THE OBSERVING EYE FOR NATIONAL SERVICES

SUPERVISED BY :

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The observing eye for national services

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Abstract

The significance of the project is that a link between the citizen and the authorities responsible directly, if I saw a problem with what you had to do but to take a picture and send it to the ministry specified.

This project allows the citizen to be effective and positive member of society, we must stand together in the face of all the problems around us.

Let's talk about the overall project, a project known as "The Observing eye for national services" is a "web application and mobile application" where we have a "five access control: general admin, local admin, general report receiver, local report receiver and user" in the case of the use of the citizen to apply it first to score in the application in his name and national number and e-mail to make it easier to communicate with him in case of requests to know more about the problem and to the competent authorities communicate with citizens through them and then the citizen can take a picture or more of the problem or download the image from one place stored to the application and write a simple description of the problem and write the time, date and place of occurrence and choose the competent ministry and send problem here is the interaction with the citizen and to inform him if the issue is resolved, or if the inability to resolve them and to inform him why, and thus become a mature society takes care of the interest of his country in the first place.

Chapter one :

Introduction

Chapter two :

Analysis

Chapter Three :

Design

Chapter Four:

Testing

CHAPTER (1)
INTRODUCTION

Introduction

1.1 Our problems definition and solution

- The difficulty of communication between the citizen and the competent authorities directly.
- The difficulty of access and the competent authorities of the problem quickly.
- And no justification not competent knowledge of the problem for the authorities.

- The application allows for citizens in the event of vision problem reporting and send images to the problem is to interact with them properly.
- The application facilitates the competent authorities see the problem in the timing and knowing where they occur.

You can through this application to provide notification of any violation with the possibility of attaching images violation and determine the location directly, as well as access to communications and their situations.

 The application also allows you to review the campaigns launched by the ministry and news consumers.

We would like to thank the consumers to communicate effectively in the community who contributed to the development ministry's applications and services.

1.2 **Final Solution**

So we decided to create an application that can make the citizen communicates with the competent authorities directly via:

- Send a picture or more of the problem
- Send a place and time of occurrence of the problem
- Writing a simplified description of the problem after that is the interaction with the citizen through the recorded information.

1.3 **Some of the services offered by our project**

Our goal that make us to create this web application is helping any person faced a problem in the environment surrounding it, you can send problem attaching one or more images of the problem.

Also The competent authorities can use this application to interact with the problems of citizens.

The application allows viewing all the problems submitted by citizens and to clarify if the issue is resolved or not.

The user does not need to identify himself each time the application is used except for the first time.

1.4 **Advantages of our project**

- **The site make the citizen able to communicate with the competent authority**

In case the citizen found it a problem to take a picture and send it directly to the competent authority so that the competent authorities are aware of the problem

- **Assistance in identifying the competent authority of the problem**

When the inability to identify the competent authority of the problem can search the nature of the problem or the functions of the ministry and the services provided and are advised citizens to the competent authority

- **Showing citizen complaints**

The user can open a page citizen complaints and see them for the sake of not repeating the problem

- **Documented knowledge of the competent authorities of the problem**

The citizen's notice in case to see the problem presented

- **The site save your time**

1.5 Assumption

- Who can your application?
- And what's the roles for each of them?

Those the two main questions that you have to introduce in your chapter.

Up till now we have 5 kind of audiences that may use our application such as:

1. General Admin :

- ✓ Login / Logout
- ✓ Manipulate Admin for National service
- ✓ Manipulate General report receiver

2. Admin for National Service

- ✓ Login / Logout
- ✓ Manipulate Local report receiver

3. General Report Receiver

- ✓ Login / Logout
- ✓ Reading problem's
- ✓ Reading problem's feedbacks

4. Local Report Receiver

- ✓ Login / Logout
- ✓ Read the report
- ✓ Send confirmation to the user
- ✓ Write feedback
- ✓ Send feedback to General Report Receiver

5. User

- ✓ Registration
- ✓ Login / Logout
- ✓ Send report of the problem
- ✓ Write report
- ✓ Read confirmation

1.6 Related Works

Government complaints portal :

The application is submitted by the Egyptian government, which allows the sending of complaints of citizens who met through the introduction of all the data relating to the citizen also allows attaching a picture of the problem and follow up the complaint is the national number and number of the complaint, but that the application lacks some of the features:

- It does not determine the competent authority, but the problem for the government to send in general.
- The application does not allow to raise more than a picture of the problem.
- The inability of the written description of the problem.
- Is not locate the problem on the map.
- The inability to see the complaints from citizens.
- Do not enter data on the problem

National Anti-corruption Commission :

The Commission aims to protect integrity, promote the principle of transparency, and combating financial and administrative corruption in all its forms and manifestations and methods, and in order to achieve this, including several terms of reference Follow-up to the execution of orders and instructions related to public affairs and interests of the citizens to ensure their commitment .

Investigate aspects of financial and administrative corruption in public works and operation and maintenance contracts and other contracts relating to public affairs and interests of the citizens in the regions covered by the functions of the Board decades, and take the necessary legal procedures regarding any contract can be seen as implying corruption or it is concluded or being carried out in violation of the provisions of the regulations The regulations in force .

Reviewing work methods and procedures in the entities covered by the functions of the Board in order to identify weaknesses that could lead to corruption, and work on them in order to ensure the achievement of the objectives of the Authority and the implementation of its terms of reference .

Propose regulations and policies to prevent and combat corruption, and a periodic review of the rules and regulations related; to determine their adequacy and work to develop them, and raise them according to legal procedures.

Follow-up to the extent to which those covered by the functions of the Board as it must to the application of criminal and financial and administrative corruption systems, and work to strengthen the principle of accountability for each person, whatever its location ,

but that the application lacks some of the features:

- Only concerned with the problem of financial and administrative corruption.
- Attachments are not any pictures of the problem.
- It is not locate the problem on map.

State of Qatar Ministry of Interior:

The Ministry of the Interior electronic services to assist the public in completing transactions without the need for a review of service providers, which makes it easier for asylum services querying various electronic transactions provided by the ministry departments , but that the application lacks some of the features:

- Lack of attention to data on the problem.
- Not locate the problem on the map.
- You do not specify a competent authority to send the   problem.
- Do not display complaints of citizens.

Baladiya Application Android :

Application helps citizens and residents of the country to access services provided by the Ministry of Municipal and the environment through the operating system Android is easy.

It features some of the services that can be used:

1.insect and rodent control service

2.Cut and trim trees Service

3.The withdrawal of sewage service

4. rainwater withdraw service

5. pull neglected car service

6. Complaint housing service workers

It also includes the following queries:

1. Enrollment Committee to accept the engineers

2. Building Permits

3. issuance of the completion of the cert

4. Personal irregularities

5. usufruct - Owner Certification

6. Sessions query

7. Checks query

8. Deposits query

This application lacks :

- Inability to attach images of the problem
- Not locate the problem on the map
- Only concerned with the problem of ministry of municipality and environment .

Ministry of Commerce &Industry(KSA) Business :

You can through this application to provide communication for commercial offense with the possibility of attaching images violation and determine the location directly, as well as access to communications and their situations. The application also allows you to review the summons ads and campaigns launched by the ministry and news consumers.

This application lacks:

- Only concerned with the problem of ministry of commerce and industry business.

1.7 Learned Skills

These words we wrote about personal experience that we gained in small life ..

- Challenge every problem face you and do not raise white flag .

- Learn how to work with team before starting our career .

- There is always time ..!

CHAPTER (2)
ANALYSIS

2.1 Technologies and Frameworks

2.1.1   C# :

Is a multi-paradigm programming language encompassing strong typing, imperative, declarative, functional, generic, object-oriented (class-based), and component-oriented programming disciplines.

It was developed by Microsoft within its .NET initiative and later approved as a standard by ECMA (ECMA-334) and ISO (ISO/IEC 23270:2006).

C# is one of the programming languages designed for the common Language Infrastructure.

C# is intended to be a simple, modern, general-purpose, object-oriented programming language.

Its development team is led by Anders Hejlsberg. The most recent version is C# 6.0, which was released on July 20, 2015.

2.1.2 HTML :

First developed by Tim Berners-Lee in 1990, HTML is short for Hyper Text Markup Language. HTML is used to create electronic documents (called pages) that are displayed on the World Wide Web.

Each page contains a series of connections to other pages called hyperlinks. Every web page you see on the Internet is written using one version of HTML code or another.

HTML code ensures the proper formatting of text and images so that your Internet browser may display them as they are intended to look. Without HTML, a browser would not know how to display text as elements or load images or other elements. HTML also provides a basic structure of the page, upon which Cascading Style Sheets are overlaid to change its

appearance. One could think of HTML as the bones (structure) of a web page, and CSS as its skin (appearance).

2.1.3 CSS :

Is a style sheet language used for describing the presentation of a document written in a markup language, Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media.

Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts.

This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate CSS file, and reduce complexity and repetition in the structural content.

This separation of formatting and content makes it possible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices.

It can also be used to display the web page differently depending on the screen size or device on which it is being viewed. Readers can also specify a different style sheet, such as a CSS file stored on their own computer, to override the one the author has specified.

Changes to the graphic design of a document (or hundreds of documents) can be applied quickly and easily, by editing a few lines in the CSS file they use, rather than by changing markup in the documents.

The CSS specification describes a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities (or weights) are calculated and assigned to rules, so that the results are predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/CSS is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

2.1.4 JAVASCRIPT :

Is a high-level, dynamic, typed, and interpreted programming language.

It has been standardized in the ECMA Script language specification.

Alongside HTML and CSS, it is one of the three essential technologies of World Wide Web content production; the majority of websites employ it and it is supported by all modern Web browsers without plug-ins.

JavaScript is prototype-based with first-class functions, making it a multi-paradigm language, supporting object-oriented, imperative, and functional programming styles.

It has an API for working with text, arrays, dates and regular expressions, but does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

2.1.5 JQUERY :

Is a cross-platform JavaScript library designed to simplify the client-side scripting of HTML.

JQuery is the most popular JavaScript library in use today, with installation on 65% of the top 10 million highest-trafficked sites on the Web.

JQuery is free, open-source software licensed under the MIT License.

JQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications.

JQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction and animation, advanced effects and high-level, theme-able widgets. The modular approach to the jQuery library allows the creation of powerful dynamic web pages and Web applications.

The set of jQuery core features—DOM element selections, traversal and manipulation—enabled by its selector engine (named "Sizzle" from v1.3), created a new "programming style", fusing algorithms and DOM data structures. This style influenced the architecture of other JavaScript frameworks like YUI v3 and Dojo, later stimulating the creation of the standard Selectors API.

Microsoft and Nokia bundle jQuery on their platforms. Microsoft includes it with Visual Studio for use within Microsoft's ASP.NET AJAX and ASP.

NET MVC frameworks while Nokia has integrated it into the Web Run-Time widget development platform.

2.1.6   SQL (Structured Query Language):

is a *special-purpose programming language* designed for managing data held in a *relational database management system* (RDBMS), or for stream processing in a *relational data stream management system* (RDSMS).

Originally based upon *relational algebra* and *tuple relational calculus*, SQL consists of a *data definition language , data manipulation language* , and *Data Control Language* . The scope of SQL includes data insert, query, update and delete , *schema* creation and modification, and data access control. Although SQL is often described as, and to a great extent is, *a declarative language (4GL),* it also includes *procedural* elements.

SQL was one of the first commercial languages for *Edgar F. Codd's relational model* , as described in his influential 1970 paper, "A Relational Model of Data for Large Shared Data Banks. Despite not entirely adhering to *the relational model as described by Codd*, it became the most widely used database language.

SQL became a *standard* of the *American National Standards Institute (ANSI) in 1986, and of the International Organization for Standardization* (ISO) in 1987. Since then, the standard has been revised to include a larger set of features. Despite the existence of such standards, most SQL code is not completely portable among different database systems without adjustments.

2.1.7 ASP.NET :

ASP.NET is a web development platform, which provides a programming model, a comprehensive software infrastructure and various services required to build up robust web applications for PC, as well as mobile devices.

ASP.NET works on top of the HTTP protocol, and uses the HTTP commands and policies to set a browser-to-server bilateral communication and cooperation.

ASP.NET is a part of Microsoft .Net platform. ASP.NET applications are compiled codes, written using the extensible and reusable components or objects present in .Net framework. These codes can use the entire hierarchy of classes in .Net framework.

The ASP.NET application codes can be written in any of the following languages:

C#

Visual Basic.Net

Jscript

J#

ASP.NET is used to produce interactive, data-driven web applications over the internet. It consists of a large number of controls such as text boxes, buttons, and labels for assembling, configuring, and manipulating code to create HTML pages.

ASP.NET Web Forms Model ASP.NET web forms extend the event-driven model of interaction to the web applications. The browser submits a web form to the web server and the server returns a full markup page or HTML page in response.

All client side user activities are forwarded to the server for tasteful processing. The server processes the output of the client actions and triggers the reactions.

Now, HTTP is a stateless protocol. ASP.NET framework helps in storing the information regarding the state of the application, which consists of:

Page state

Session state

The page state is the state of the client, i.e., the content of various input fields in the web form.

The session state is the collective information obtained from various pages the user visited and worked with, i.e., the overall session state. To clear the concept, let us take an example of a shopping cart.

User adds items to a shopping cart. Items are selected from a page, say the items page, and the total collected items and price are shown on a different page, say the cart page.

Only HTTP cannot keep track of all the information coming from various pages. ASP.NET session state and server side infrastructure keeps track of the information collected globally over a session.

The ASP.NET runtime carries the page state to and from the server across page requests while generating ASP.NET runtime codes, and incorporates the state of the server side components in hidden fields.

This way, the server becomes aware of the overall application state and operates in a two-tiered connected way.

The ASP.NET Component Model:

The ASP.NET component model provides various building blocks of ASP.NET pages. Basically it is an object model, which describes:

Server side counterparts of almost all HTML elements or tags, such as <form> and <input>.

Server controls, which help in developing complex user-interface. For example, the Calendar control or the Grid view control.ASP.NET is a technology, which works on the .Net framework that contains all web-related functionalities.

The .Net framework is made of an object-oriented hierarchy. An ASP.NET web application is made of pages. When a user requests an ASP.NET page, the IIS delegates the processing of the page to the ASP.NET runtime system.

The ASP.NET runtime transforms the .asp page into an instance of a class, which inherits from the base class page of the .Net framework. Therefore, each ASP.NET page is an object and all its components i.e., the server-side controls are also objects.

2.1.8 ADO.Net :

Is a set of computer software components that programmers can use to access data and data services from the Database?

It is a part of the base class library that is included with the Microsoft .NET Framework. It is commonly used by programmers to access and modify data stored in relational database systems, though it can also access data in non-relational sources.

ADO.NET is sometimes considered an evolution of ActiveX Data Objects (ADO) technology, but was changed so extensively that it can be considered an entirely new product.

is a data access technology from the Microsoft .NET framework which provides communication between relational and non-relational systems through a common set of components. ADO.NET is a set of computer

software components that programmers can use to access data and data services from the database. It is a part of the base class library that is included with the Microsoft .NET Framework. It is commonly used by programmers to access and modify data stored in relational database systems, though it can also access data in non-relational sources. ADO.NET is sometimes considered an evolution of ActiveX Data Objects (ADO) technology, but was changed so extensively that it can be considered an entirely new product.

ADO.NET is conceptually divided into consumers and data providers. The consumers are the applications that need access to the data, and the providers are the software components that implement the interface and thereby provide the data to the consumer.

Functionality exists in Visual Studio IDE to create specialized subclasses of the DataSet classes for a particular database schema, allowing convenient access to each field through strongly typed properties. This helps catch more programming errors at compile-time and enhances the IDE's Intellisense feature.

2.1.9 Entity Framework :

is an object-relational mapper that enables. NET developers to work with relational data using domain-specific objects. It eliminates the need for most of the data-access code that developers usually need to write.

The Entity Framework is a set of technologies in ADO.NET that support the development of data-oriented software applications. Architects and developers of data-oriented applications have typically struggled with the need to achieve two very different objectives. They must model the entities, relationships, and logic of the business problems they are solving, and they must also work with the data engines used to store and retrieve the data. The data may span multiple storage systems, each with its own protocols; even applications that work with a single storage system must balance the requirements of the storage system against the requirements of writing efficient and maintainable application code.

The Entity Framework enables developers to work with data in the form of domain-specific objects and properties, such as customers and customer addresses, without having to concern themselves with the underlying database tables and columns where this data is stored. With the Entity Framework, developers can work at a higher level of abstraction when they deal with data, and can create and maintain data-oriented applications with less code than in traditional applications. Because the Entity Framework is a component of the .NET Framework, Entity Framework applications can run on any computer on which the .NET Framework (starting with version 3.5 SP1) is installed.

2.1.10 LINQ:

Language Integrated Query (LINQ, pronounced "link" and "liquid") is a Microsoft .NET Framework component that adds native data querying capabilities to .NET languages, although ports exist for Java, PHP, JavaScript and Action Script.

LINQ extends the language by the addition of query expressions, which are akin to SQL statements, and can be used to conveniently extract and process data from arrays, enumerable classes, XML documents, relational databases, and third-party data sources.

Other uses, which utilize query expressions as a general framework for readably composing arbitrary computations, include the construction of event handlers or monadic parsers.

LINQ also defines a set of method names (called standard query operators, or standard sequence operators), along with translation rules used by the compiler to translate fluent-style query expressions into expressions using these method names, lambda expressions and anonymous types.

2.1.11 Java ME (Micro Edition):

 is a Java platform designed for embedded systems (such as mobile devices, for example). Target devices range from industrial controls to mobile phones (especially feature phones) and set-top boxes. Java ME was formerly known as Java 2 Platform, Micro Edition (J2ME).

Java ME was designed by Sun Microsystems, acquired by Oracle Corporation in 2010; the platform replaced[when?] a similar technology, PersonalJava. Originally developed under the Java Community Process as JSR 68, the different flavors of Java ME have evolved in separate JSRs. Sun provides a reference implementation of the specification, but has tended not to provide free binary implementations of its Java ME runtime environment for mobile devices, rather relying on third parties to provide their own.

As of 22 December 2006, the Java ME source code is licensed under the GNU General Public License, and is released under the project name phoneME.

As of 2008, all Java ME platforms are currently restricted to JRE 1.3 features and use that version of the class file format (internally known as version 47.0). Should Oracle ever declare a new round of Java ME configuration versions that support the later class file formats and language features, such as those corresponding to JRE 1.5 or 1.6 (notably, generics), it will entail extra work on the part of all platform vendors to update their JREs.

Java ME devices implement a profile. The most common of these are the Mobile Information Device Profile aimed at mobile devices, such as cell phones, and the Personal Profile aimed at consumer products and embedded devices like set-top boxes and PDAs. Profiles are subsets of configurations, of which there are currently two: the Connected Limited Device Configuration (CLDC) and the Connected Device Configuration (CDC).

There are more than 2.1 billion Java ME enabled mobile phones and PDAs. It is popular in sub $200 devices such as Nokia's Series 40. It was also used on the Badaoperating system and on Symbian OS along with

native software. Users of Windows CE, Windows
Mobile, Maemo, MeeGo and Android can download Java ME for their
respective environments.

2.2 DB Engine

2.2.1 SQL SERVER:

Is a relational database management system (RDBMS) from Microsoft
that's designed for enterprise the environment, SQL Server runs on T-
SQL (Transact -SQL), a set of programming extensions from Sybase and
Microsoft that add several features to standard SQL, including transaction
control, exception and error handling, row processing, and declared
variables.

Code named Yukon in development, SQL Server 2005 was released in
November 2005. The 2005 product is said to provide enhanced flexibility,
scalability, reliability, and security to database applications, and to make
them easier to create and deploy, thus reducing the complexity and
tedium involved in database management. SQL Server 2005 also includes
more administrative support.

The original SQL Server code was developed by Sybase; in the late
1980s, Microsoft, Sybase and Ashton-Tate collaborated to produce the
first version of the product, SQL Server 4.2 for OS/2. Subsequently, both
Sybase and Microsoft offered SQL Server products. Sybase has since
renamed their product Adaptive Server Enterprise.

2.3 Tools

2.3.1 : Word 2016 :

is the other application in Office, and it, too, is reassuringly the same for the most part. Microsoft's particularly keen to sell users on one new feature: Smart Lookup, also known as Insights.

Right-click a word or phrase in Word 2013, and a limited number of options pop up: a small formatting window, as well as options for spelling, linking the phrase, and checking grammar. In Word 2016, you get more—including options to translate the word or phrase, find synonyms, and so on.

With Office 2016, Smart Lookup takes the Review > Define command from Word 2013 and supercharges it. With both the old Define and the new Smart Lookup, a right-hand pane provides additional information. But whereas Define used Bing to explain the word in question, Smart Lookup provides context: the definition, plus content from Wikipedia, Bing Image Search, Bing's Web search, and more. You can cut and paste text from Smart Lookup, or drag an image into the body of the text.

It would be nice for Word to allow you to right-click and copy text from Wikipedia into your Word document; it would be even better if it automatically added it and added either a footnote or a hyperlink back to the source document. Sadly, nothing like that is available.

It's somewhat weird, then, to discover that feature in Insert > Wikipedia, a Wikipedia app for Word that was built into my preview copy of Word 2016. Highlight a word or phrase and click the Wikipedia app, and a more robust version of Wikipedia opens up. Even better, any image that appears in the pane can be clicked once to add it to the text, with attribution (and license info) automatically appended. It also searches on any text you highlight as you're writing or editing. These are all nice touches.

Not so nice is the portal to the Apps for Office store, which has not been updated for Office 2016. A lack of Office apps or plug-ins is one thing, but you still can't see what others have said about the apps in question. There's also a big "Trust It" button that basically serves as a warning to download plugins at your own risk. No wonder the Apps for Office store basically failed.

2.3.2 : Adobe Illustrator :

is a professional quality graphic art program. Its applications are diverse, from creating print to web graphics and, for our purposes, posters. Although the program is complex and requires a significant amount of time to truly master, it is quite easy to learn the basics and create work with a professional appearance. Designing a poster does not require any special artistic talent or skills; it just requires having the patience to get acquainted with the program. As with most computer applications, I recommend using the trial-and-error methodology to figure out the intricacies of this program. You will make numerous mistakes, and frequently want to make changes. Thankfully Illustrator is equipped with an undo option. In fact, undo [Crtrl+Z] will become a very familiar action as you design your poster.

This tutorial is very basic, because (as just mentioned), Illustrator is best mastered by actually using it. Use Illustrator's help index whenever you need a question answered that is not addressed in this text. This tutorial is meant to assist you in making posters only! Many essential elements for creating graphic art have been purposely left out. Although this tutorial was made for use with the Windows® version only, almost everything (with only a few exceptions) is applicable to the Mac® version.

It is also recommended that you create the general appearance of your poster first with pen and paper, so that you have a general idea of what you wish to accomplish on Illustrator.

2.3.3 : Android Studio *:*

Android Studio 2.1 includes the following new features:
N Developer Preview Support: Android Studio 2.1 is the best IDE to test and validate your app with the N Developer Preview. Get the latest versions of the preview SDK, experiment with the new Java 8 support, and gain access to the only official Android Emulator able to run N Developer Preview Emulator System Images to help in your testing.
Instant Run: For those of you who enjoyed the fast edit, build and deploy cycle with Android Studio 2.0, Instant Run now can now update incremental changes to your app code significantly faster.
Deeper Dive into the New Features
N Developer Preview

On top of new features and APIs of the N Developer Preview, Android Studio 2.1 release includes support for the new Jack compiler and support for Java 8. With the Jack compiler, lambdas, method references, compile-time type annotations, intersection types and type inference are available on all versions of the Android platform. Default and static methods and repeatable annotations are available on Android N and higher. To use Java 8 language features when developing with the N Developer Preview, you need to use the Jack compiler. The New Project Wizard [File? New? Project] generates the correct configurations for projects targeting the N.

Getting started with development is as easy generating a new project or updating a few settings in your existing project. Once you are ready to test, you can create a fresh Android Virtual Device (AVD) and run your app on the N Developer Preview using the new Android Emulator

2.3.4 Visual Studio 2012 :

is a rich, integrated development environment for creating stunning applications for Windows, Android, and iOS, as well as modern web applications and cloud services.

Tools and services for projects of any size or complexity
C#, Visual Basic, F#, C++, Python, Node.js, and HTML/JavaScript
Sprint planning
Advanced debugging, automated and manual testing, and profiling
DevOps with automated deployments and continuous monitoring

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs for Microsoft Windows, as well as web sites, web applications and web services. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.

Visual Studio includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a forms designer for building GUI applications, web designer, class designer, and database schema designer. It accepts plug-ins that enhance the functionality at almost every level—including adding support for source-control systems (like Subversion)

and adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Team Foundation Server client: Team Explorer).

Visual Studio supports different programming languages and allows the code editor and debugger to support (to varying degrees) nearly any programming language, provided a language-specific service exists. Built-in languages include C,[6] C++ and C++/CLI (via Visual C++), VB.NET (via Visual Basic .NET), C# (via Visual C#), and F# (as of Visual Studio 2010[7]). Support for other languages such as Python, Ruby, Node.js, and M among others is available via language services installed separately. It also supports XML/XSLT, HTML/XHTML, JavaScript and CSS. Java (and J#) were supported in the past.

Before Visual Studio 2015, commercial versions of Visual Studio were available for free to students via Microsoft's DreamSpark program, when only commercial versions supported plugins.[8] Starting with Visual Studio 2015, Microsoft provides Community editions, which support plugins, at no cost to all users.

2.3.5 : SQL Server Management Studio :

The SQL Server Management Studio tutorial introduces you to the integrated environment for managing your SQL Server infrastructure. SQL Server Management Studio presents a graphical interface for configuring, monitoring, and administering instances of SQL Server. It also allows you to deploy, monitor, and upgrade the data-tier components used by your applications, such as databases. SQL Server Management Studio also provides Transact-SQL, MDX, DMX, and XML language editors for editing and debugging scripts.

This tutorial will help you understand the presentation of information in Management Studio and how to take advantage of the features. Note that this tutorial uses the free Management Studio downloaded from the download center.
The best way to get acquainted with Management Studio is through hands-on practice. This tutorial will teach you how to manage the

components of Management Studio and how to find the features that you use regularly.

This tutorial is divided into three lessons:

Lesson 1: Basic Navigation in SQL Server Management Studio

In this lesson you will learn how to use the components of Management Studio, how to reconfigure the environment layout, and how to restore the default layout.

Lesson 2: Writing Transact-SQL

In this lesson, you will learn how to open Query Editor, how to manage code, and how to use the other new features of Query Editor.

Lesson 3: Working with Templates, Solutions, and Script Projects

In this lesson you will learn how to use templates, and organize scripts into solutions and projects.

This tutorial is intended for experienced database administrators and database developers who are not familiar with Visual Studio, but who are who are familiar with database concepts and the Transact-SQL language.

Your system must have the following installed to use this tutorial:

SQL Server 2016 or a later version with the AdventureWorks2012 sample databases. To enhance security, the sample databases are not installed by default. To install the sample databases, see Installing SQL Server Samples and Sample Databases.

Install the latest version of SQL Server Management Studio from the download center .

2.3.6 : Edrow Max :

I'm very happy I've finally found a good flowchart tool! It's easy to use and easy to learn. - Eric Wilson, Software Developer, Switzerland

I compared several products, and Edraw Pro is by far the most powerful and versatile. I'm quite pleased! - Steven Larson

I've made a real impression on my boss (a publisher) because of the results that we have obtained using Edraw. - Robert Bascom , HR Manager, Saratoga, CA

This easy-to-use program creates flowcharts and network diagrams. The interface is straightforward and handy, with clearly labeled buttons, an outlook template window for adding shapes, samples gallery for managing examples. Edraw also provides a rather standard assortment of editing tools for resizing, rotating, grouping, order, align and distribute. We appreciated the large library of available flowchart shapes, as well as the ability to set their style, color and shadow. you

Some samples are provided by the publisher. You can use these samples as templates, to learn how to use the program. Each object from the flowchart has a color scheme and an associated style (color properties,

shadow position, transparency, and so on). There are some nice looking predefined styles, and you can also define your own drawing style.
You can insert many types of objects: lines, text, pictures, symbols, or connectors. OLE objects are supported, meaning that you can insert virtually any kind of document inside your flowchart. Excel, Word, PDF documents can be used in your flowchart using this option.
The user interface looks good, and most importantly is very easy to use. All predefined objects are organized into categories, making it easy to find what you are looking for.
When will large software houses learn and start offering slimmed down versions of their expensive apps..... (wish full thinking, they'll probably never need to!)

So not really a rip off, rather a few saved pounds, but either way I'm happy as I   have the tool I needed and haven't broken the bank! Edraw Max is rather a lightweight yet incredibly powerful diagramming tool.

Over the usual elements that you can see in any of similar solutions, Edraw Max provides a full power of modern interfaces, huge, smartly organized library of primitives, along with many examples and tutorials.

When you just start working with a new Edraw Max diagram, you are asked to select its kind and the software provides you with the corresponding primitives. Of course, you can always load more primitives or even search them by name. The kinds of diagrams available in Edraw Max cover all the areas you can imagine about schemes and diagrams: Flowcharts, DB architecture, Organization Charts, Mind Maps, Networks and much more, and there are several sections in the shapes library for each kind of diagrams, as well as several examples that come with the software. You can save your own shapes in the shape gallery for further usage .

As for drawing itself, Edraw Max provides a really convenient vector editor, with handy shapes grouping, locking and organizing, selection and zooming; you can control all the parameters (colors, fonts, and lines) of every shape, either yours or from the library. All the beauty pictures you have designed can be easily exported and printed in a strict correspondence with the screen picture.

2.3.7 : *PowerPoint* 2016 :

PowerPoint shows collaboration's pain points

PowerPoint—the tool of most modern presentations—is an appropriate place to talk about what Microsoft is trying to accomplish with collaboration, and where it struggles.

In the upper right corner of most of the Office 2016 apps you'll see a new "Share" button, which is where collaboration takes place. For now, however, the sharing experience differs sharply between apps like PowerPoint and Word.

Here's how real-time collaboration works within Word: to share a document, you first save it to the cloud. Then you invite one or a series of people to edit it, using the Share button, which opens up an in-app message box. You can also eliminate all that and simply send a link. (Permissions are built in, so you can send one link to view, and another to edit.) I found using a link was better for casual editing, as the recipient can simply open the document as a "guest" in Word Online, rather than needing to type in his or her Microsoft password. (Otherwise, you'll need a Microsoft account to authenticate yourself.)

As long as all parties have Office 2010 or later versions, real-time editing can take place: Invited guests can add, edit, or delete content in a sort of collaborative free-for-all. That can be managed, however, by some relatively fine-grained editing restrictions, such as locking format changes, restricting a user to making only tracked changes, or by blocking him or her entirely (while letting other users make free, unrestricted edits). You can attach a comment to the document itself, or to a specific location in the text (which then shows up as an icon). You can also manually save whenever you'd like to create a version history that helps organize the document further. Even if you're offline, you can still monitor progress using Track Chan

2.5 Framework

2.4.1 : WINDOWS 10 :

Microsoft in late 2014 took the wraps off the Technical Preview of its next Windows operating system, and in doing so it took everyone by surprise. We expected the next generation of Windows: we just didn't expect it to be called Windows 10. None the less here is Windows 10: the next Windows OS for PCs and laptops, smartphones and tablets. And, indeed, an OS for servers and all points in between. Microsoft said that Windows 10 is built from the ground up for a world in which mobile- and cloud computing are key. Execs from the company said it was committed to making Windows 10 friendly for the enterprise, ideal for keyboard and mouse users, but also optimised for touch. Oh, and Windows 10 will put the same interface on devices with displays ranging in size from 4in to 80in. 'One product family, one platform, one store,' said Microsoft. Given the lukewarm reaction to compromised Windows 8, these seem like bold claims. They are necessary, though also necessary is Microsoft's decision to make Windows 10 the most beta-tested product it has ever released. Windows 10 was tested by over 4 million people around the world before its launch. That doesn't mean it's perfect - indeed some people won't like the privacy issues (see far below) or the forced updates. Others won't like the new Start menu or the fact that there's now both a Control Panel and separate Settings app. But these won't be issues for most people - minor gripes at worst - and the improvements, new apps and new features make it well worth upgrading. For more detail on this, see: Should I upgrade to Windows 10?

2.4.2 : .NET RUNTIME 4.5:

As part of Microsoft's .NET Framework, the Common Language Runtime (CLR) is programming that manages the execution of programs written in any of several supported languages, allowing them to share common object-oriented classes written in any of the languages.

The Common Language Runtime is somewhat comparable to the Java Virtual Machine that Sun Microsystems furnishes for running programs compiled from the Java language. Microsoft refers to its Common Language Runtime as a "managed execution environment." A program compiled for the CLR does not need a language-specific execution environment and can easily be moved to and run on any system with Windows 2000 or Windows XP.

Programmers writing in any of Visual Basic, Visual C++, or C# compile their programs into an intermediate form of code called Common Intermediate Language (CIL) in a portable execution (PE) file that can then be managed and executed by the Common Language Runtime.

The programmer and the environment specify descriptive information about the program when it is compiled and the information is stored with the compiled program as metadata. Metadata, stored in the compiled program, tells the CLR what language was used, its version, and what class libraries will be needed by the program.

The Common Language Runtime allows an instance of a class written in one language to call a method of a class written in another language.

It also provides garbage collecting (returning unneeded memory to the computer), exception handling, and debugging services.

2.4.3 : IIS 7.0:

 Is an extensible web server created by Microsoft for use with Windows NT family, [2] IIS supports HTTP, HTTPS, FTP, FTPS, SMTP and NNTP. It has been an integral part of the Windows NT family since Windows NT 4.0, though it may be absent from some editions (e.g. Windows XP Home edition), and is not active by default.

2.4.4 : SQL Server 2008 Express:

is a database platform that is based on Microsoft SQL Server. SQL Server Express makes it easy to develop data-driven applications that are rich in capability, offer enhanced storage security, and are fast to deploy.
SQL Server 2008 Express with Advanced Services is an edition of SQL Server Express that includes a new graphical management tool, features for reporting, and advanced text-based search capabilities.
SQL Server 2008 Express with Tools is an edition of SQL Server Express that includes basic graphical management tools.
All editions of SQL Server Express are free downloads that can be redistributed subject to agreement. Each edition can function both as the

client database and as a basic server database. Any edition of SQL Server Express is an ideal choice for independent software vendors (ISVs), server users, non-professional developers, Web developers, Web site hosts, and hobbyists who are building client applications. If you need more advanced database features, you can upgrade SQL Server Express to more sophisticated versions of SQL Server.

Microsoft SQL Server 2008 Management Studio Express is a free, integrated environment for accessing, configuring, managing, administering, and developing all components of SQL Server, as well as combining a broad group of graphical tools and rich script editors that provide access to SQL Server to developers and administrators of all skill levels

2.6 Use cases and ERD
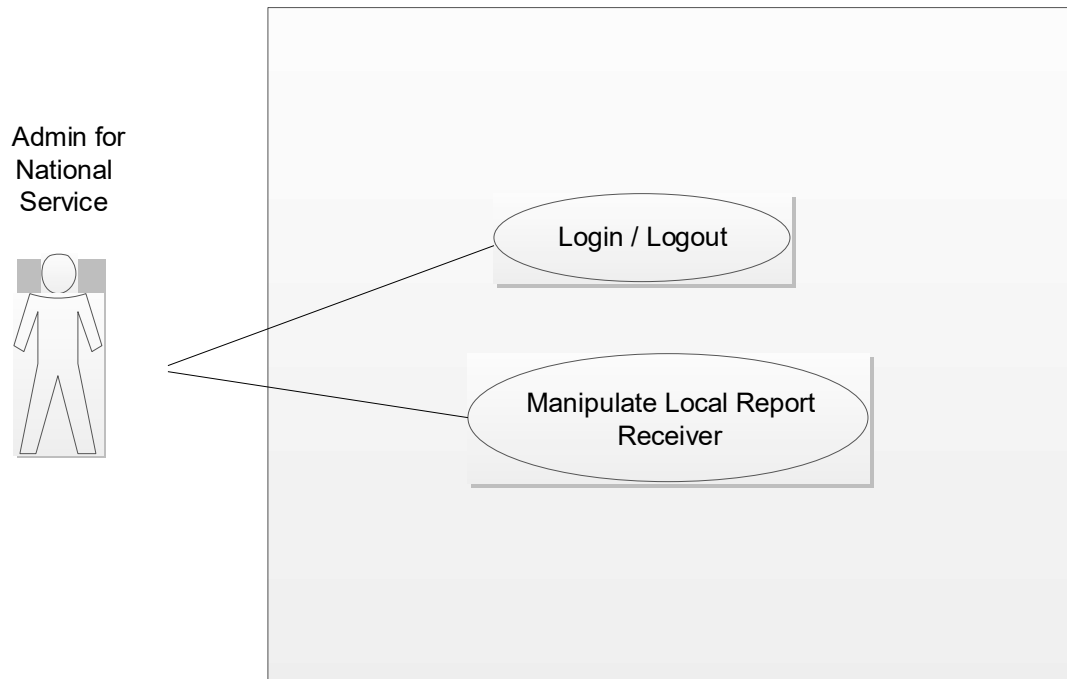
Figure 2.1 Admin for national service Use Cased
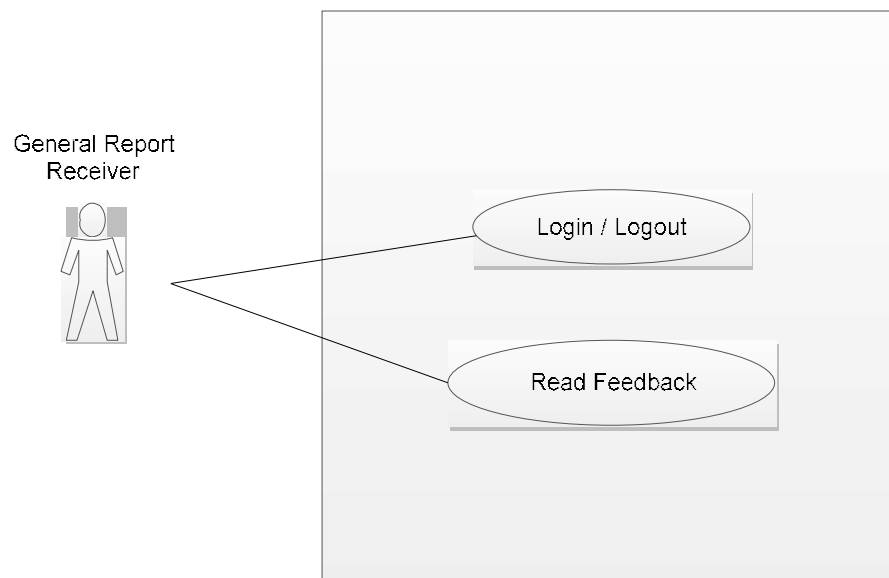
Figure 2.2 general report receiver use case
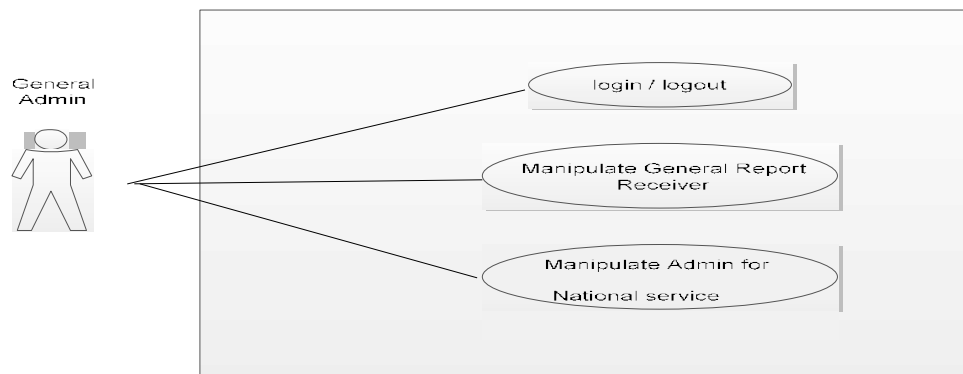
Figure 2.3 general admin use case
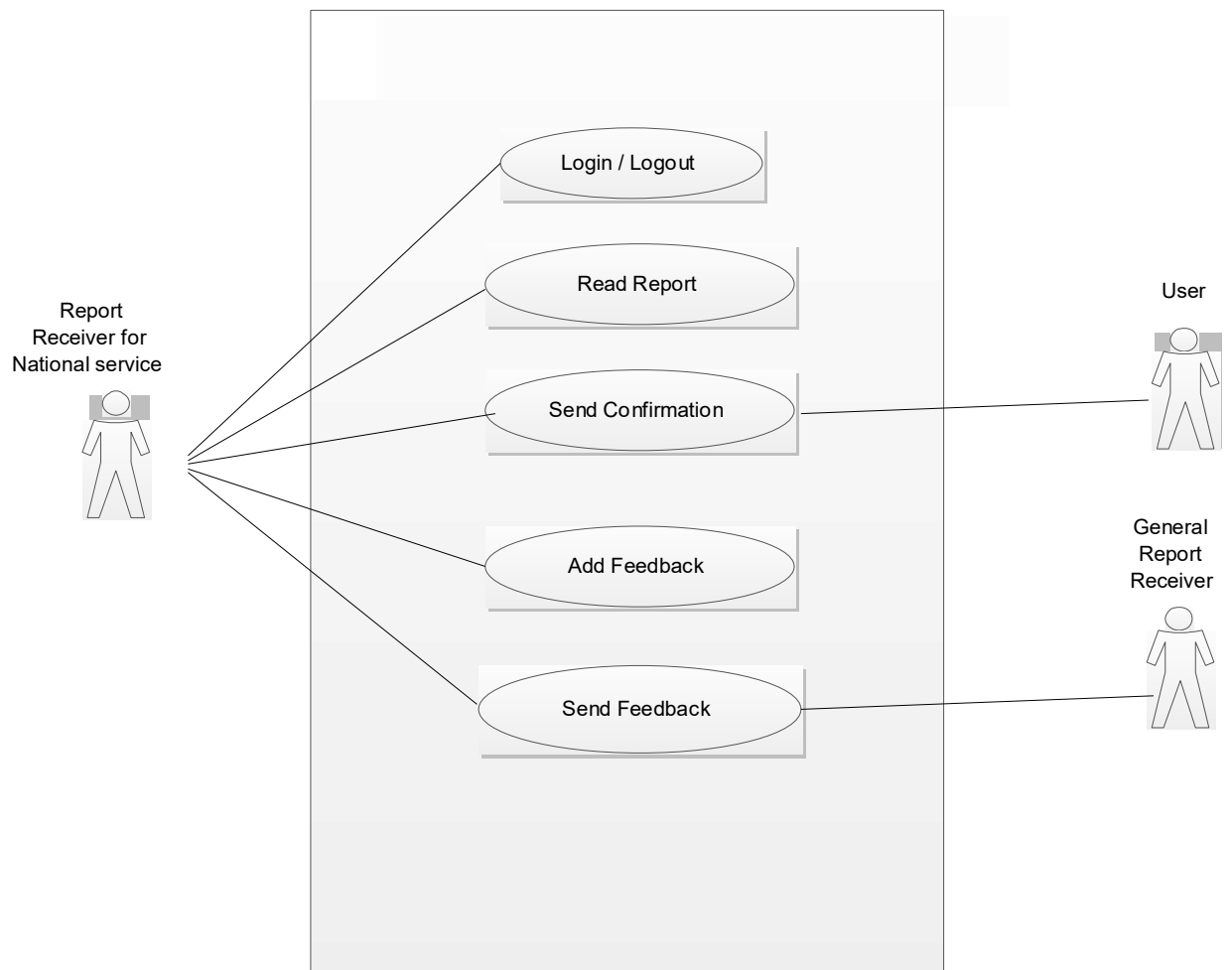
Figure 2.4 report receiver for national services use case
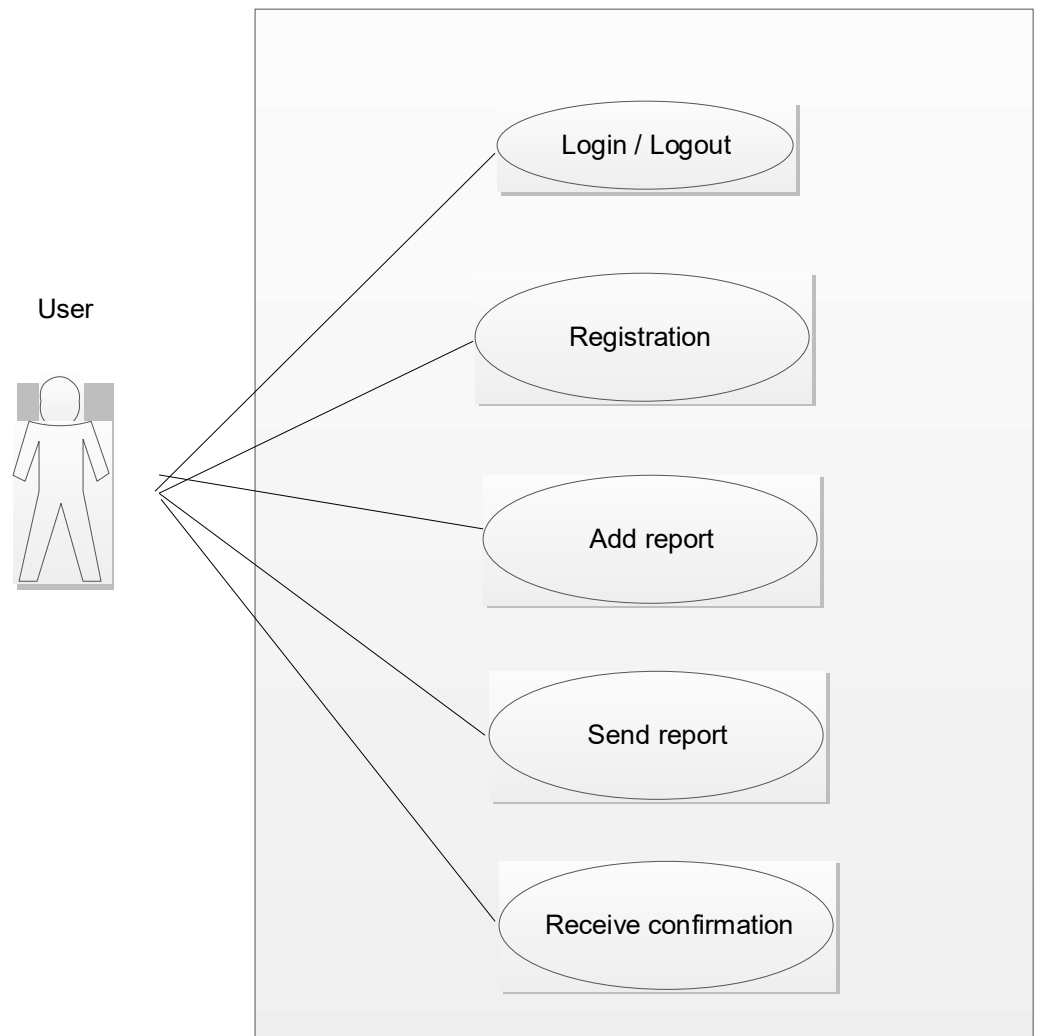
Figure 2.5 user use case
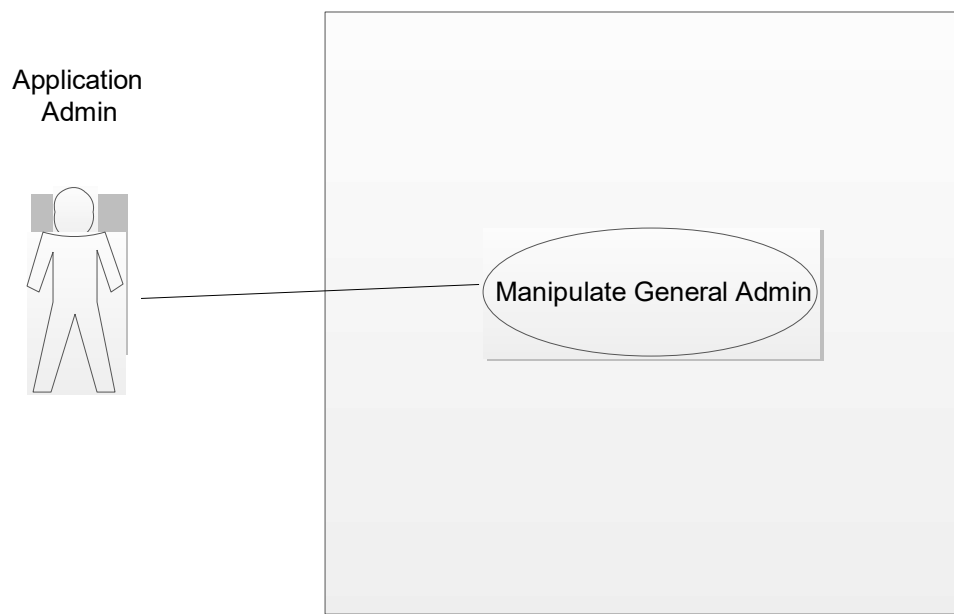
Figure 2.6 Application Admin use case

CHAPTER (3)
DESIGN

3.1 :Database Layers

At first we use (SQL Server Management Studio) to create database for our web site.We have 10 tables in the schema :

1- Governments table :

The tables in this schema:

	Column Name	Data Type	Allow Nulls
⚷	ID	int	☐
	Name	nvarchar(50)	☑
	NameEN	nvarchar(50)	☑
			☐

Figure 3.1 government table

2- Report table :

The tables in this schema:

Column Name	Data Type	Allow Nulls
🔑 ID	int	☐
Title	nvarchar(200)	☑
TitleEN	nvarchar(200)	☑
Description	nvarchar(MAX)	☑
CreateDate	smalldatetime	☑
Address	nvarchar(200)	☑
GovID	int	☑
URLPhoto1	nvarchar(500)	☑
URLPhoto2	nvarchar(500)	☑
URLPhoto3	nvarchar(500)	☑
URLPhoto4	nvarchar(500)	☑
URLPhoto5	nvarchar(500)	☑
MinitryID	int	☑
UserID	int	☑
FeedBack	nvarchar(500)	☑
Mail	nvarchar(100)	☑
SSN	nvarchar(20)	☑
Lat	nvarchar(50)	☑
Long	nvarchar(50)	☑
IsConfirmed	bit	☐
DescriptionEN	nvarchar(MAX)	☑
▶		☐

Figure 3.2 report table

3- Report Receiver table :

The tables in this schema:

Column Name	Data Type	Allow Nulls
🔑 ID	int	☐
UserName	nvarchar(50)	☑
Password	nvarchar(50)	☑
MinistryID	int	☑
GroupID	int	☑
FullName	nvarchar(200)	☑

Figure 3.3 report receiver

4- Ministry table :

The tables in this schema:

Column Name	Data Type	Allow Nulls
🔑 ID	int	☐
Name	nvarchar(200)	☑
NameEN	nvarchar(200)	☑
Description	nvarchar(MAX)	☑
DescriptionEN	nvarchar(MAX)	☑
		☐

Figure 3.4 ministry table

5- User table :

The tables in this schema:

Column Name	Data Type	Allow Nulls
🔑 ID	int	☐
Name	nvarchar(200)	☑
Phone	nvarchar(50)	☑
UserName	nvarchar(50)	☑
Password	nvarchar(50)	☑
Email	nvarchar(50)	☑
SSN	nvarchar(50)	☑
Address	nvarchar(500)	☑
IsActive	bit	☑
IsDeleted	bit	☑
CreateDate	smalldatetime	☑
GovernerateID	int	☑
MinistryID	int	☑
		☐

Figure 3.5   user table

6- Admin table :

The tables in this schema:

Column Name	Data Type	Allow Nulls
🔑 ID	int	☐
Name	nvarchar(100)	☐
GroupID	int	☑
IsActive	bit	☐
UserName	nvarchar(50)	☑
Password	nvarchar(50)	☑
		☐

Figure 3.6 admin table

This is schema :
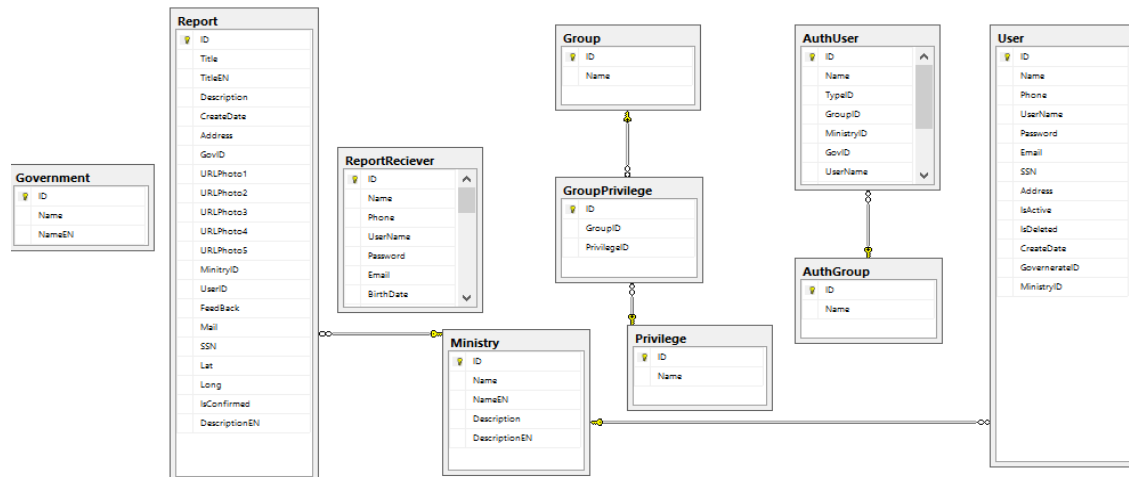
Figure 3.7 schema for data base

3.2 : Screenshots for web application
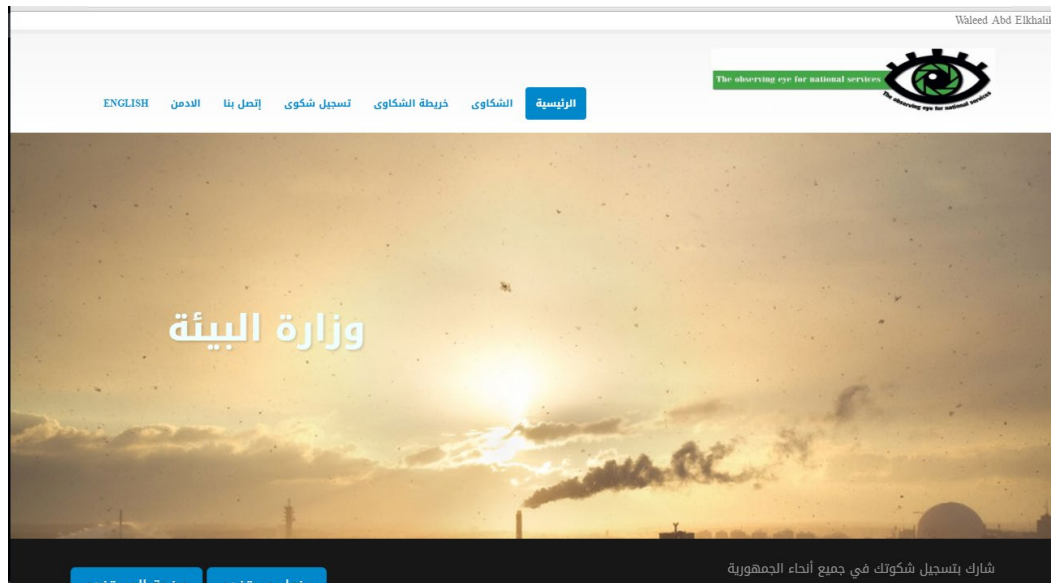
Figure 3.8 screenshot for web

Figure 3.9 screenshot for web
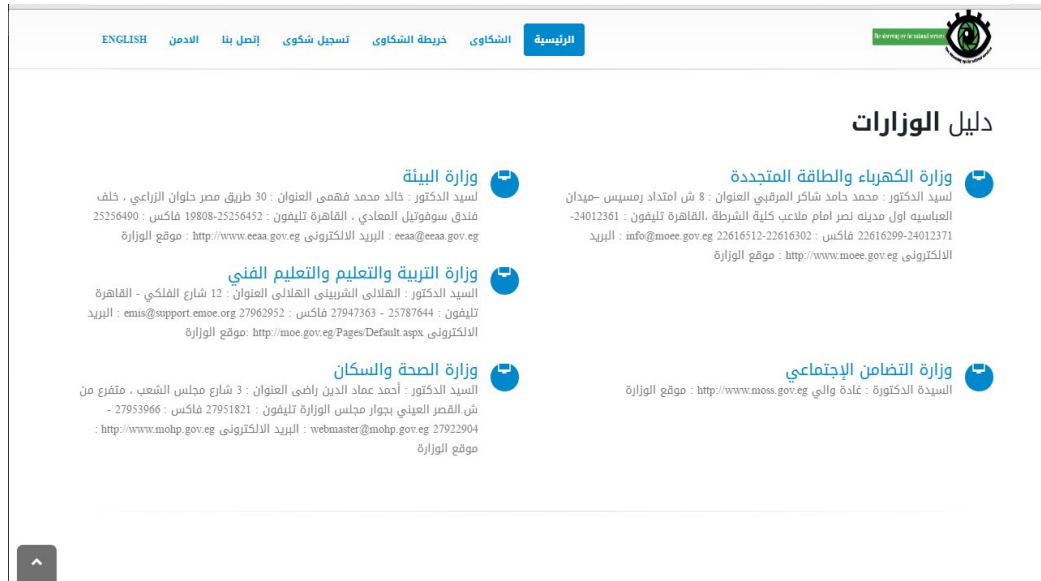
Figure 3.10 screenshot for web
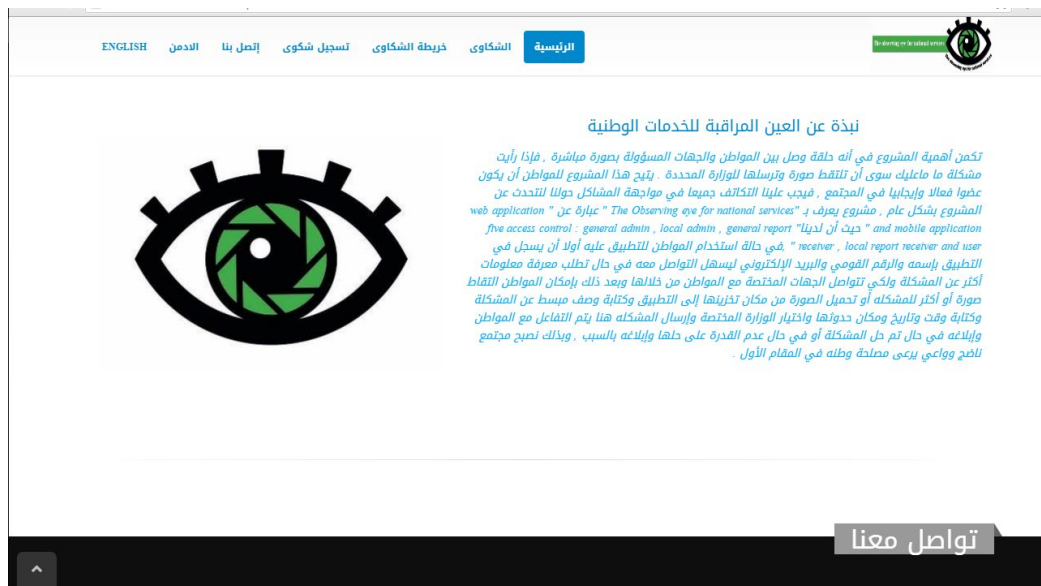
Figure 3.11 screenshot for web

3.3 : Screenshots for mobile application

Figure 3.12 screenshot for mobile application

Figure 3.13 screenshot for mobile application
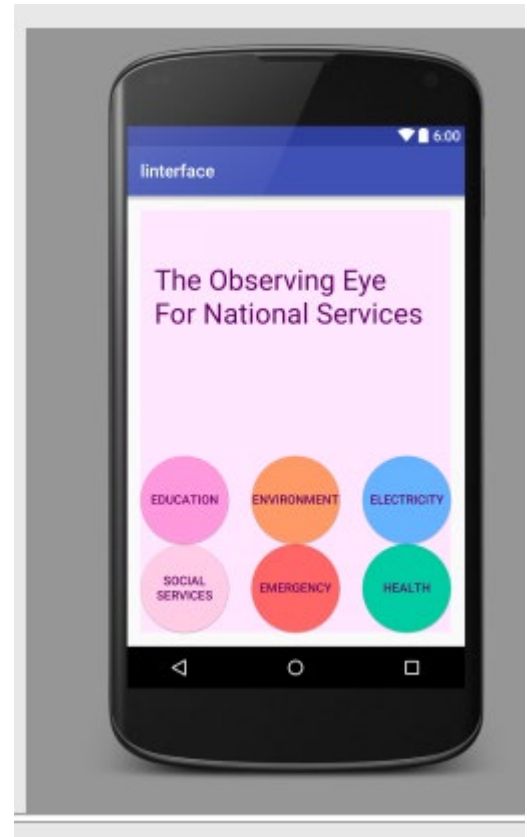
Figure 3.14 screenshot for mobile application

CHAPTER (4)
TESTING

4.1 : user access control

1- click to " تسجيل دخول"

Figure 4.1 user access control

2- click " جديد " if the first registeration
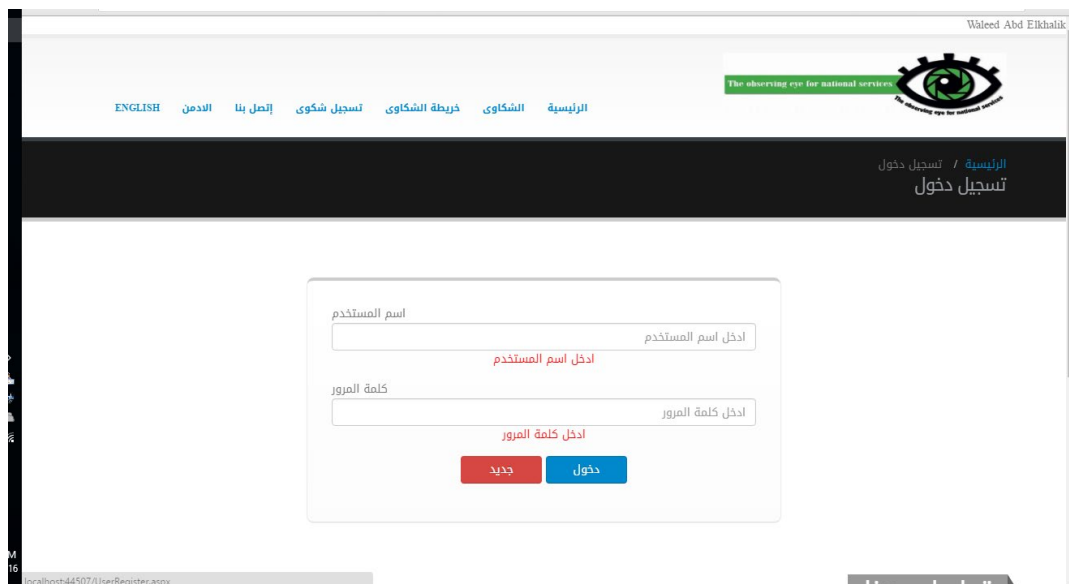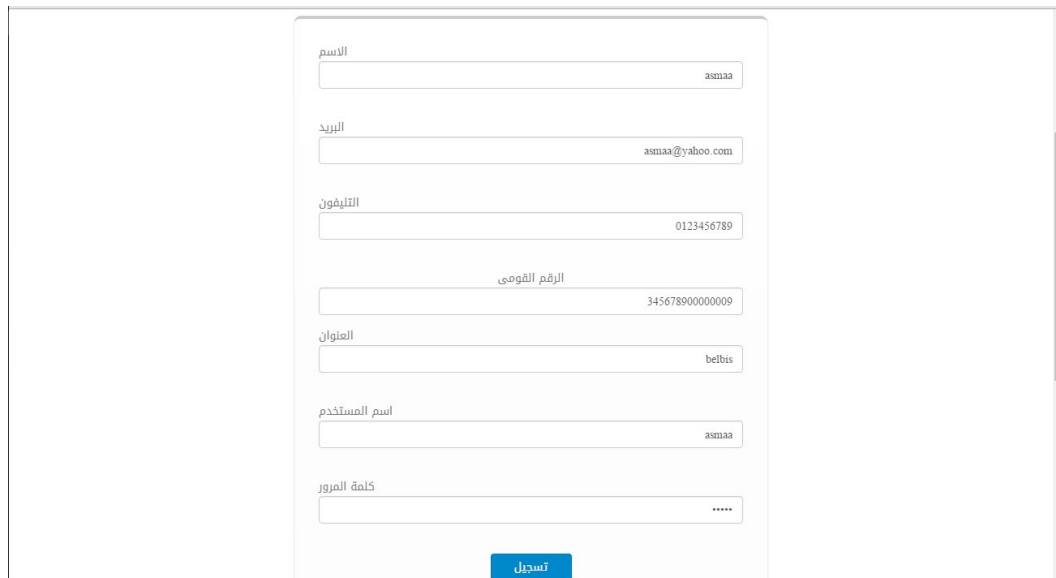
Figure 4.2 user access control

3- Fill out the form

Figure 4.3 user access control

4- click " تسجيل " and now you are now registered in the application

5- click " تسجيل شكوى " for register problem

Figure 4.5 user access ontrol

6-The required data recording

Figure 4.6 user access control

7-Registration of the complaint data

Figure 4.7 user access control

8-Recording location data

Figure 4.8 user access control

9-Select the location on the map

Figure 4.9 user access control

10-A message through the system successfully sent registration of the complaint .
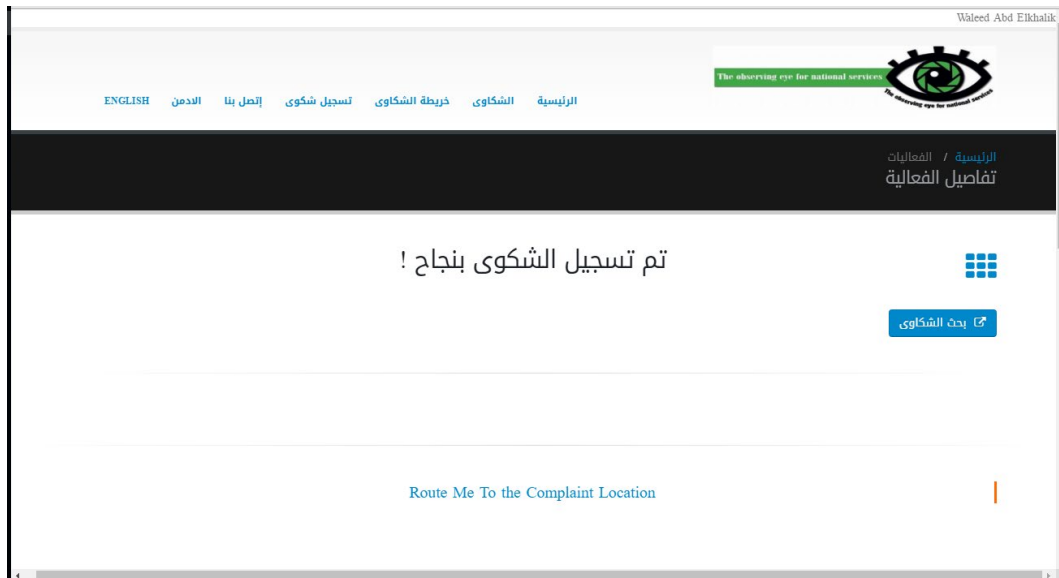
Figure 4.10 user access control

11-The user can follow the problems sent through   "صفحة المستخدم "
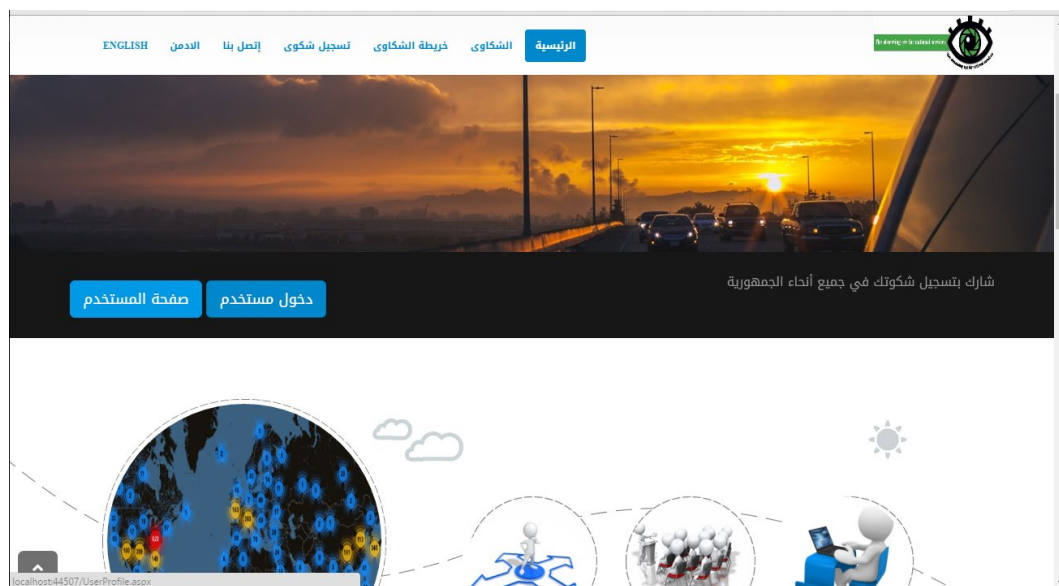
Figure 4.11 user access control
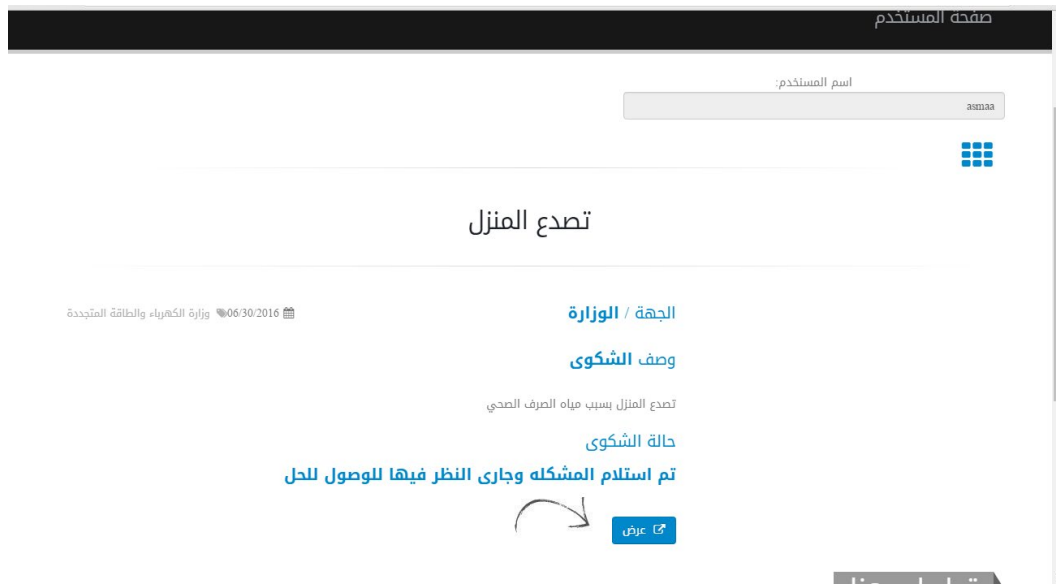
Figure 4.12 user access control

4.2 : admin access control

First : general admin .

1-click " الأدمن"

Figure 4.15 general admin access control

2-login by username and password
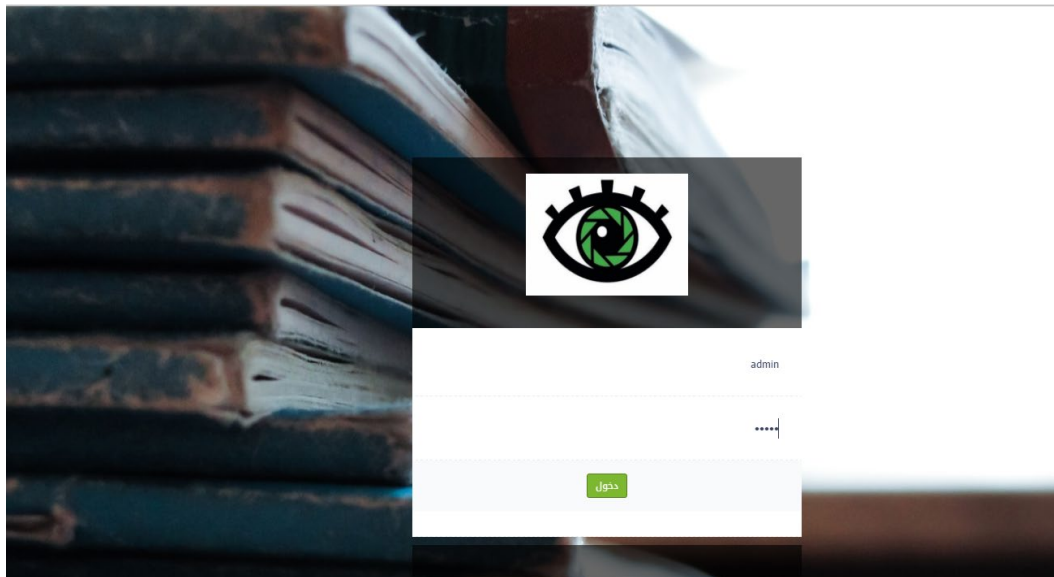
Figure 4.16 general admin access control

3-admin page

Figure 4.17 general admin access control

4-manipulate admin for national service and general report receiver
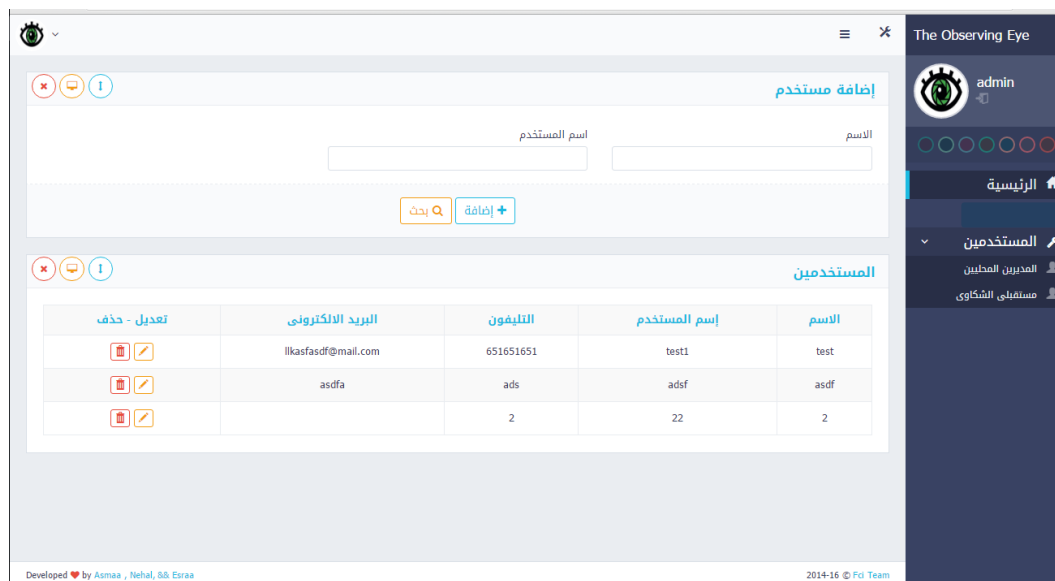
Figure 4.18 general admin access control

Figure 4.19 general admin access control
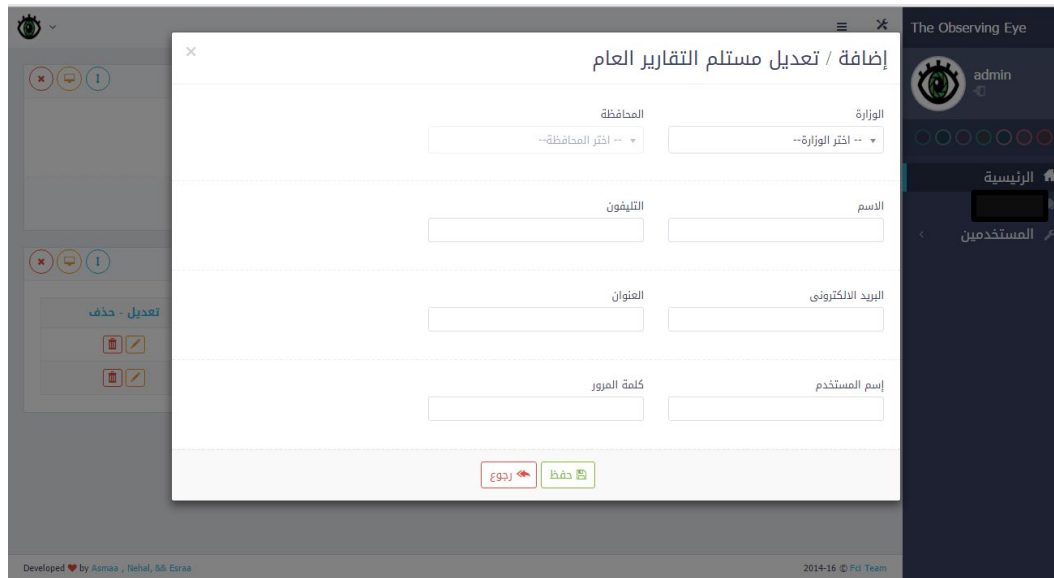
Figure 4.20 general admin access control

5-search for national service and general report receiver
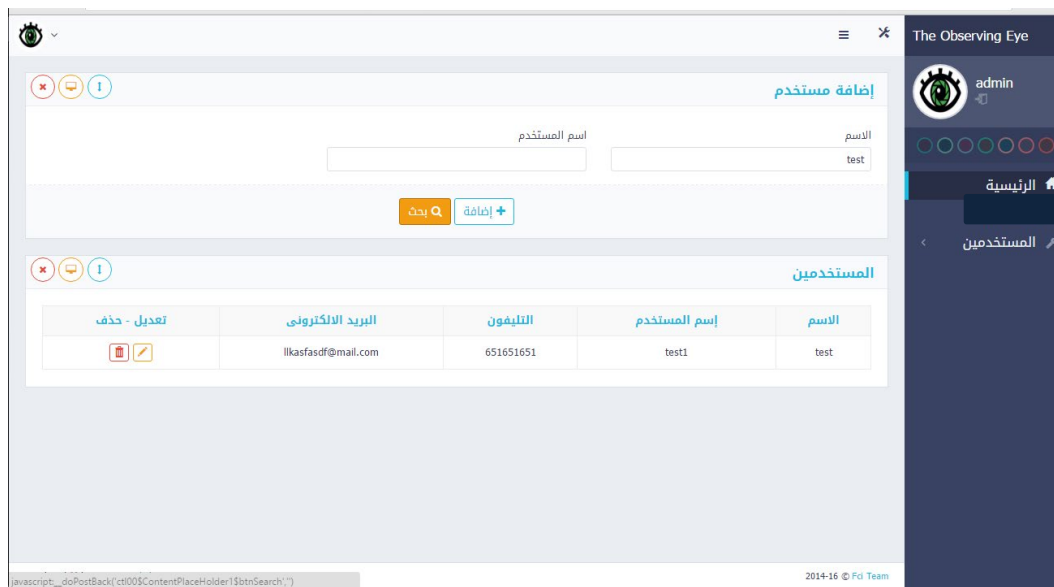
Figure 4.21 general admin access control

1-login by username and password
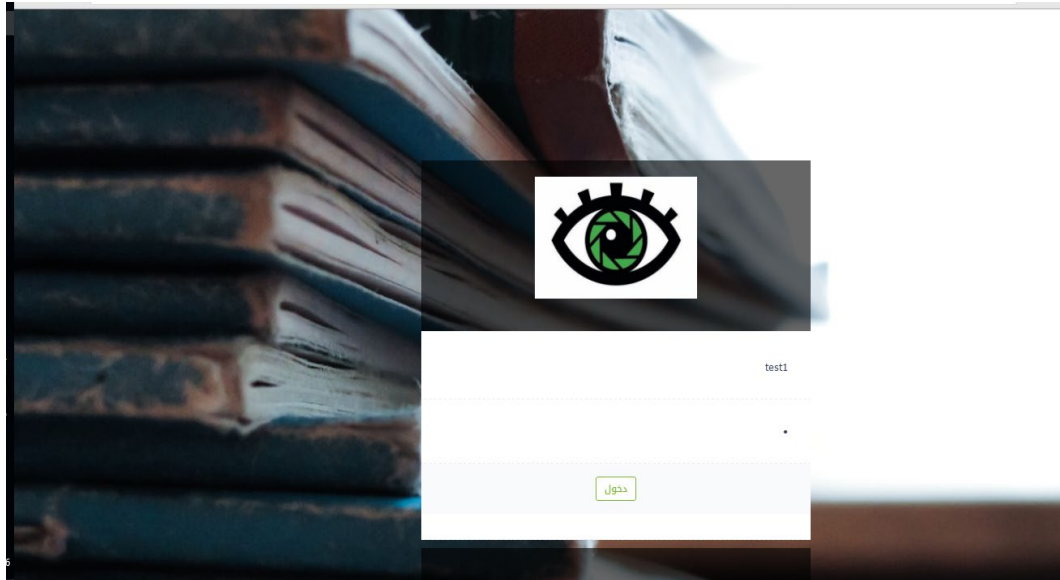
Figure 4.21 admin for national service access control

2-admin for national service page

Figure 4.22 admin for national service access control

3-manipulate local report receiver

Figure 4.23 admin for national service access control

Third : Local report receiver .

1-login by username and password
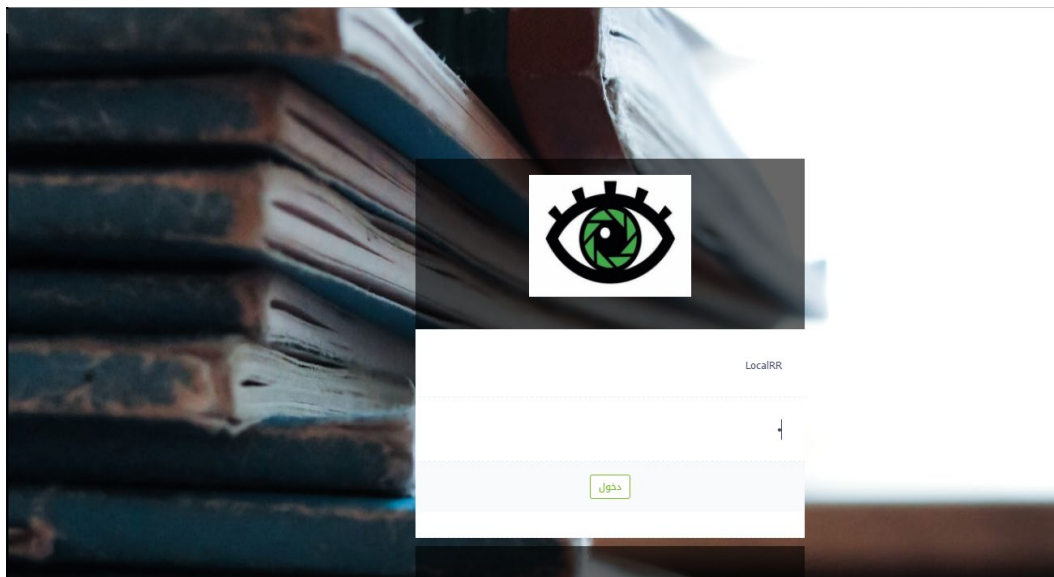
Figure 4.24 local report receiver access control

2-Local report receiver page

Figure 4.25 local report receiver access control

3-view problems

Figure 4.26 local report receiver access control

4-add feedback

Figure 4.27 local report receiver access control

Fourth : General report receiver .
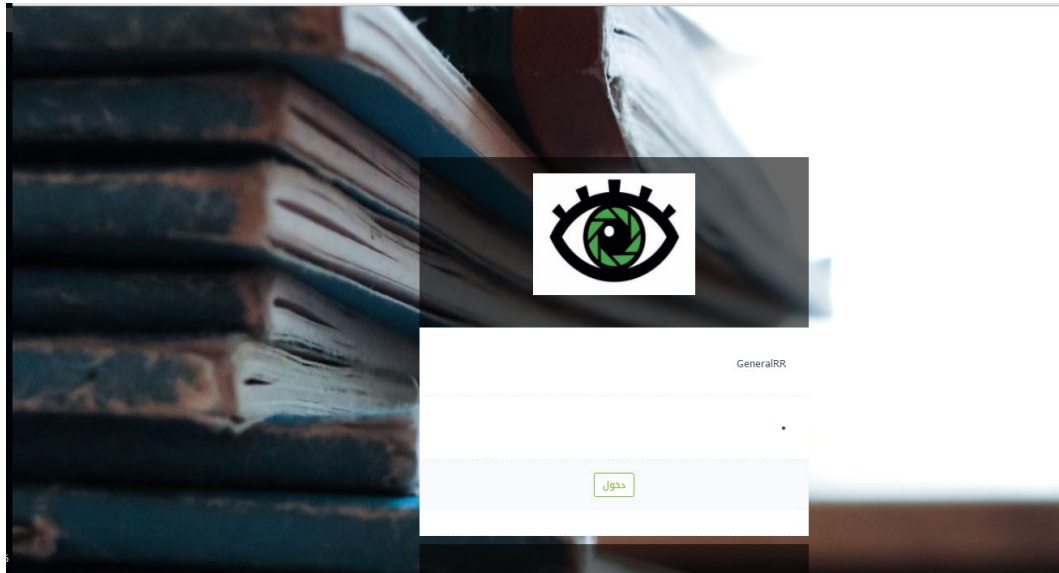
1-login by username and password

Figure 4.28 general report receiver access control
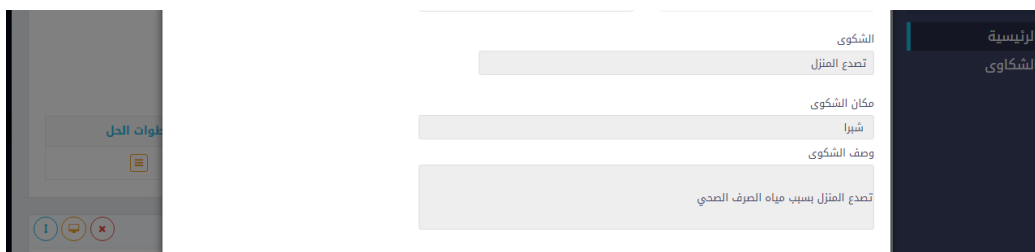
2-view all problems

Figure 4.29 general report receiver access control

3-read feedback

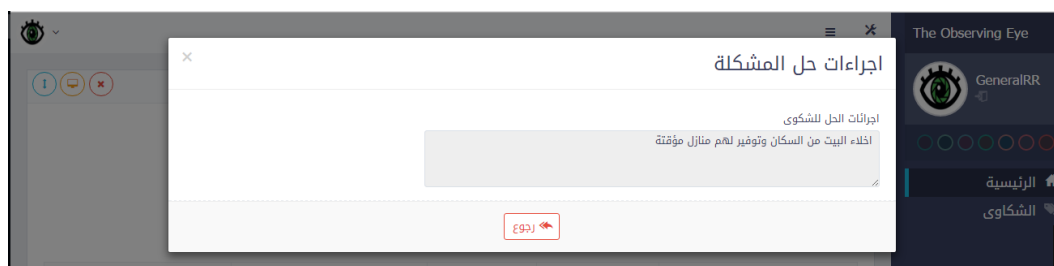
Figure 4.30 general report receiver access control

الملخص

تكمن أهمية المشروع في أنه حلقة وصل بين المواطن والجهات المسؤولة بصورة مباشرة , فإذا رأيت مشكلة ما ماعليك سوى أن تلتقط صورة وترسلها للوزارة المحددة . يتيح هذا المشروع للمواطن أن يكون عضوا فعالا وإيجابيا في المجتمع , فيجب علينا التكاتف جميعا في مواجهة المشاكل حولنا لنتحدث عن المشروع بشكل عام , مشروع يعرف بـ "The web application" عبارة عن " Observing eye for national services and mobile application " حيث أن لدينا "five access control : general admin , local admin , general report receiver , local report receiver and user " , في حالة استخدام المواطن للتطبيق عليه أولا أن يسجل في التطبيق بإسمه والرقم القومي والبريد الإلكتروني ليسهل التواصل معه في حال تطلب معرفة معلومات أكثر عن المشكلة ولكي تتواصل الجهات المختصة مع المواطن من خلالها وبعد ذلك بإمكان المواطن التقاط صورة أو أكثر للمشكله أو تحميل الصورة من مكان تخزينها إلى التطبيق وكتابة وصف مبسط عن المشكلة وكتابة وقت وتاريخ ومكان حدوثها واختيار الوزارة المختصة وإرسال المشكله هنا يتم التفاعل مع المواطن وإبلاغه في حال تم حل المشكلة أو في حال عدم القدرة على حلها وإبلاغه بالسبب , وبذلك نصبح مجتمع ناضج وواعي يرعى مصلحة وطنه في المقام الأول