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## 1. TITLE OF PROJECT

The proposed project title is **“Web Based Security & Complain Management System”** which is developing to fulfill the dream of making Complain system through web. This system is introduced to provide security to our citizen, if they face any problem or they want to complain us related to security then they can easily use our system.

Actually, this project idea was thought by me because my family person related to Defence services, and every day solve many complain related to security and other related problem. But one thing is common in every public who want to registered complain. That is complaining registration. Today's world connects with IT technologies and public uses Smartphone, wifi technology, internet, website and many more other IT related tools and services. So I decided to develop a web system related to Public Security and Complain Management. Any public gets registered with this system, after successful registration they can share feedback related to security, they can share view and suggestion, they can inform us if seen any suspect person or work, they can directly complain us and many more. Main idea is that we provide complain & security support related to their location. That means they have not to worry to go anywhere. They have to just open our portal, register themselves as per norms and registered complain. In any case we will not disclose their identity. So, after introducing and development of this system, we are able to support our society, provide flexible platform to our citizen/public and contribute to our nation.

## 2. INTRODUCTION AND OBJECTIVE

**Introduction:** This proposed project is providing a reliable, cost effective and fast working platform to the public. Its interface is very reliable and easy to use hence it's providing an ideal working platform for security and complains management. We know very well, in our day to day life many times need to get register complain and some time want security from nation security system. But main problem is identifying easy complain system. Currently there is no any reliable system for complaining. Hence this project is introduced.

This web based platform able to support to public with minimum charges and fast processing through online. Public get served by 24X7 without location boundaries, but they have must be registered with our system, if new user then they easily registered with our system to filling registration form from web portal.

**Objective:** This online system with titled “Web Based Security & Complain Management System” has been initiated for the following reasons:

- ✧ It provide a effective platform for complain registration
- ✧ It Reduce paper work.
- ✧ It is cost effective platform
- ✧ It is time efficient and hassle free system
- ✧ It Removes chances of corruption because public direct connected with system
- ✧ This system is available without time and location boundaries
- ✧ It is error free system, because if any feedback received from public, we immediately implement with this system.
- ✧ This is very effective system to maintain security in our society.

### 3. PROJECT CATEGORY

This proposed system ***“Web Based Security & Complain Management System”*** is an OOPS and RDBMS based Project. This project will be developed using ASP.NET with C# and SQL SERVER 2005/2008.

- ✧ **Front end** : Asp.Net with C#
- ✧ **Back end** : Sql Server 2005/2008
- ✧ **Internet technology** : Html, Java Script
- ✧ **Web Server** : IIS6.0/IIS7.0

### 4. SURVEY OF TECHNOLOGIES

This proposed project ***“Web Based Security & Complain Management System”*** is middle level project and after seeing all the available technologies we decided to use below mention technologies to develop this project.

- Front end** : Asp.Net with C#
- Back end** : Sql Server 2005/2008
- Other technology** : Html, Java Script
- Web Server** : IIS6.0/IIS7.0

**Introduction of Front End Platform-** We choose ASP.Net as a front end and server side programming language with C# language. It is popular and suitable interface for web

application development. It provides qualitative tools for web application development. Code behind pages and configuration files, global definition interface, XML Web Service Links, proper database connectivity and caching are the some tools which is widely used for web development.

**Introduction of Back End Platform-** It is middle sized application. Although Sql Server, Oracle, MYSQL and other database are good for using back end interface but I choose Sql Server 2005/2008 for backend database.

**Introduction of Web Server –** We choose Internet Information System 6.0 or 7.0 as a web server because our project is middle level application and this web server properly supports this system.

## **5. PROBLEM DEFINITION AND ANALYSIS**

This section consist main problem to develop this proposed system i.e. ***“Web Based Security & Complain Management System”***. The main problem is user management with this system. So solving this problem we implemented login and user management system. It will provide publics to easily get legal advice in a very effective way. First time users need to register with system and after registration they got a conformation mail through the system. This conformation mail consist valid user id and respective password. Registration is mandatory to use the system, a registration page is provided to the new user. After successful registration and verification public making them eligible to ask legal query from our legal adviser and our legal support system if they want then they can easily register their complaints with our system. After receiving

complain this system is directly connected with law & order system. So, related officer look after about the registered complain and provide solution to the users. To implement and manage this system we face following main problem:

- ✧ Public/new User information management.
- ✧ Details management of guest public and registered public.
- ✧ Management of Security and safety policy.
- ✧ Management of the public details with respective support provider.
- ✧ Security from unauthorized access of our online system.
- ✧ Make this system known to public.
- ✧ Getting top ranking with search engine.
- ✧ Management of law and order related persons.
- ✧ Proper knowledge management system related to rules and regulations.

## 6. REQUIREMENT SPECIFICATION

This Proposed project is an online system in titled with ***“Web Based Security & Complain Management System”***. It is designed according to the following module which is widely used in this proposed project.

- 1) **Complain Module**
- 2) **Support Module**
- 3) **New Public module (New User/Guest User)**
- 4) **Registered Public Module (Registered User)**
- 5) **Feedback Module**
- 6) **Administrator Module**

**1. Complain Module:** This module is basically designed for the group of registered as well as new user/ public. New User can use this system to registered complain but

before that they have to fill registration form. But if user is registered then they have to just login and registered complain. We also provide complain facility to non registered user.

**2. Support Module:** This module basically designed for the group of support person. It may be involve with Police Officer/legal adviser/Legal department/other representative & NGOs. This module has some basic work & responsibilities for the public which is mention in below:

- ✧ Support person are available on 24x7 hours through online mode as shift decided by the administrator of this system.
- ✧ They have a unique id to represent on online mode with this system.
- ✧ They also registered with our system having valid proof & verification.
- ✧ This system provides them a login id & password.
- ✧ Public directly connected to Support person through our website.
- ✧ Adviser advice through email, chat or using skype or other mode decided by admin.
- ✧ All advisers are monitored by administrator because chat /email record shared with admin also.

### **3. New Public module (New User/Guest User)**

This module is introduced for those users who are first time visitor of this website. This module provides a reliable and rich experience to the guest user and make them registered user.

- ✧ All New users/ Guest User visit this system through domain name.

- ✧ This system welcomes our new user.
- ✧ System provides a New User registration form.
- ✧ After filling Registration form system send a conformation mail.
- ✧ That conformation mail content valid Public Id which is used in future.
- ✧ For any query and support, user represents their unique public Id. After that they ask query with legal adviser/Support team to solve the concern problem or advice them as required.

**4. Registered Public Module (Registered User):** This module is designed for registered user only. If unregistered user visited this section then they are not able to use this system and automatically redirected with registration page. Following are main work and responsibility of public module:

- ✧ User/New User/ Registered Public visit this system through domain name.
- ✧ If user visited first time then they redirected with registration page.
- ✧ They have to fill registration form and waiting for approval.
- ✧ This system sends a conformation mail after verification to concern person with proper user id and password if applicable.
- ✧ If user is already registered with this system then they can easily login with respective user id and password.
- ✧ If the forgot then this system help and resend their id and details.



- ✧ Registered public directly served by the Support Person / legal adviser/ lawyer as per asked query.
- ✧ Using public id they are able to know their status and details through our system.
- ✧ They can easily share their feedback and comments to the administrator of this system.

**5. Feedback Module:** This module is designed for collecting feedback from the user. They can easily share their feedback as well as suggestion. They can also share their suggestion if they want any new things with this system.

**6. Administrator Module:** This module is developed for super administrator, who is responsible to overall management of this system. Following are the key points of this module:

- ✧ Administrator/Admin is responsible for overall execution and management of this proposed project.
- ✧ They are responsible for creation of Support person / Legal Person/Adviser Id and details.
- ✧ They also responsible for creation of Public Id with respective details.
- ✧ Verify the public and adviser details which are provided by them.
- ✧ Provide forgotten password and details to the public and support adviser.
- ✧ Responsible for making top ranking of this system website over the search engine.
- ✧ Responsible for advertisement and promotion work related to this system.

- ✧ Manage the database and contact details properly.
- ✧ Delete the details which are not necessary over the website.
- ✧ Manage validation and connection with entire system.
- ✧ Provide security to this proposed system.

## 7. PLANNING AND SCHEDULING

Gantt chart is a very good technique to represent the project schedule. Gantt charts illustrate the start and finish dates of the terminal elements and summary elements of a project. Terminal elements and summary elements comprise the work breakdown structure of the project. With the help of Gantt chart we represent scheduling and tasks against the progression of time of the project.

Task Schedule	1 <sup>st</sup> week	2 <sup>nd</sup> week	3 <sup>rd</sup> week	4 <sup>th</sup> week	5 <sup>th</sup> week	6 <sup>th</sup> week	7 <sup>th</sup> week	8 <sup>th</sup> week
Analysis of Project								
Requirement Gathering								
Design Layout								
Coding Layout								
Testing								
Implementation								
Maintenance								

## 8. SYSTEM REQUIREMENT SPECIFICATION

A System Requirements Specification for ***Online Public Security and Complain Management System***". It is a structured collection of information that embodies the requirements of a system. It is most important technique to gather the software and hardware requirement. Following are hardware and software specification for developing this proposed system:

Hardware & Software		
Platform Used	Minimum Requirement	Recommended Requirement
Processor	Dual core processor	Core i3
RAM	512 MB	2 GB
Operating System	Windows XP	Windows 2007
Hard Disk	40GB	80 GB or more
Display	800 X 600	1024 X 768
Mouse/Key Board	Compatible with System	Compatible with System
Database	SQL Server 2005/2008	SQL Server 2005/2008
Software Tools	Dot Net Framework 3.5 SP1 , Visual Studio 2005	Dot Net Framework 3.5 SP3, Visual Studio 2005, 2008
Web Server	IIS 6.0	IIS 7.0 or more
Browser	IE 7.0	IE 8.0, Mozilla Firefox ,Google Chrome

## **9. PROCESS LOGIC**

Process logic of this project “**Web Based Security & Complain Management System**” is effective and presentable from the user and adviser point of view. It is designed according to the following module which is widely used in this proposed project.

- 1. Complain Module**
- 2. Support Module**
- 3. New Public module (New User/Guest User)**
- 4. Registered Public Module (Registered User)**
- 5. Feedback Module**
- 6. Administrator Module**

### **Process for Complain Module:**

- ✧ New User/New Public has to register with system for complaining.
- ✧ Register user can registered complain after login.
- ✧ We also provide facility to guest user for complaining with our system
- ✧ As per complain our support team provide solution.
- ✧ All system and overall all management completed by Admin.

### **Process for Support Module:**

- ✧ They have a unique id to represent on online mode with this system.
- ✧ They also registered with our system having valid proof & verification.
- ✧ This system provides them a login id & password.
- ✧ Public directly connected to legal Support person through our website.
- ✧ Legal adviser advice through email, chat or using skype or other mode decided by admin.
- ✧ All advisers are monitored by administrator because chat /email record shared with admin also.

### **Process for New Public module (New User/Guest User):**

- ✧ All New users/ Guest User visit this system through domain name.
- ✧ This system welcomes our new user.
- ✧ System provides a New User registration form.
- ✧ After filling Registration form system send a conformation mail.
- ✧ That conformation mail content valid Public Id which is used in future.
- ✧ For any query and support, user represents their unique public Id. After that they ask query with legal adviser/Support team to solve the concern problem or advice them as required.

### **Process for Registered Public Module (Registered User):**

- ✧ User/New User/ Registered Public visit this system through domain name.
- ✧ If user visited first time then they redirected with registration page.
- ✧ They have to fill registration form and waiting for approval.
- ✧ This system sends a conformation mail after verification to concern person with proper user id and password if applicable.
- ✧ If user is already registered with this system then they can easily login with respective user id and password.
- ✧ If the forgot then this system help and resend their id and details.
- ✧ Registered public directly served by the legal adviser/ lawyer as per asked query.
- ✧ Using public id they are able to know their status and details through our legal system.
- ✧ They can easily share their feedback and comments to the administrator of this system.

### **Process for Feedback Module:**

- ✧ User can share their feedback using our system.
- ✧ They have to just login and share their feedback and suggestion.
- ✧ We implement their suggestion if required

### **Process for Administrator Module:**

- ✧ Administrator responsible for overall execution and management of this proposed project.
- ✧ They are responsible for creation of Legal Person/Adviser Id and details.
- ✧ They also responsible for creation of Public Id with respective details.
- ✧ Verify the public and adviser details which are provided by them.
- ✧ Provide forgotten password and details to the public and support adviser.
- ✧ Responsible for making top ranking of this system website over the search engine.
- ✧ Responsible for advertisement and promotion work related to this system.
- ✧ Manage the database and contact details properly.
- ✧ Delete the details which are not necessary over the website.
- ✧ Manage validation and connection with entire system.
- ✧ Provide security to this proposed system.

## 10. SYSTEM DEVELOPMENT LIFE CYCLE

To manage this type of system, a number of system development life cycle (SDLC) models have been presented such as:

- ✧ Spiral Model
- ✧ Waterfall Model
- ✧ Build and Fix Model
- ✧ Prototype Model
- ✧ Interactive Enhancement Model
- ✧ RAD Approach etc.

As per survey of SDLC model, we have been found that **waterfall model** is the oldest of these, and the best model to develop this type of project. So, we choose **waterfall model** to develop this project. In this model a sequence of stages in which the output of each stage becomes the input for the next.

### Some Advantage of this model includes:

- ❖ **Systems analysis, requirements definition:** Refines project goals into defined functions and operation of the intended application. Analyzes end-user information needs.



- ❖ **Systems design:** Describes desired features and operations in detail, including screen layouts, business rules, process diagrams, pseudo code and other documentation.
- ❖ **Project planning, feasibility study:** Establishes a high-level view of the intended project and determines its goals.
- ❖ **Implementation:** The real code is written here.
- ❖ **Integration and testing:** Brings all the pieces together into a special testing environment, then checks for errors, bugs and interoperability.
- ❖ **Acceptance, installation, deployment:** The final stage of initial development, where the software is put into production and runs actual business.
- ❖ **Maintenance:** After implementation maintenance starts for the software or project.

## 11. USE CASE DIAGRAM

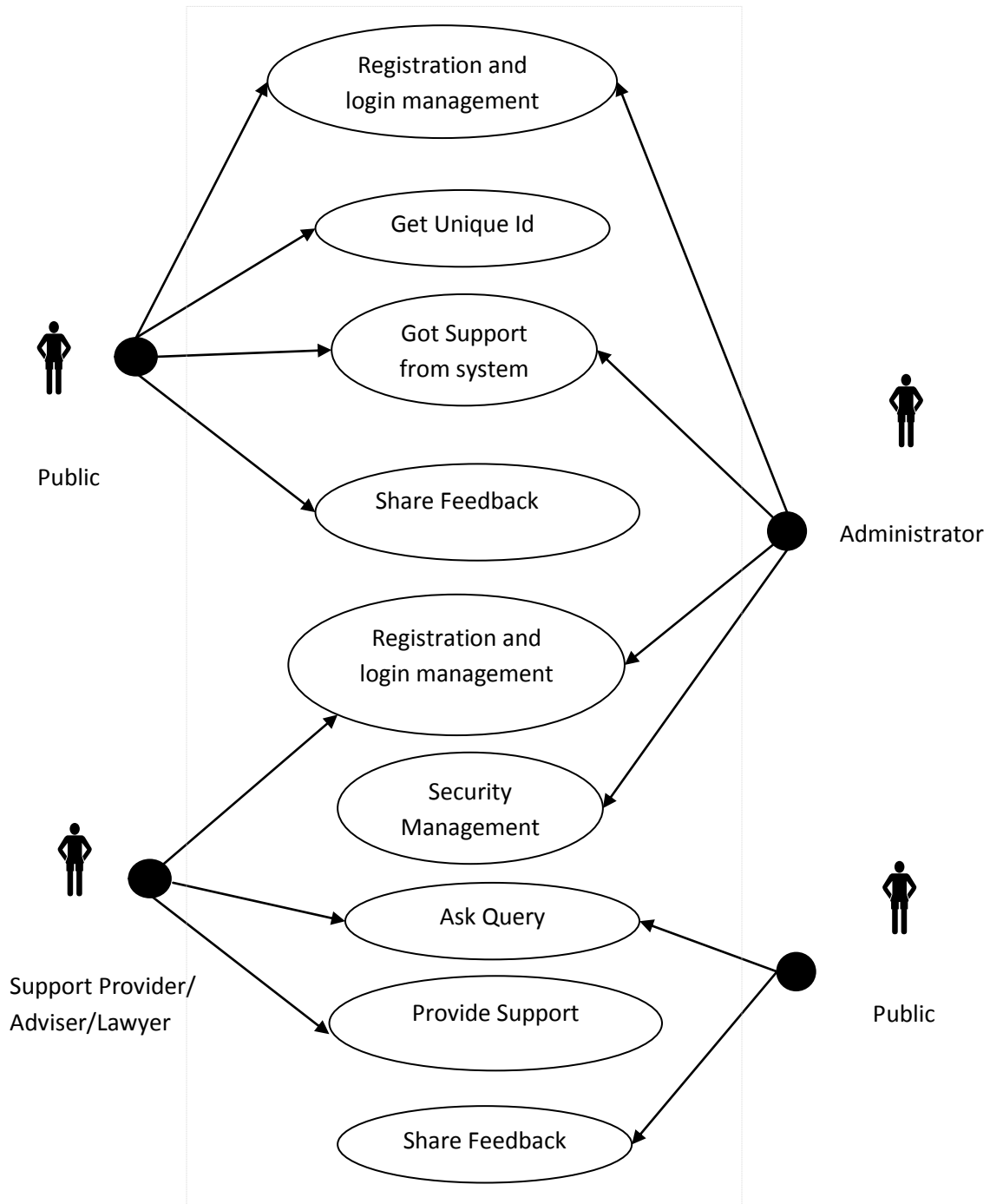


Figure-1

## 12. ENTITY RELATIONSHIP DIAGRAM

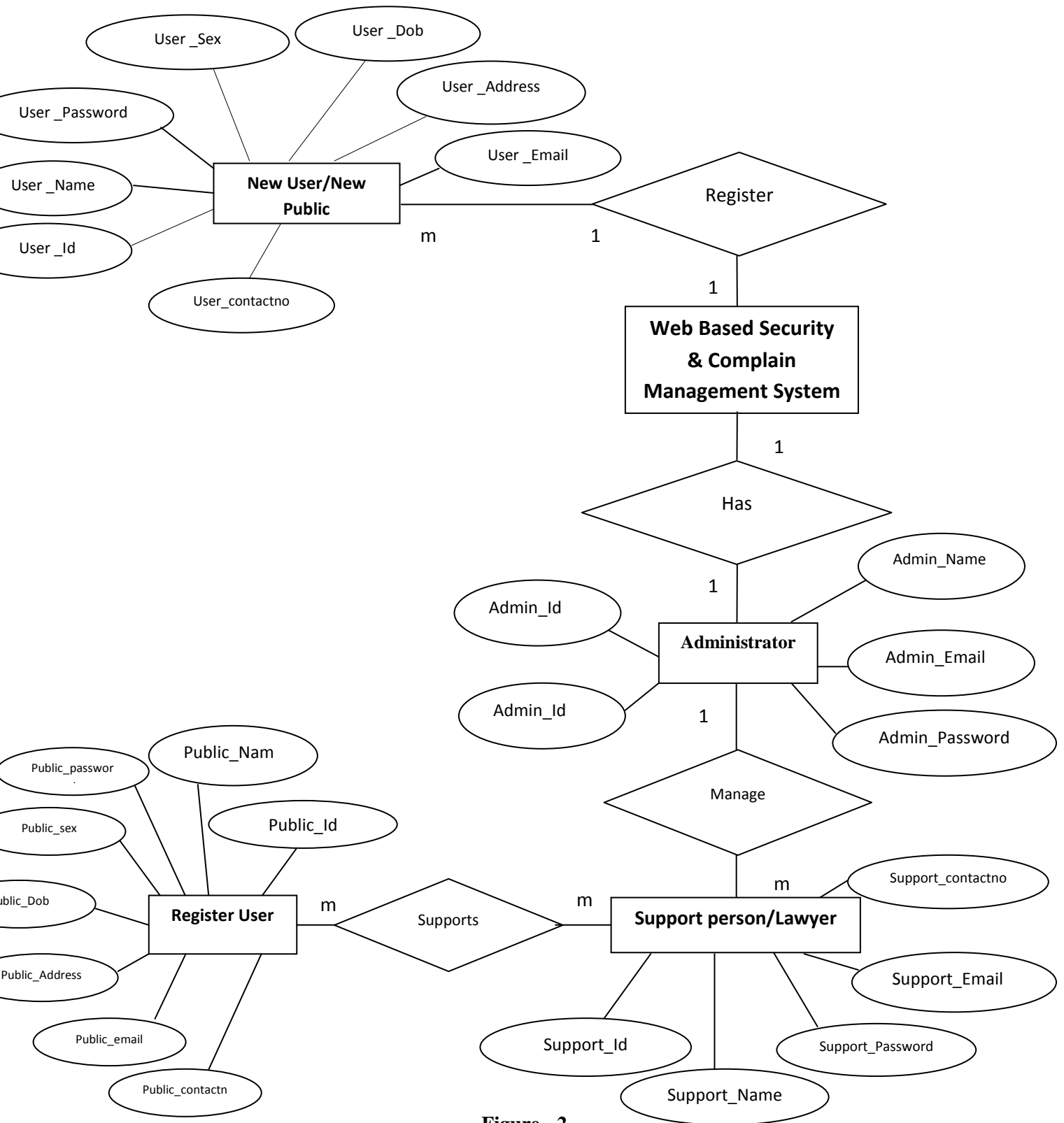
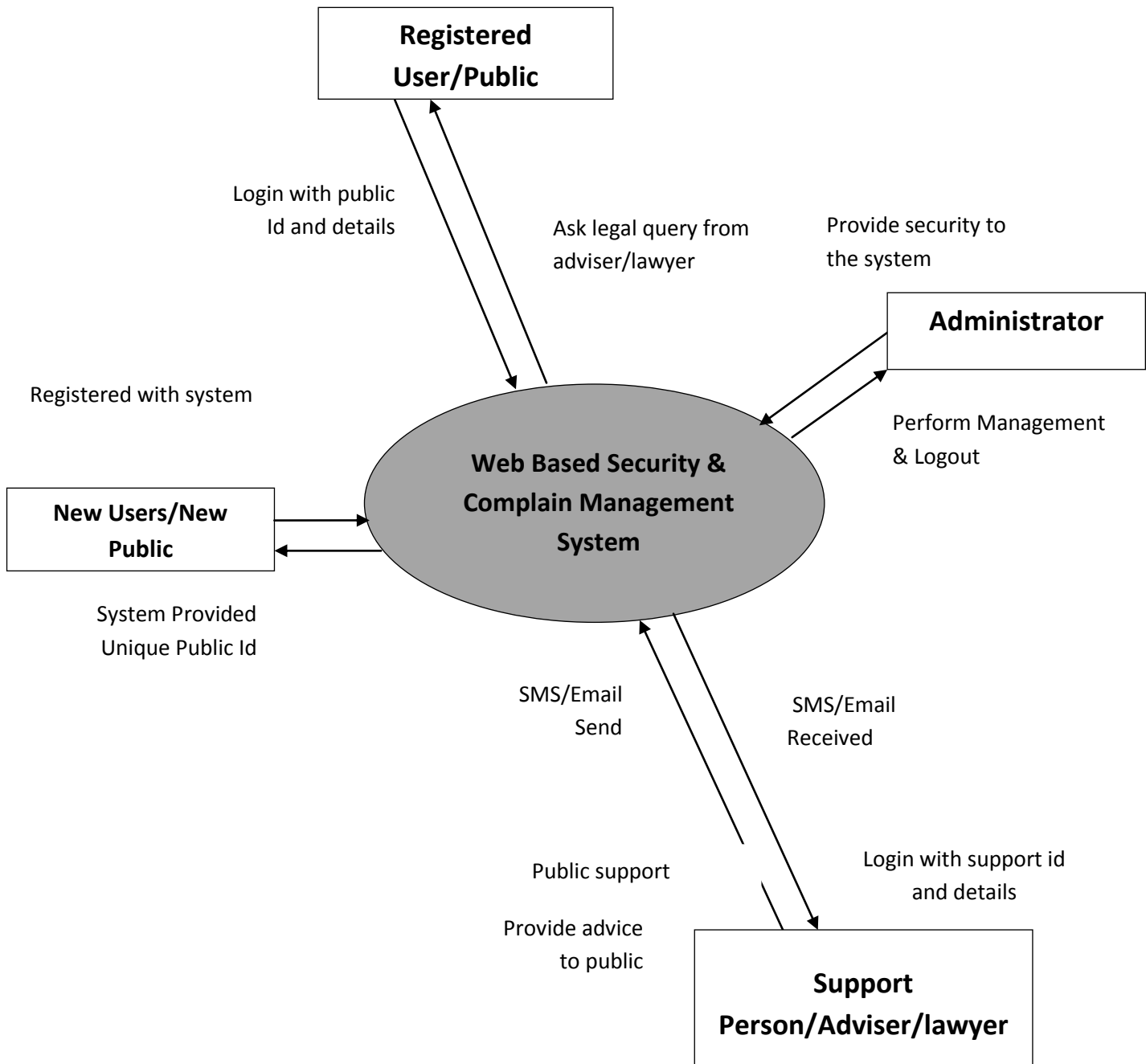


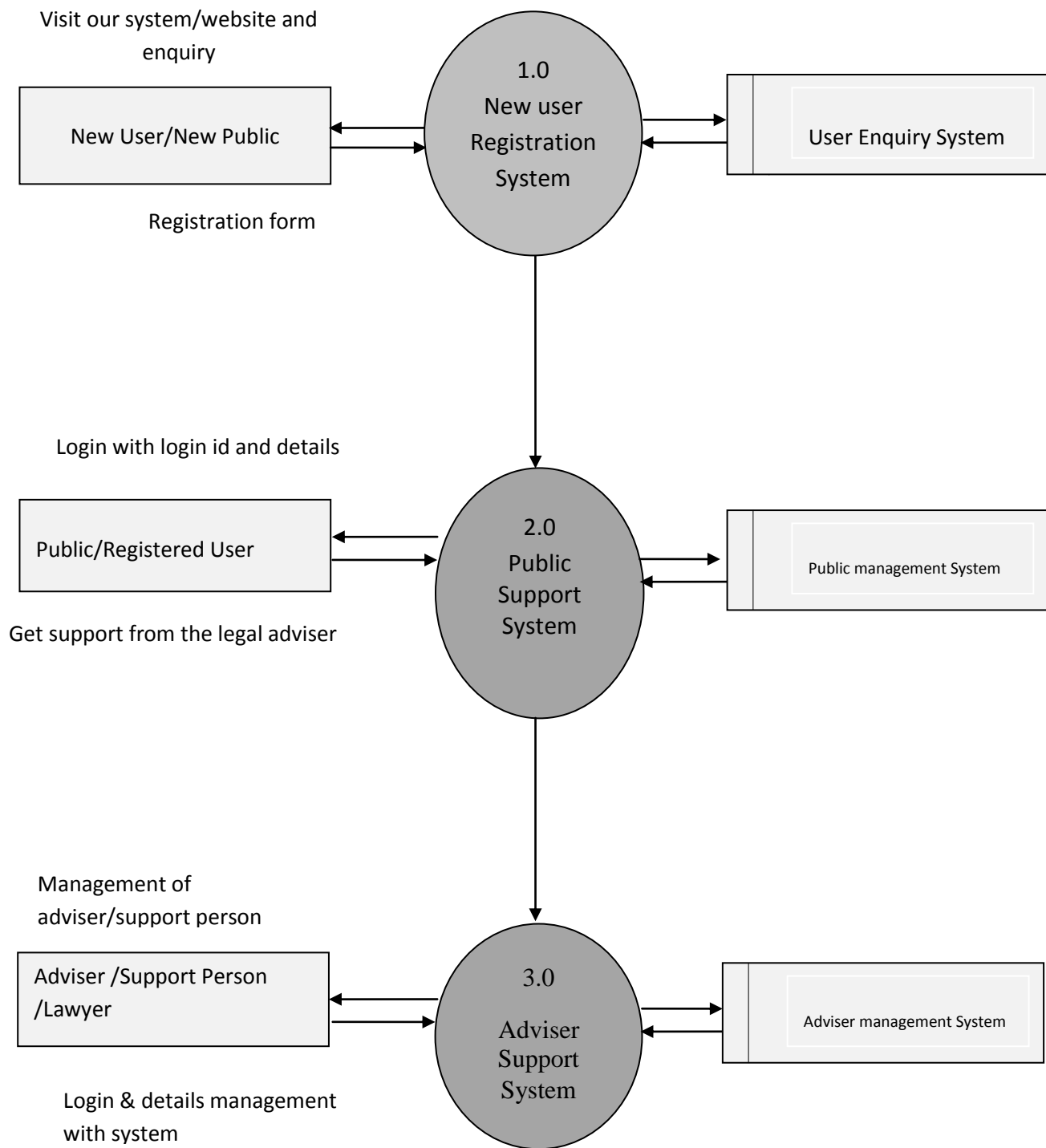
Figure - 2

### 13. DATA FLOW DIAGRAM



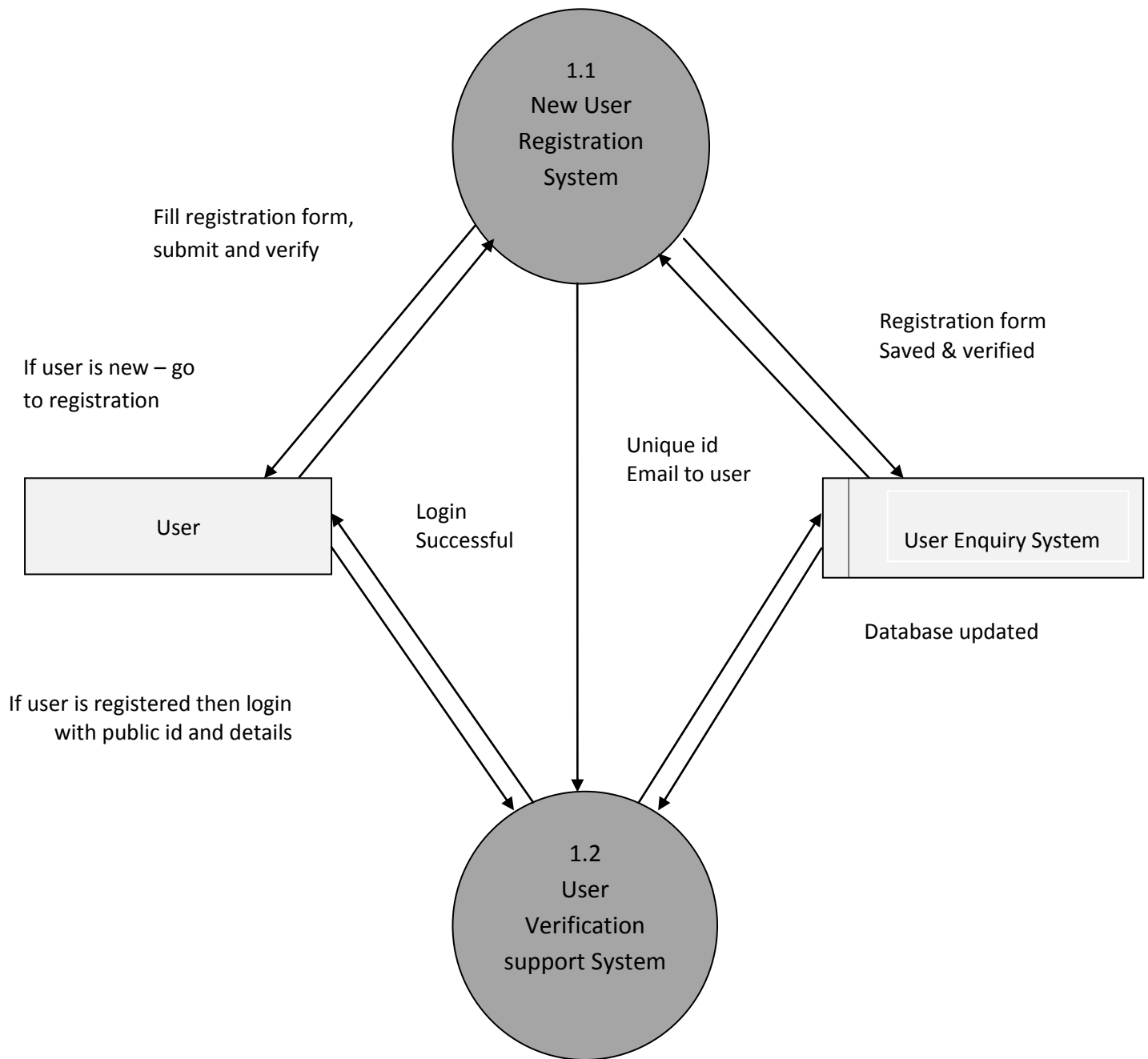
DFD-Level 0

Figure 3



**DFD-Level 1**

**Figure - 4**



**DFD-Level 2**

**Figure - 5**

## 14. DATA STRUCTURE

**Support Module Table:**

S. No.	Field Name	Description	Data Type
1.	Support_Id	Support Person unique id	Varchar(10)
2.	Support_Name	Support Person Name	Varchar(20)
3.	Support_Password	Support Person unique password	Varchar(10)
4.	Support_Email	Support Person Email Id	Varchar(20)
5.	Support_contactno	Support Person Contact No	Varchar(10)

**Registered Public Module Table:**

S. No.	Field Name	Description	Data Type
1.	Public_Id	Public unique id	Varchar(05)
2.	Public_Name	Public Name	Varchar(20)
3.	Public_Password	Public unique password	Varchar(10)
4.	Public_Sex	Public sex	Varchar(10)
5.	Public_Dob	Public Date of Birth	Date
6.	Public_Address	Public Address	Varchar(50)
7.	Public_Email	Public Email Id	Varchar(20)
8.	Public_Contactno	Public Contact No	Varchar(10)

**New User/New Public Module Table:**

S. No.	Field Name	Description	Data Type
1.	User_Id	User unique id	Varchar(05)
2.	User _Name	User Name	Varchar(20)
3.	User _Password	User unique password	Varchar(10)
4.	User _Sex	User sex	Varchar(10)
5.	User _Dob	User Date of Birth	Date
6.	User _Address	User Address	Varchar(50)
7.	User _Email	User Email Id	Varchar(20)
8.	User _Contactno	User Contact No	Varchar(10)

**Administrator (Admin) Module Table:**

Sl. No.	Field Name	Description	Data Type
1.	Admin_Id	Administrator unique id	Varchar(10)
2.	Admin_Password	Administrator unique password	Varchar(10)
3.	Admin_Name	Administrator Name	Varchar(20)
4.	Admin_Email	Administrator Email Id	Varchar(20)
5.	Admin_contactno	Administrator Contact No	Varchar(10)



## 15. TESTING

Testing is the integral part of software development. Poor testing methodologies lead to unstable products and unpredictable development times. It is very essential to have a testing plan in place to ensure that the product delivered is robust and stable and is delivered in a predictable timeline. Standard development methodologies describe a set of general testing mechanisms which must be incorporated in the product development lifecycle. These mechanisms start from testing very small of code piece by piece to testing the whole application functionality in the end.

**1) Unit Tests:** This is the most basic testing mechanism at the developer level. This covers very narrow and well defined scope. We isolate the code from any outside interaction or any dependency on any module. Unit tests focus on very small unit of functionality. They cover the interaction of the code with memory only and do not cover any interaction with network, database or file systems. These dependencies are hard coded into the code while testing. They provide a simple way to check smallest units of code and prove that units can work perfectly in isolation. However, we need to check further that when these units are combined they work in a cohesive manner which leads us to further types of tests.

**2) Integration Tests:** Integration Test forms the next class of tests at the developer level. They provide a mechanism to test the interoperation of smaller units. Integration test involve testing the modules which access network, databases and file systems. They reveal out the issues with network modules or databases and more importantly in the connections between small units of

code. Often when the units are wired together there are issues. Unit A might not be giving data properly to the Unit B and these issues come up in the integration tests.

**3) Functional Tests:** After the integration tests are performed, higher level tests are used. Functional tests check for the correctness of the output with respect to the input defined in the specification. Not much emphasis is given on the intermediate values but more focus is given on the final output delivered.

**4) Smoke Tests:** Smoke Tests analogy comes from the electronics where a mistake means the circuit board giving out smoke. After functional tests are done a simple test is done from the start typically after a fresh installation and newer input values. Luckily there is no smoke in software industry but yeah, crashes are there to indicate trouble.

**5) Regression Tests:** Whenever complex bugs are patched in a system, typically which affect the core areas of the system, regression tests are used to re test all the modules of the system.

**6) Acceptance Tests:** These form the final level of test plan. Every feature is checked from the user's perspective by the testing team and the feature is marked accepted or rejected. These tests test the application from end user's perspective like detecting crashes after going through a certain flow. The results of these tests are very subjective in nature and it takes a while to figure out the exact issue in the code.

## 16. INDUSTRY PUBLIC INTERFACE

Are you doing this project for any Industry/Public?

Mention Yes/No. If Yes, Mention the Name and Address of the Industry or Public.

Are you doing this project for any Industry/Public? ☐ Yes ☐ No

## 17. FUTURE SCOPE

***“Web Based Security & Complain Management System”*** is very new approach to support the user/public with very effective way. With the help of this system we are able to serve our society as well as public with more reliable way. This makes more supportive citizen with good nation and relations.

This project is currently in proposal process so, during development and after development we have need to keep below mention points to make successful this project:

- ✧ It's an online system, so ranking of websites matters.
- ✧ Our main focus is to make seo based site so that it's come on first page at search engine.
- ✧ Its content and all registration filled need to make reliable as per user point of view.
- ✧ We have to do proper advertise this system so that it is popular on wider level.
- ✧ Integration of various District/session courts may be implemented in phases so that we are able to provide best services to the user.
- ✧ SMS and email facility must be having every user in future.
- ✧ We have to develop mobile application for the public so that they can able to use any time anywhere.
- ✧ We have to provide 24X7 supports with very good manner in all the day.

## 18. BIBLIOGRAPHY

### BOOKS AND WEBSITE USED FOR THIS PROJECT

- ✧ Project Guide Booklet                      IGNOU
- ✧ Software Engineering                      IGNOU
- ✧ ASP.Net Black Book                      Dreamtech Press
- ✧ Software Engineering                      Techmax Publication
- ✧ <http://en.wikipedia.org/>
- ✧ <http://www.microsoft.com/>
- ✧ <http://www.microsoft.com/en-in/download/details.aspx?id=21844>