENT'. The user is logged in as 'admin'. A sidebar menu on the left contains the following items: MAIN, View Issue details, Allocate Technician, Alert, Sending mail (highlighted), and Logout. The main content area shows a 'Home' breadcrumb and a 'Sending Mail' form. The form fields are: To: (haya.chat@gmail.com, anand91.cbe@gamil.com, vishnu.prithivi06500@gamil.com), Subject: (Pending project), and Message Text: (Complete the project with allocated time). At the bottom of the form are 'Send' and 'Reset' buttons.

Figure 1.13 Mail sent successfully

Sending Mail Using JSP

Your mail sent successfully....

Figure 1.14 Technician login:

Please login with your Username and Password.

Remember me

Login

Figure 1.15 Update solution:

- MAIN
- View Issue Details
- Allocated Projects
- Tickets
- Logout

Home

✕ Ticket History

Projectid

Status

solution

Update

ProjectId	Name	ProjectName	Subject	Issue type	Category	Priority	Status	Date	Solution
1	divya	itil	cant run netbeans	Bug Report	Network	High	Closed	2014-03-06 12:13:04.0	uninstall the netbeans
2	priya	cybersinage	problem	Bug Report	software	High	Closed	2014-03-07 03:19:45.0	reboot ur system
3	sumathi	printer	printer is not proper	Bug Report	Printer problem	High	Closed	2014-03-05 10:41:22.0	aabc
4	hari	e service	not saved in database	Bug Report	Software	Low	Open	2014-03-08 10:43:39.0	No solution
5	hariharasudhan	mail casting	mail cant send	Bug Report	Software	Low	Closed	2014-03-06 10:43:53.0	refresh ur inbox
6	anand	install	install windows 8 os	Bug Report	Operating systems	Medium	Open	2014-03-07 13:31:23.0	No solution
7	vishnu	idle time management	cant display idle time	Bug Report	Software	Medium	Open	2014-03-08 13:32:43.0	No solution