DESIGN AND DEVELOPMENT OF WEB PORTAL FOR PROTOTYPE DEVELOPMENT: CLIENT MODULE

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Masters of Science in Computer Science and Engineering

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APPROVAL

This Project titled “Design and Development of Web portal for Prototype Development : Client Module”, submitted by Khaleda Bintay Khalaque to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of M.Sc in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06th Oct 2012.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of Md. Yousuf Mahbubul Islam, Professor and Department of CSE/CS/CIS, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

This project is on “Design and Development of Web portal for Prototype Development : Client Module”. Most of the development processes their uses traditional method. This is a kind of communication using spread sheet prototyping, which help to create a prototype build up an error free documentation.

Gathering, understanding and managing requirements is a key factor to the success of a software development effort. Requirement find out is a critical task in all development methods including the agile development method.

There are several development techniques available for requirement gathering which can be used with web portal development methods. These techniques concentrates on a continuous interaction with the customer to address the evolution of developing requirements, changing design requirements, prioritizing developing requirements and delivers the most important functionalities first.

The design and developing requirement gathering methodology suggests developing requirements in stages. The aim of this project is to allow requirements to be developed through web-based support. The web-based support provides a virtual meeting place where a spreadsheet based prototype can be discussed and improved step-by-step. Each step would be documented and the development of the prototype can be followed to its final stages.

To develop this project the most essential tools is Codeigniter Framework, Apache server, MYSQL database using Linux platform. But in this process will be completed with an online system.

After implementation of all functions, the system is tested in different stages and it works successfully as a spreadsheet based prototype.
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CHAPTER 1
INTRODUCTION

1.1 BACKGROUND OF THE PROJECT

A critical part of any developing project is the requirements develop for web portal. When the customer finds it difficult to articulate their requirements, prototyping provides a low cost way to help them visualize a potential solution. Often customers are not entirely sure what they want (particularly in software development projects) and a prototype can help tease out their requirements.

The aim of our project is to develop a website where the prototype activities will be centralized. The web site will be maintained for monitoring and writings about any prototype documentation. The client can create and maintain their own pages for prototype planning and developer can review client pages to check prototype status and give feedback.

Once you have established and agreed a clear set of requirements, the next step is to model a software solution and this stage helps the team to create a clear and unambiguous prototype design document.

1.2 PROBLEMS OF CURRENT SYSTEM

The current system has many problems. In this section we discuss those problems-

- Each and every prototype project creating manually.
- All the prototype works are carried out in pen and paper.
- Sometimes client cannot get proper information about the prototype requirement.
- The client cannot find the prototype concept easily.
- This system is not efficient and takes long time.
1.3 OBJECTIVE OF THE PROJECT

The goal of our project is to make the entire system efficient and user friendly to the product manager and administrator. The objectives focusing on our attempt are mainly concerned:

- To increase the flexibility of the client and developer.
- To make an easier system to complete the documentation.
- To encourage developer in writing their own thoughts.
- To monitor prototype progress.
- To facilitate the Client so that he can easily access prototype information from anywhere.
- To eliminate the paper work of the chat system like skype.

1.4 METHODOLOGY

Methodology is defined as a collection of procedures, techniques and tools that is used for the development. The methodology is not only a set of methods but it also includes the ideas, rationale and assumptions which is underling the research or investigation. Software development methodology helps us to contribute our effort to develop and implement a system by the collection of theories and concepts, comparative studies of different approaches and by development of individual methods. This methodology was followed-

- Web Language PHP
- Databases MYSQL
- Framework Codeigniter
- JavaScript Framework Jquery
- Web Servers Apache
- Development Tools Netbeans, Macromedia Dreamweaver
- Development Platforms Ubuntu-Linux, windows
- Design Platforms Adobe Photoshop, Adobe Illustrator
1.5 CONCLUSION

It has been concluded from our initial study that clients need an online based prototype development system to create their own prototype sample. It is hoped that the proposed requirement gathering system will bring sufficient efficiency in developing prototype.
CHAPTER 2
REQUIREMENT ANALYSIS

2.1 INTRODUCTION

Requirement analysis is the way to understand the requirements of the users of the system. It explores the expectations of the users about the proposed system. Requirements are actually the descriptions on how the system should work and interact with the user of the system. Requirement analysis is difficult as it brings together all the requirements and interest of the business personnel. The efficiency of the final product depends on the accuracy of the requirement analysis. As this is the base of the future work, so the analysis part of this project was performed carefully.

2.2 OVERVIEW OF USER CATALOG

JOB TITLE : CLIENT

TASK : Some featuring task like

- CREATE OWN ACCOUNT AS A CLIENT
- CREATE REQUIRED EXCEL PROTOTYPE
- ANY IMPORTANT FILE UPLOAD
- ANY DATA SHARE USING SKYPE
- ANY FEEDBACK TO SEND DEVELOPER

2.3 SYSTEM REQUIREMENT SPECIFICATION

To begin development, testing and deployment of the proposed system, we would require some specifications.

2.3.1 OPERATING SYSTEM

Windows XP Professional

The current client version of windows, XP professional is a major upgrade to the client version of windows 2000 with numerous changes to the user interface. It added a personal Firewall and improved sharing connections to the internet. Although XP is a client operating system, it can function as a server in a peer-to-peer network.
Windows NT
An MS operating system, the two main flavors being NT workstations for desktop, Which is an ideal development environment and NT server? This is designed to control the domain once the site is deployed. NT server is widely used to support commercial Web sites.

Windows 95 & 98 (Win 9x)
Microsoft operating systems are largely designed for personal use. These versions of Windows are not as stable as NT and unsuitable for deployed sites.

Windows 2000
Microsoft’s next generation of operating system that forms the next upgrade for both NT and win9x users alike. The work stations versions are geared more for personal users, the server version is for the developers.

2.3.2 WEB SERVER
A web server delivers web pages to browsers and other files to applications via the HTTP protocol. It includes the hardware, operating system, web server software, TCP/IP protocols and site content. If the web server is used internally and not by the public. It may be called an “internet server”.

Internet information service (IIs)
IIS is a Microsoft’s web server. IIS runs under the server versions of NT and 2000, adding full HTTP capability to the windows operating system. IIs are also available for the windows 2000 client version. To run IIs in windows XP operating system, we have to install windows XP’s service pack2 (Annex).

Personal web server
Personal web server (PWS) is an abbreviated version of internet information server (IIs), and was made available as an NT option as well as a free download from its web site.
Apache Server
Apache Server is an open source HTTP web server for Microsoft windows, UNIX system and other platforms. Apache features highly configurable error messages. It is also supported by several graphical user interfaces which permit easier, more intuitive configuration of the server.

2.3.3 WEB PROGRAMMING – SCRIPTING LANGUAGE

PHP
PHP (PHP: Hypertext preprocessor) is a Scripting language that is used to create dynamic Web pages. With syntax from C, Java and Perl, PHP code is embedded within HTML pages for server side execution. It is commonly used to extract data out of a database and present it on the web page. IIS, PWS and Apache web servers support the language, and it is widely used by the MySQL database. PHP was originally known as “personal web page”.

ASP
ASP (Active Server Page) is a web server technology from Microsoft that allows for the creation of dynamic, interactive sessions with the user. An ASP is a web page that contains HTML and embedded programming code written in VBScript or Jscript. In this project, as a scripting language, PHP, ELGG is used.

2.3.4 WEB APPLICATION DATABASE

MySQL
MySQL is a multithreaded, multi-user, SQL relational database server. MySQL is open source software available either under the GNU general public license (GPL) or under other licenses when the GPL is inapplicable to the intended use. It is used in many platforms such as Microsoft Windows, UNIX, and Linux etc.
2.3.5 WEB BROWSER

Internet Explorer
Microsoft’s Web Browser, also known as “IE” versions for windows, Mac and UNIX are available. Internet Explorer has become very popular due to Microsoft’s corner on the market as well as the steady improvements and enhancements that have been made to it since its inception.

Netscape
Netscape was the first commercial internet browser. It is a computer term used mainly for the series of web browsers originated from the Netscape communications corporation. Now have only a relatively small number of users. Netscape is also used to refer to the former Netscape internet services provide.

Opera
Opera is a web browser for windows and Linux from Opera software. Opera can display multiple windows with only one instance of the program running.

Mozilla
An open source web browser and toolkit from the Mozilla foundation. Mozilla Server as a reference platform for standards compliance and quality control. Mozilla-based products are the Mozilla Browser for Windows, Linux and Mac, the Camino browser for Mac, and the Firefox browser and Thunderbird e-mail client for windows. Introduced in 2004, Firefox and Thunderbird are next-generation products. To develop this proposed system the requirements specifications are

Web Tools
- HTML (Hypertext markup Language).
- Macromedia Dreamweaver MX.
- Macromedia Flash MX.

Scripting Language
- PHP (PHP stands for Hypertext Preprocessor).
2.4 CONCLUSION

In this chapter we had discussed about the elements of a web page and the things that has to be maintained during the designing period of a web page. we have followed these things to build up our system.
CHAPTER 3
SYSTEM ANALYSIS

3.1 INTRODUCTION

System analysis is defined as tasks that focus on the specification of a detailed computer based solution. System analysis emphasizes business problem whereas system design focuses on the technical or implementation concern of the system. When a system designer wants to design the system, he or she should have has sufficient knowledge about the details of the system. Few steps can simplify the task of designing coding of a system dramatically. Every designer should take time to complete each of the following steps.

Describe precisely the core functionality & the system design using data model such as ER data model.

Normalize the system precisely the core functionality the system using normalization and draws the DFD of the system.

Describe precisely the core functionality & the system design using data model such as DFD.

3.2 OBJECTIVE

System analysis is conducted with the following objectives in mind:

- Understand a system.
- Understand the different phases of system development life cycle.
- Know the components of system analysis.
- Know the components of system designing.

3.3 SYSTEM LIFE CYCLE

System life cycle is an organizational process of developing and maintaining systems. It helps in establishing a system project plan, because it gives an overall list of processes and sub-processes required developing a system.
3.4 SYSTEM DEVELOPMENT LIFE CYCLE

System development life cycle means the combination of various activities. In other words we can say that various activities put together are referred as system development life cycle. It explains the various activities involved in the development of software systems. It presents the different approaches towards software development. [2, 4, and 8].

Following are the different phases of software development cycle:

- System study/Initial Idea
- Feasibility study
- Requirement Analysis
- System analysis
- System design
- Development
- Testing
- Implementation
- Maintenance
- Review

Fig. 3.1 Different phases of Software development Life Cycle.
3.5 PHASES OF SYSTEM DEVELOPMENT LIFE CYCLE

Let us now describe the different phases and the related activities of system development life cycle in detail.

3.5.1 SYSTEM STUDY /INITIAL IDEA

System study is the first stage of system development life cycle. This gives a clear picture of what actually the physical system is? After completing the system study, a system proposal is prepared by the System Analyst (who studies the system) and placed before the user. The proposed system contains the findings of the present system and recommendations to overcome the limitations and problems of the present system in the light of the user’s requirements.

To describe the system study phase more analytically, we would say that system study phase passes through the following steps:

1. Problem identification and project initiation
2. Background analysis
3. Inference or findings

3.5.2 FEASIBILITY STUDY

The feasibility study is basically the test of the proposed system in the light of its workability, meeting user’s requirements, effective use of resources and of course, the cost effectiveness. The main goal of feasibility study is not to solve the problem but to achieve the scope. In the process of feasibility study, the cost and benefits are estimated with greater accuracy [2, 4, and 8].

3.5.3 REQUIREMENT ANALYSIS

Requirements Analysis is the process of understanding the customer needs and expectations from a proposed system or application and is a well-defined stage in the Software Development Life Cycle model.

Requirements are a description of how a system should behave or a description of system properties or attributes. It can alternatively be a statement of ‘what’ an
application is expected to do. The Software Requirements Analysis Process covers the complex task of eliciting and documenting the requirements of all these users, modeling and analyzing these requirements and documenting them as a basis for system design.

3.5.4 SYSTEM ANALYSIS

System Analysis involved a detailed study of the current system, leading to specifications of a new system. Analysis is a detailed study of various operations performed by a system and their relationships within and outside the system. During analysis, data are collected on the available files, decision points and transactions handled by the present system. Interviews, on-site observation and questionnaire are the tools used for system analysis.

3.5.5 SYSTEM DESIGN

Based on the user requirements and the detailed analysis of a system, the new system is designed. This is the phase of system designing. It is a crucial phase in the development of a system. Normally the design proceeds in two stages:

1. Preliminary or general design
2. Structure or detailed design

3.5.6 DEVELOPMENT/CODING

After designing the new system, the whole system is required to be converted into computer understanding language. Coding the new system into computer programming language does this. It is an important stage where the defined procedures are transformed into control specifications by the help of a computer language. This is also called the programming phase in which the programmer converts the program specifications into computer instructions, which we refer as programs. The programs coordinate the data movements and control the entire process in a system.

3.5.7 TESTING

Before actually implementing the new system into operations, a test run of the system is done to remove all the bugs, if any. It is an important phase of a successful system.
After codifying the whole programs of the system, a test plan should be developed and run on a given set of test data. The output of the test run should match the expected results.

### 3.5.8 IMPLEMENTATION

After having the user acceptance of the new system developed, the implementation phase begins. Implementation is the stage of a project during which theory is turned into practice. During this phase, all the programs of the system are loaded onto the user's computer. After loading the system, training of the users starts. Main topics of such type of training are:

- How to execute the package
- How to enter the data
- How to process the data (processing details)
- How to take out the reports

### 3.5.9 MAINTENANCE

Maintenance is necessary to eliminate errors in the system during its working life and to tune the system to any variations in its working environment. It has been seen that there are always some errors found in the system that must be noted and corrected.

If a major change to a system is needed, a new project may have to be set up to carry out the change. The new project will then proceed through all the above life cycle phases.

### 3.6 CONCLUSION

System analysis is an important part of the project. System analysis is needed for designing and implementation of the project. The problems are analyzed to determine the nature of the system. System Analysis finds the different phase of a system and components of system design.
4.1 Identifying requirements analysis

In this paper, the identifying requirements are given below:

- Use case model
- Activity Model
- Data Model
- PHP Platform
- Apache Web Server
- MySQL database

4.2 Use case Model

A use-case model is a model of how different types of users interact with the system to solve a problem. As such, it describes the goals of the users, the interactions between the users and the system, and the required behavior of the system in satisfying these goals.

A use-case model consists of a number of model elements. The most important model elements are: use cases, actors and the relationships between them.

A use-case diagram is used to graphically depict a subset of the model to simplify communications. There will typically be several use-case diagrams associated with a given model, each showing a subset of the model elements relevant for a particular purpose. The same model element may be shown on several use-case diagrams, but each instance must be consistent. If tools are used to maintain the use-case model, this consistency constraint is automated so that any changes to the model element (changing the name for example) will be automatically reflected on every use-case diagram that shows that element.

The use-case model may contain packages that are used to structure the model to simplify analysis, communications, navigation, development, maintenance and planning.
Much of the use-case model is in fact textual, with the text captured in the use-case specifications that are associated with each use-case model element. These specifications describe the flow of events of the use case.

The use-case model serves as a unifying thread throughout system development. It is used as the primary specification of the functional requirements for the system, as the basis for analysis and design, as an input to iteration planning, as the basis of defining test cases and as the basis for user documentation. The use-case model contains, as a minimum, the following basic model elements.

**Actor**
An element of presentation to communicate each other document. Properties include the actors name and brief description.

**Associations**
Associations are used to describe the relationships between actors and the use cases they participate in. This relationship is commonly known as a "communicates-association".

**Advanced model elements**
The use-case model may also contain the following advanced model elements.

**Subject**
A model element that represents the boundary of the system of interest.

**Use-Case Package**
A model element used to structure the use case model to simplify analysis, communications, navigation, and planning. If there are many use cases or actors, you can use use-case packages to further structure the use-case model in much the same manner you use folders or directories to structure the information on your hard-disk. You can partition a use-case model into use-case packages for several reasons, including:
To reflect the order, configuration, or delivery units in the finished system thus supporting iteration planning.

To support parallel development by dividing the problem into bite-sized pieces.

To simplify communication with different stakeholders by creating packages for containing use cases and actors relevant to a particular stakeholder.

**Generalizations**
A relationship between actors to support re-use of common properties.

**Dependencies**
A number of dependency types between use cases are defined in UML. In particular, `$<<extend>>$` and `$<<include>>$`.

`$<<extend>>$` is used to include optional behavior from an extending use case in an extended use case.

`$<<include>>$` is used to include common behavior from an included use case into a base use case in order to support re-use of common behavior.

The latter is the most widely used dependency and is useful for:

- Factoring out behavior from the base use case that is not necessary for the understanding of the primary purpose of the use case to simplify communications.
- Factoring out behavior that is in common for two or more use cases to maximize re-use, simplify maintenance and ensure consistency.

In our project there are two actors who execute their performance according to their sections. These are

- Client
- Developer

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Fig 4.1: Use Case Diagram of requirement gathering for agile software development

Fig 4.2: Use Case Model for Client Part

4.2.1 Use Case Model Template

Login

Use case : Login
Use case ID : U001
Description : Login
Actor : Client
Primary Path :
1. Key-in : Username
2. Key-in : Password
3. Click Login
Alternative Path:
3.1 Login Fails, try to again with valid ID or password

**Create Prototype Model:**
Use case : Create Prototype Model Precondition: Login
Use case ID : U002
Description : Create Prototype Model
Actor : Client
Primary Path :
1. Key-in : Prototype Title
2. Key-in : Prototype Description
3. Key-in : Prototype Images

**View Prototype Analytic Report:**
Use case : View Prototype Analytic Report Precondition: Login
Use case ID : U003
Description : View Prototype Analytic Report
Actor : Developer
Primary Path :
1. Key-in : Prototype Title
2. Key-in : From date
3. Key-in : End date

**Collaborate with client:**
Use case : Collaboration Precondition: Login
Use case ID : U007
Description : Collaboration
Actor : Client
Primary Path:
1. Key-in: Attach a sample Description or share own idea and excel file
2. Key-in: Feedback Each Prototype
3. Key-in: instant chat by Skype
4. Key-in: View Prototype other User blogs

4.2.2 Activity Model

User gives user ID and Password then click login button, if it is correct user id and password then state is full but if user gives invalid information then it will be back to first state. The following figure 3.2 shows the activity model for login class.

```
State

Key-in ID

Key-in Password

Click Login

False
```

Figure 4.2.2: Activity Model for Login

4.2.3 Ontology Model

In ontology model client has a relation with spreadsheet based prototype platform:
1. Client create spreadsheet based prototype
2. Prototype has a criteria
3. Client gives some idea or some instruction
4. Prototype has a feedback system
5. Client conduct spreadsheet based prototype
6. Prototype have to be facing the Final stage
4.2.4 Data Model

The following figure 3.4 shows the data model of teacher module.

Figure 4.3: Data Model for a Client and Developer Module
CHAPTER 5
IMPLEMENTATION AND TESTING

5.1 Implementation of Excel Prototyping
Go through online http://prototype.comjagat.com

5.2 Implementation of Data Model
The following Figure 5.2.1 shows the User table in MySQL database.

<table>
<thead>
<tr>
<th>id</th>
<th>user_name</th>
<th>full_name</th>
<th>email</th>
<th>password</th>
<th>verification_key</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>sabika</td>
<td>Khaleda</td>
<td><a href="mailto:seagirlsabo@gmail.com">seagirlsabo@gmail.com</a></td>
<td>1a76f40e5a32f75e27e784486e1a04</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
<tr>
<td>3</td>
<td>eesrin</td>
<td>Jebrin Noor Nashir</td>
<td><a href="mailto:eesrin247@gmail.com">eesrin247@gmail.com</a></td>
<td>1a8dc309ba51abbe56e6720883a</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
<tr>
<td>5</td>
<td>tase</td>
<td>Shafail Akhter</td>
<td><a href="mailto:shafail@yahoo.com">shafail@yahoo.com</a></td>
<td>1a8dc309ba51abbe56e6720883a</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
<tr>
<td>13</td>
<td>bripbob</td>
<td>Badruzzaman Biplab</td>
<td><a href="mailto:bripbob@gmail.com">bripbob@gmail.com</a></td>
<td>68b0fa767733b3457b6a19274</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
<tr>
<td>15</td>
<td>surwi</td>
<td>Surwil Panneen</td>
<td><a href="mailto:mail2surwi@gmail.com">mail2surwi@gmail.com</a></td>
<td>508b0e-b254d585515b256256cde19f</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
<tr>
<td>17</td>
<td>abdullah</td>
<td>Md. Abdullah</td>
<td><a href="mailto:tamberrana500@gmail.com">tamberrana500@gmail.com</a></td>
<td>1a8dc309ba51abbe56e6720883a</td>
<td>43b465013f163664175d8f7a75b7</td>
</tr>
</tbody>
</table>

Figure 5.2.1 Client or Developer table

The following Figure 5.2.2 shows the course table in MySQL database.

<table>
<thead>
<tr>
<th>cat_id</th>
<th>id</th>
<th>title</th>
<th>detail</th>
<th>image</th>
<th>thumb_image</th>
<th>file</th>
<th>flag_status</th>
<th>total_responds</th>
<th>user_ref_id</th>
<th>create_d</th>
<th>update_d</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>1</td>
<td>1</td>
<td>Resturant Prototype</td>
<td>&lt;p&gt;in software development, a prototype is a rum.</td>
<td>NULL</td>
<td>NULL</td>
<td>0</td>
<td>5</td>
<td>2012-07-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>2</td>
<td>Restaurant Prototype</td>
<td>&lt;p&gt;    in software development, a prototype is a</td>
<td>NULL</td>
<td>NULL</td>
<td>0</td>
<td>3</td>
<td>2012-07-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>1</td>
<td>1</td>
<td>Teacher Availability</td>
<td>&lt;p&gt;    in software development, a prototype is a</td>
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Figure 5.2.2 Work Panel table

The following figure 5.2.3 shows the User Portfolio environments.

Figure 5.2.3 User Portfolio environments
The Following figure 5.2.4 shows the step of prototype integration or add

![Figure 5.2.4 Category of Prototype](image)

**5.3 Integration & testing**

The Following figure 5.3.1 shows the prototype title environments

![Figure 5.3.1 Added Prototype Title](image)

The following figure 5.3.2 shows the prototype title, description and images add environments

![Figure 5.3.2 Added Prototype Title, Description and Images](image)
CHAPTER 6
SYSTEM SECURITY

6.1 INTRODUCTION

Security is not only used to prevent unauthorized access to data but is also used to prevent accidental destruction of data. That is why in our project the administrator and the members created by the administrator have the privilege to read, insert, and update data. But any kind of major change in developing project documentation system can only be made by the super administrator. The general students can read, update and edit data. They don’t have any kind of access to the database.

6.2 THREATS TO SYSTEM SECURITY

Research shows that the most damage comes from errors and omission-people making mistakes. The treat of external attack on a priority sequence, one would probably want to start from within the firm and work out.

The list of potential threats is:

1. Errors and omissions.
2. Disgruntled and dishonest users.
3. Fire
4. Natural disasters.
5. External attack.

6.3 SECURED ADMIN AREA

In this system the admin area is fully secured. Without knowing the right password nobody can enter in the admin area. And without entering the in the admin area nobody can change the settings and other features of our system.
6.4 SESSION COOKIE SECURED

The session cookie is stored in temporary memory and is not retained after the browser is closed. Session cookies do not collect information from the user’s computer. They typically will store information in the form of a session identification that does not personally identify user. Without cookies, websites and their servers have no memory. A cookie, like a key, enables swift passage from one place to the next. Without a cookie every time a user opens a new web page the server where the page is stored will treat the user like a completely new visitor.

Cookies are very important method for maintaining state on the web. “State” in this case refers to an applications ability to work interactively with a user, remembering all data since the application started, and differentiating between users and their individual data sets.

A cookie is a text-only string that gets entered into the memory of ones browser, the value of a variable that a website sets. If the lifetime of this value is set to be longer than the time you spend at that site, then this string is saved to file for future reference.

6.5 DATABASE SECURITY

The data stored in the database need to be protected from unauthorized access and accidental introductions of inconsistency. Accidental loss of data consistency may result:

✓ Crashes during transaction processing.
✓ Anomalies caused by concurrent access to the database.
✓ Anomalies caused by the distribution of data over several computers.

So, to protect the database, steps are as follows:

✓ Unauthorized reading of data.
✓ Unauthorized modification of data.
✓ Unauthorized destruction of data.
6.6 CONCLUSION

Security is critical in system development. The amount of protection depends on the sensitivity of the data, the reliability of the user, and the complexity of the system. The motives behind security are to keep the organization running protect data as and seek management support for more installations.
CHAPTER 7
INTERFACE DESIGN

Figure 7.1 Prototype Your Needs Home Page
Figure 7.2 Prototype Your Needs Working Rules
Figure 7.3 Prototype Your Needs Feedback Page

Figure 7.4 Prototype Your Needs Login Page
Figure 7.5 Prototype Your Needs Registration Page

Figure 7.6 Prototype Your Needs Forgot Password Page
Figure 7.7 Prototype Your Needs User Profile Page

Figure 7.8 Prototype Your Needs working Page
in software development, a prototype is a rudimentary working model of a product or information system, usually built for demonstration purposes or as part of the development process. In the systems development life cycle (SDLC) prototyping model.

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Figure 7.9 Prototype Your Needs Reviewing page
Figure 7.10 Prototype Your Needs User Blog Page
Figure 7.11 Prototype Your Needs Report Page

Figure 7.12 Prototype Your Needs Search Page
Figure 7.13 Prototype Your Needs without login review Page
CHAPTER 8
FUTURE SCOPE AND CONCLUSION

8.1 Future Scope

- In future I will extend whiteboard solution for documentation present easily.
- Presently we are working on excel prototype in future it will be more features with the other prototype concept.

8.2 Conclusion

The main contribution of this paper is our new module for the requirement gathering system, using the software development method of Web technology. This model including various services and tools in the context of a client requirement, such as: create prototypes, uploading excel documents and reporting image, useful links, assessment, and simple prototype search. Our interest in making this website stems from the desire to facilitate all the key interaction patterns in excels documentation. A list of the technologies used in the implementation of web-based e-learning system includes PHP Platform, Apache Web Server, Codeigniter Framework, and MySQL database.

I believe that there are two primary advantages of our Excel Prototyping web-based model.

One is that the proposed module, which contains a hierarchical contents structure and prototype relationships between concepts, can provide related useful information for searching and sequencing learning resources in web-based communication platform.

The other is that it can help an instructor to develop a communication by helping the structure understand the how and why of the requirement gather by developing excel prototype. This website will give the instructors a complete view of prototype progress by each developer and allowing instructors to provide targeted feedback and help to the client.
References

[1] Ontologies and the Semantic Web
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