

# Online Dictionary Final Project Report

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# 1. INTRODUCTION

This online dictionary system is designed to deliver the meanings of the words to the customers on the fly. Moreover it's not just for a browsing facility as provided in a simple handheld pocket dictionary; it also adds interactive properties so that the information for a particular requested word is generated. Customers upon login can avail to the various newsletters and feedback facilities.

The favourite list of individual users can be saved and viewed as reference, as can the last viewed words of the different users. There are different applications like word builder (using interactive quizzes), thesaurus, and news flashes which show the vocabulary related news articles, most commonly searched items on this site and quotes of the day.

What is special in this application is that people can use this website as a word builder tool. The various competitive exams require the students to possess good vocabulary. Ranging from the beginner to the advanced levels, user could make use of various tests to practice and learn new words. These quizzes tell the user whether this is important for SAT or CAT etc. related words can be generated using the words already generated. This increases the instructiveness and productivity of this tool.

Moreover the related words section at the end of every page links to the original word meaning. So when you need to learn words together or get the accurate meaning when in confusion among the similar sounding words, you could use this section and browse through its usages. The thesaurus is also provided to get to know the synonyms, antonyms and the parts of grammar of words.

## 1.1. PURPOSE

The purpose of this document is to describe the external behaviour of the Online Dictionary System. Requirements Specification defines and describes the operations, interfaces, performance, and quality assurance requirements of the Online Dictionary System. The document also describes the non-functional requirements such as the user interfaces. It also describes the design constraints that are to be considered when the system is to be designed, and other factors necessary to provide a complete and comprehensive description of the requirements for the software.

Here in this, we would describe the various functional and non-functional requirements of this system and show snap shots of the graphical user interfaces of the prime pages. All the pages of the website are not shown; only the major pages are used here to explain the product design.

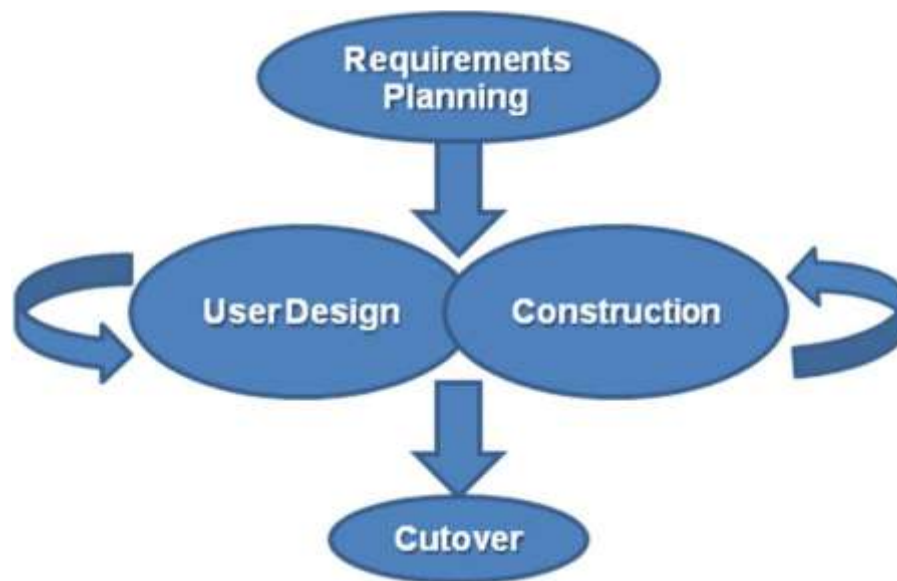
## 1.2 SCOPE

The software requirements specification states all the requirements in a single document. The main features are as follows:

- The product provides the members with features to have a dictionary system on the fly and the whole system is up and running all day. There are users who use the internet facility in their hand held devices or pocket devices, so it becomes a matter of convenience for them.
- The system provides logon facility to the users.
- The system provides the members with the option to check their account and/or change their options like password of the account whenever needed all through the day and get newsletters and provide feedback for the various services.
- The system is available all throughout the day, every day.
- Word of the day and word builder facility is used for vocab builder.
- Thesaurus is also available.
- Autocomplete facility so that the user doesn't have to type everything... the system does it for them.
- The quote of the day is shown with reference to the quote's origins and other interesting details.
- News flashes to show the current trends in the literary society and the academia.

The features that are described in this document are used in the future phases of the software development cycle. The features described here meet the needs of all the users. The success criteria for the system are based in the level up to which the features described in this document are implemented in the system.

## 2. PROCESS MODEL : RAPID APPLICATION DEVELOPMENT



**Rapid application development (RAD)** is a software development methodology that uses minimal planning in favour of rapid prototyping. The "planning" of software developed using RAD is interleaved with writing the software itself. The lack of extensive pre-planning generally allows software to be written much faster, and makes it easier to change requirements.

We used this model because our whole project could have been divided into smaller parts and thus we could have faster development, developing all the modules individually and some in parallel. Moreover there are many components that could be plugged in and used. We did minimum planning beforehand and thought as we worked because many improvisations are needed throughout the development process.

### Four phases of RAD

- **Requirements planning phase** – combines elements of the system planning and systems analysis phases of the System Development Life Cycle (SDLC). Users, managers, and IT staff members discuss and agree on business needs, project scope, constraints, and system requirements. It ends when the team agrees on the key issues and obtains management authorization to continue.
- **User design phase** – during this phase, users interact with systems analysts and develop models and prototypes that represent all system processes, inputs, and outputs. The RAD groups or subgroups typically use a combination of Joint Application Development (JAD) techniques and CASE tools to translate user needs into working models. *User Design* is a continuous interactive process that allows users to understand, modify, and eventually approve a working model of the system that meets their needs.
- **Construction phase** – focuses on program and application development task similar to the SDLC. In RAD, however, users continue to participate and can still suggest changes or improvements as actual screens or reports are developed. Its tasks are programming and application development, coding, unit-integration and system testing.
- **Cutover phase** – resembles the final tasks in the SDLC implementation phase, including data conversion, testing, changeover to the new system, and user training. Compared with traditional methods, the entire process is compressed. As a result, the new system is built, delivered, and placed in operation much sooner. Its tasks are data conversion, full-scale testing, system changeover, user training.

### 3. OVERALL DESCRIPTION

This software system contains these basic functional components:

**3.1 Logon Capabilities:** The system shall provide the users with logon capabilities.

**3.2 Dictionary browsing:** The Online Dictionary System is useful for normal alphabetical browsing of the words.

**3.3 Word builder:** The system can be used as a tool for honing the vocabulary skills.

**3.4 Word of the day:** the word of the day is an application which generates a new word each day and also sends an email to the subscribed users.

**3.5 Thesaurus:** the thesaurus clubs the related words together and is useful for finding similar words, their antonyms and synonyms.

**3.6 News flash:** news articles relating to the academia and the literary society would also be displayed here.

**3.7 Word articles:** various articles related to the word origins and similar stories about the words in general is shown here.

**3.8 Quote of the day:** a random quote is generated in the leftmost section and links are provided for the person or place.

### 4. SPECIFIC REQUIREMENTS

#### 4.1 FUNCTIONAL REQUIREMENTS

##### 4.1.1 Logon Capabilities

INPUT - the username and password.

OUTPUT- the personalized login page will be displayed.

PRECONDITION – the user should be a registered customer/ should register as a new user.

POSTCONDITION- NA.

It is basically the login page through which user interacts with the dictionary site. It has various functions. Users can enter into his/her account where a personalized view is available. His most common word searches and the recent updates can be viewed because his details and his activities would be updated, on every logon, in the user database.

New users could also use other services like word builder tools and other applications after registering on the site. There is a link provided on the right side bar to register, if a new user. To subscribe for newsletters or new words of the day, the user can submit his/her email id in the text box provided.

User can also give tests like SAT, LSAT or CAT by continuously keeping an eye on the timer attached to the login page. Various links like test, speciality, home are available to go directly to the page desired. User can contact admin or can check for validation of site. User can directly go to test section, check for new words etc. through this page. User can also go directly to the starting letter of the word to be searched as letter series is given there in login page itself. So, just by clicking on the starting letter, user will be able to see variety of words starting from that letter from where he/she can search his/her word.

##### 4.1.2 Dictionary Browsing

INPUT- click on the letter to which the word belongs.

OUTPUT- the detailed meaning of the word in the main page.

PERCONDITION- the word should exist in the dictionary database.

The dictionary can be browsed alphabetically , simulating the real life handheld pocket dictionary but with larger information scope. The browsing links are given in a section in the footer region and it will be replicated in all the html sheets , thus the accesibility is high.

The browsing functionality is simple. The letters are arranged alphabetically and each of them are links. When the user clicks on the lettered links which gets highlighted on hovering, and the section showing the various words in the database related to the specified letter is shown on the left bar. These words are generated dynamically on accessing the word database . These words generated are also hyperlinks ,which on clicking leads the user to a page with all the details relating to the word, from its usage, meanings and related words to the parts of grammar and its origins.

This makes a very educational read and is supposed to give a feel of the traditional hand held dictionary.

#### **4.1.3 Word Of The Day**

INPUT- NA

OUTPUT- the randomly generated words are displayed in the space provided.

the site would display a random word of the day on the site bar, it preferably being a hyperlink. On clicking the word the various other articles relating to the word will be dispalyed in the content pane.

This is a simple code snippet which would be random in nature. The word would change everyday and would never repeat, preferably. This word of the day will also be maintaining a history log ,so the user can view the words which were displayed previously and get updated if he was not able to view the previous days words. On the newsletter subscription these words would be coming in the mail everyday, without user intervention. It is a system generated function and thus if the user does not stop the service, it would keep on sending the word of the day mails to all of the subscribers.

#### **4.1.4 Word Builder**

INPUT- click on the difficulty of the test, the test type etc. to get the test of your choice.

OUTPUT- the test page with the timer will be displayed.

PERCONDITION- the test sould be a part of the system.

POSTCONDITION- the final score and report of performance will be generated only if the user completes the whole quiz.

The various english competitive exams test the students on their vocabulary knowledge, so an application would be developed to hone their skills, for exams such as the Sat, GMAT etc. this tool is what we collectively call the word builder. Its usage is relatively simple. There are two ways to go about it. Firstly you could select the type of examination you want to appear for, example the SAT. Then the timer is set for the test in batches of about ten questions and the user is supposed to answer the questions. The quiz will be immediate. The answer on marking would show whether it is right or wrong . it is supposed to be a realtive grading test, which means that the next question would appear based on your correctness of the previous answer. This format is used nowadays in many computer adaptive tests and a better feel is provided this way. If the user gives a wrong answer a question which is realtively easier to the previous one , would be provided. Else the question difficulty would keep on increasing. The score generated would be based on the average highest score reached.

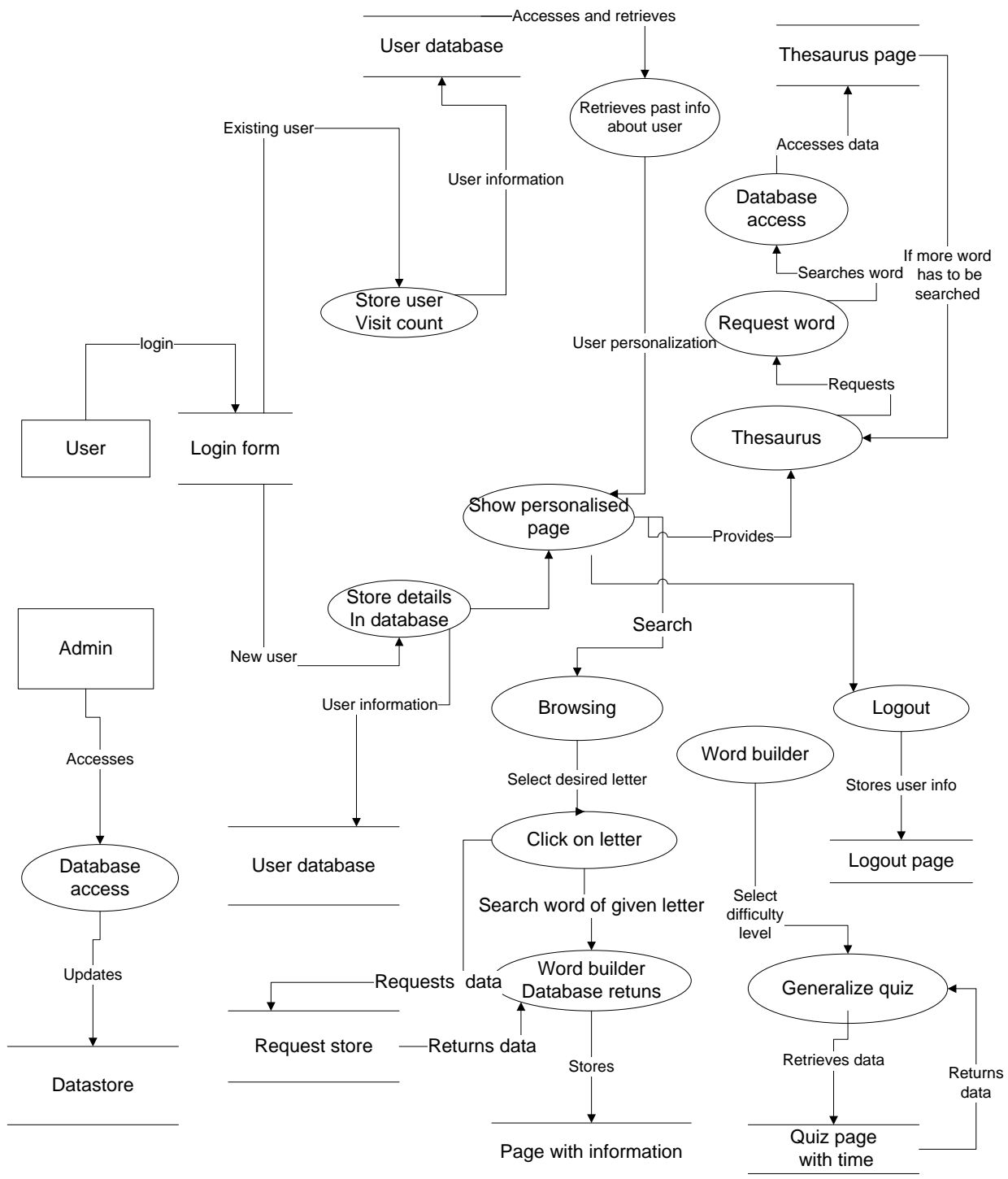


Fig: the dataflow for “the online dictionary”.

#### 4.1.5 Thesaurus

INPUT- click the link to select the words in the thesarus database.

OUTPUT- the page displaying the words and the related synonyms and antonyms will be displayed.

A thesaurus is a reference work that lists words grouped together according to similarity of meaning (containing synonyms and sometimes antonyms), in contrast to a dictionary, which contains definitions and pronunciations.

Apart from normal dictionary, this page will help user to find relative antonyms and synonyms of the word to be searched. This will help especially those users who are preparing for competitive examinations like SAT, LSAT, CAT, etc. As we know that in these examinations, one has to be very strong in vocabulary so our

dictionary will provide new words replacing obsolete words and words which do not belong to English i.e. words that belong to different languages but are used in day-to-day life. Here we are providing a series of words with their variety of meanings, their antonyms and their synonyms. It will also help user to check if there is any spelling error and hence help user to enhance their vocabulary with correct spellings. Thus, thesaurus helps people to write freely without caring for spelling mistakes. Hence, it provides an important functionality to our dictionary site.

#### **4.1.6 News flashes**

INPUT- NA

OUTPUT- the page displays the news articles.

there are many news articles which find relevance on a site, with news relating to the world of academia. Since this is not a traditional dictionary, it's not supposed to be looking like one too. Thus we have a special facility, in which some news snippets would be added. These would either be pictorially arranged or by some links to lead the user to the parent site. The news articles may be on the various literary words of recent authors, their view points or on some recent news in the field of arts.

#### **4.1.7 Word articles**

INPUT- NA

OUTPUT- word articles will be displayed on random.

there are various articles which can be written on the words themselves. The basic ones are describing the origins of the words. For example, the word equipoise is derived from the word "equi" + "poise". There are various articles which show how the words came to be. Some other instances would be to show the various discoveries which have come about. A short article illustrating the origins of wheel is a good example. The various illustrations and the links provided in the page are hyperlinks and on clicking, they would lead you to the Wikipedia encyclopaedia articles, where you could read more about it.

#### **4.1.8 Feedback**

INPUT- username and password to send the completed form

OUTPUT- the form is sent to the administrator.

various systems require regular feedback mechanisms to know about the various mistakes which the system would be making. Thus if the users have any grievances they wish to share, they could either fill a form on the feedback page or just give suggestions in the text box provided. Moreover it is an open site and many users could apply for the position of contributors and could help in the development of the system. The suggestions provided would be useful in evaluating the system, its working and its effectiveness.

#### **4.1.9 Quote of the day**

INPUT- NA

OUTPUT- the random quote of the day will be published everyday.

like the word of the day tool, we described earlier, we have another tool known as the quote of the day. It's a random quote generator function which not only quotes the words of famous personality, but also gives references to the personalities and also to the situations in which it were used. The history of the "quotations" help the user builds the general knowledge and it is an interesting read.



## **4.2 NON FUNCTIONAL REQUIREMENTS**

**4.2.1 Usability:**The users of the system are members and the administrators who maintain the system. The members are assumed to have basic knowledge of the computers and Internet browsing. The administrators of the system to have more knowledge of the internals of the system and is able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system. The proper user interface, user's manual, online help and the guide to use and maintain the system must be sufficient to educate the users on how to use the system without any problems.

### **CONSTRAINTS**

- The information of all the users must be stored in a database that is accessible by the Online System.
- The Online Dictionary System is connected and is running all 24 hours a day.
- The users access the Online System from any computer that has Internet browsing capabilities and an Internet connection.
- The users must have their correct usernames and passwords to enter into the Online Dictionary System.

### **ASSUMPTIONS AND DEPENDENCY:**

- The users have sufficient knowledge of computers.
- The users know the English language, as the user interface will be provided in English
- The product can access the university student database

## **4.2.2 Reliability**

The system has to be very reliable due to the importance of data and the damages incorrect or incomplete data can do.

### **4.2.2.1 Availability**

The system is available 100% for the user and is used 24 hrs. a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

### **4.2.2.2 Mean Time Between Failures (MTBF)**

The system will be developed in such a way that it **may** fail once in a year.

### **4.2.2.3 Mean Time to Repair (MTTR)**

Even if the system fails, the system will be recovered back up within an hour or less.

### **4.2.2.4 Accuracy**

The accuracy of the system is limited by the accuracy of the speed at which the employees and users use the system.

### **4.2.2.5 Maximum Bugs or Defect Rate**

Not specified.

### **4.2.2.6 Access Reliability**

The system shall provide 100% access reliability.

## **4.3 Performance**

### **4.3.1 Response Time**

The Splash Page or Information page should be able to be downloaded within a minute using a 56K modem. The information is refreshed every two minutes. The system shall respond to the member in not less than two seconds from the time of the request submittal. The system shall be allowed to take more time when doing large processing jobs.

#### **4.3.2 Administrator**

The system shall take as less time as possible to provide service to the administrator .

#### **4.3.3 Throughput**

The number of transactions is directly dependent on the number of users; the users may be the guest who are not registered and also those who are logged on to the system account and checking online account.

#### **4.3.4 Capacity**

The system is capable of handling 250 users at a time.

#### **4.3.5 Resource Utilization**

The resources are modified according the user requirements and also the requests by the users.

### **4.4 Supportability**

The system designers shall take in to considerations the following supportability and technical limitations.

#### **4.4.1 Internet Protocols**

The system shall be comply with the TCP/IP protocol standards and shall be designed accordingly.

#### **4.4.2 Maintenance**

The maintenance of the system shall be done as per the maintenance contract.

#### **4.4.3 Standards**

The coding standards and naming conventions will be as per the American standards.

### **4.5 Design Constraints**

#### **4.5.1 Software Language Used**

The languages that shall be used for coding the Online Dictionary System are PHP, Java Servlets, Java Server Pages (JSP), HTML, JavaScript, and MySQL . For working on the coding phase of the Online Library System, the Apache Server needs to be installed.

#### **4.5.2 Development Tools**

We will make use of the available Java Development Tool kits for working with Java Beans and Java Server Pages. Also, we will make use of the online references available for developing programs in PHP, HTML and the scripting language, JavaScript.

#### **4.5.3 Class Libraries**

We will make use of the existing Java libraries available for JSP and Servlets. Also we need to develop some new libraries for the web-based application. Also will develop new programs using PHP and scripting languages.

### **4.6 On-line User Documentation and Help System Requirements**

Online help is provided for each of the feature available with the Online Dictionary System. All the applications provide an on-line help system to assist the user. The nature of these systems is unique to application development as they combine aspects of programming (hyperlinks, etc) with aspects of technical writing (organization, presentation). Online help is provided for each and every feature provided by the system.

The User Manual describes the use of the system to the user. The user manual should be available as a hard copy and also as online help.

An installation document will be provided that includes the installation instructions and configuration guidelines, which is important to a full solution offering. Also, a Read Me file is typically included as a standard component. The Read Me includes a “What’s New With This Release” section, and a discussion of compatibility issues with earlier releases. Most users also appreciate documentation defining any known bugs and workarounds in the Read Me file.

## 4.7 INTERFACES

### 4.7.1 USER INTERFACES

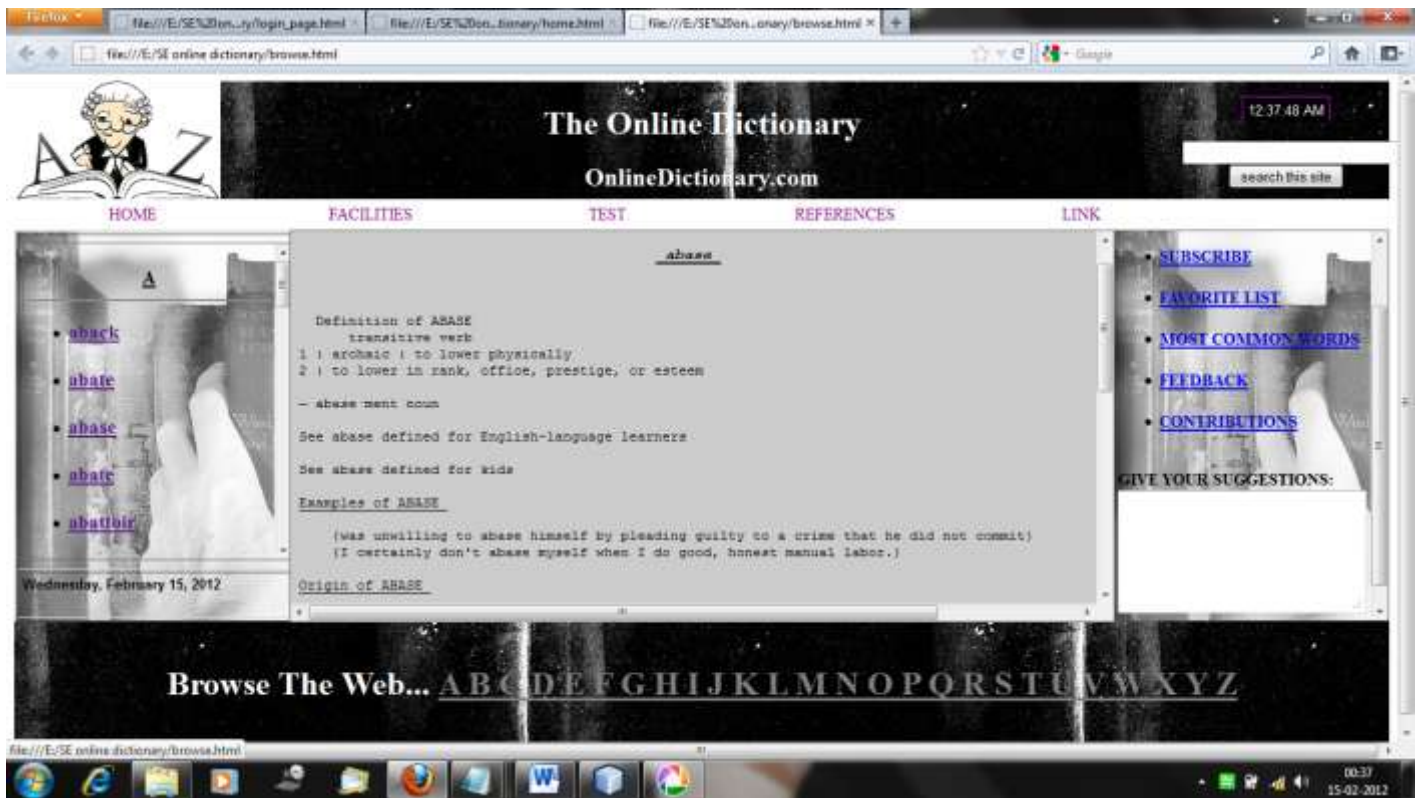


Fig: the page which is visible for browsing words alphabetically.



Fig: word builder start screen

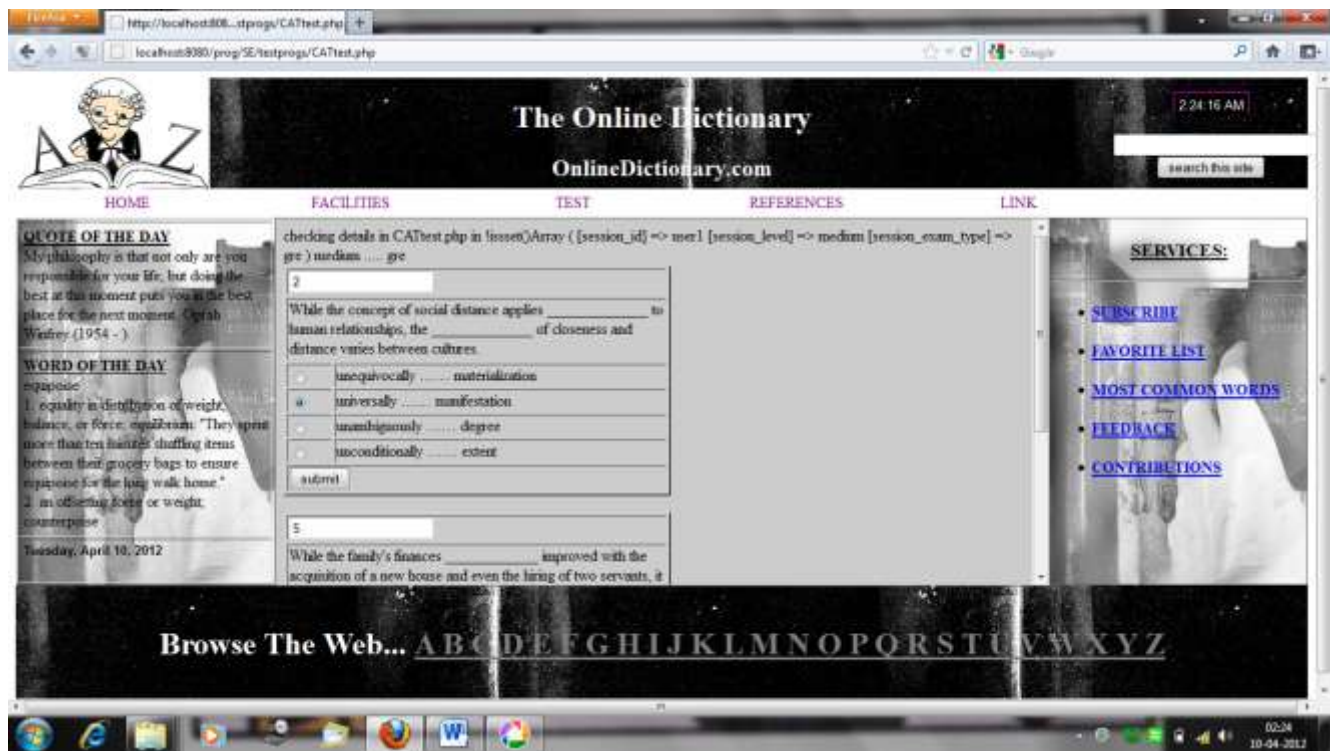


Fig: after selecting the difficulty the questions.



Fig: the question when answered wrong





Fig: the question when answered right



fig: the home page , with login section, word of the day, quote of the day, search box etc.

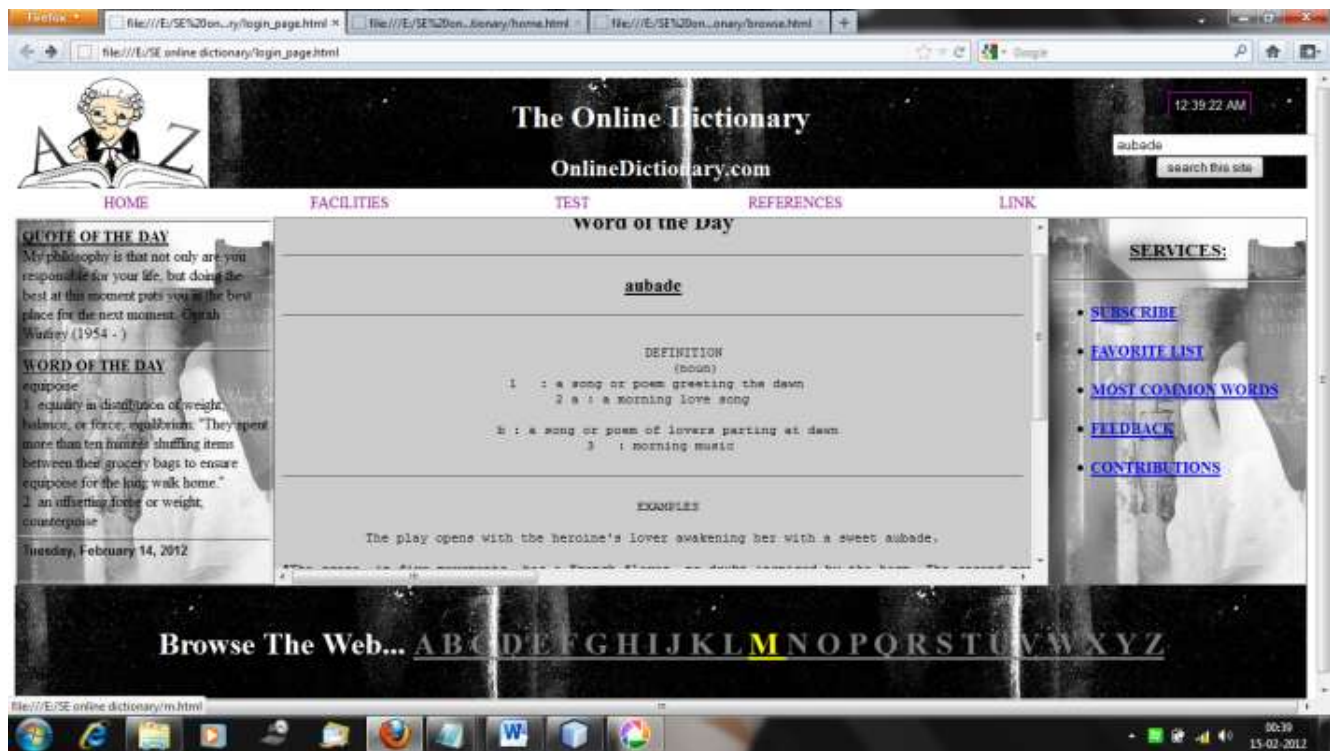


Fig: the feedback and other services



fig: the personalized page , after login to show the various services provided like feedback, subscription etc.

#### 4.7.2 Hardware Interfaces

The existing Local Area Network (LAN) will be used for collecting data from the users and also for updating the system.

i. Software Interfaces

A firewall will be used with the server to prevent unauthorized access to the system.

ii. Communications Interfaces

The Online System will be connected to the World Wide Web.

b. Licensing Requirements

The usage is not restricted to anyone. It is a free service.

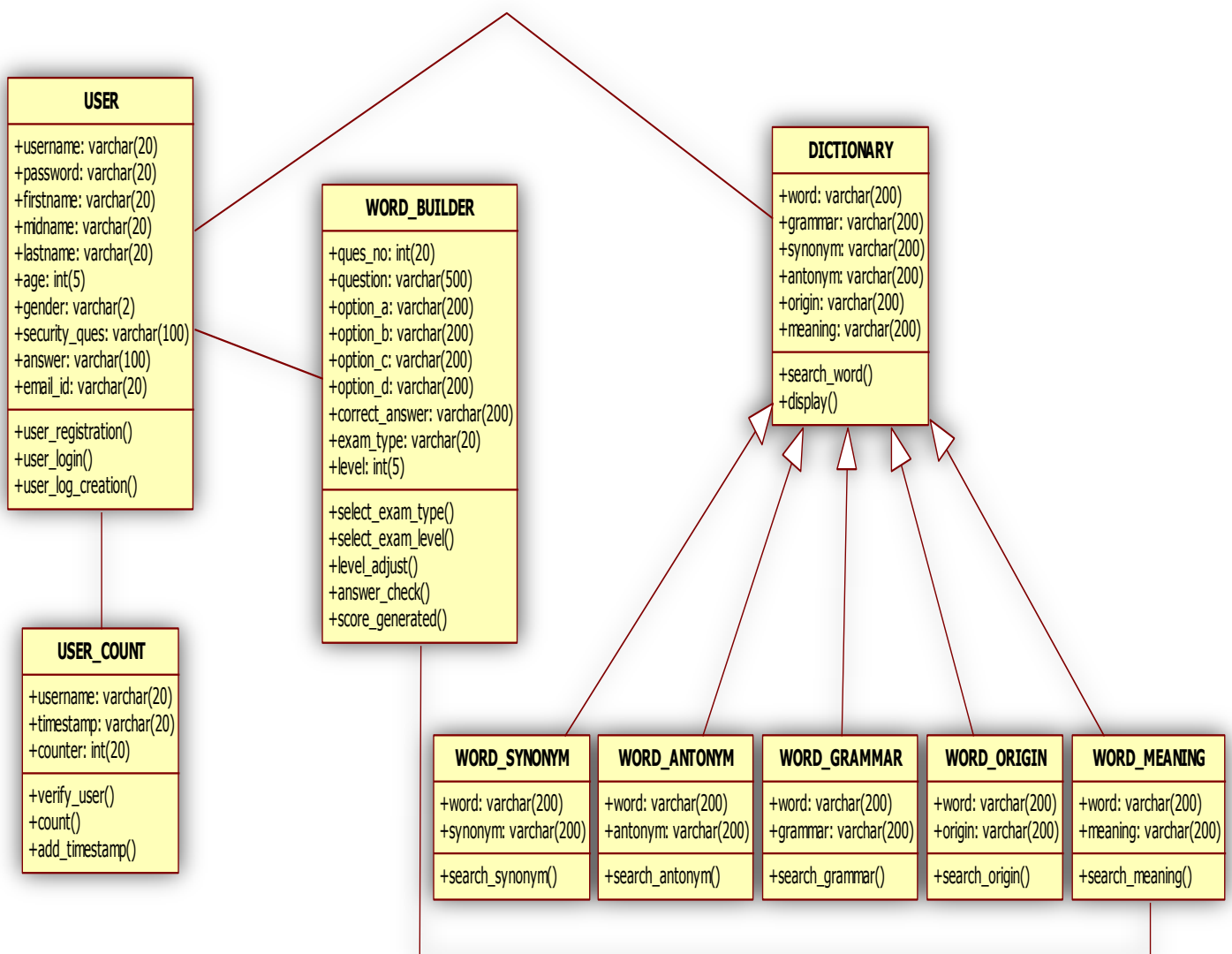
c. Legal, Copyright, and Other Notices

Online dictionary System is a trademark of aditi and shubham, and cannot be used without their consent.

d. Applicable Standards

The ISO/IEC 6592 guidelines for the documentation of computer based application systems will be followed.

## 5. CLASS DIAGRAM



## **USER**

*Name:* user

*Type:* database

*Description:* This is the database used to store the information about the users of the system, example: the username, password and the session details, so that when the user logs on again , a personalized experience could be managed for him.

*Attributes:* username, password, first name, middle name, last name, age, gender, security question, answer, email-id.

*Operations:*

User\_registration()

User\_login()

User\_log\_creation()

*Arguments:* None

*Pre-condition:* the user is either a registered one, or if new to the site, should register .

*Post-condition:* session starts only on login and verification.

*Exceptions:* None

*Flow of Events:*

1. user registration, if new to the site.
2. login using username and password
3. password verification

## **USER\_COUNT**

*Name:* user\_count

*Type:* database

*Description:* This is the database used for log creation, so that errors and unauthenticated entry could be tracked.

The timestamp and counter values are used to show how many times the user has logged on to the system.

*Attributes:* username, timestamp, counter

*Operations:*

Verify\_user()

Count()

Add\_timestamp()

*Arguments:* None

*Pre-condition:* the registered user has to login.

*Post-condition:* session starts only on login and verification.

*Exceptions:* None

*Flow of Events:*

1. user registration, if new to the site.
2. login using username and password
3. password verification
4. the timestamp and the user count will be displayed.

## **WORD BUILDER**

*Name:* word\_builder

*Type:* application module

*Description:* this is the application in which the user can choose his exam type, his start difficulty



level and solve

questions , pertaining to vocabulary based exams. His next question level is based on the previous answer's

correctness. Based on computer adaptive tests.

*Attributes:* ques\_no, question, option\_a, option\_b, option\_c, option\_d, correct\_answer, exam\_type, level

*Operations:*

Select \_exam\_type()

Select \_exam\_level()

Level\_adjust()

Answer\_check()

Score\_generated()

*Arguments:* exam\_type, level

*Pre-condition:* the user is either a registered one, or if new to the site, should register .

*Post-condition:* session starts only on login and verification.

*Exceptions:* None

*Flow of Events:*

1. user registration, if new to the site.
2. login using username and password
3. password verification
4. choose level of exam and exam type
5. the questions are presented in the order of difficulty
6. if the answer is right, move up a level, else move down a level

## **DICTIONARY**

*Name:* dictionary

*Type:* database and associated web pages generated on user request

*Description:* there is a database of all the words in the dictionary and the information related to it, the user

request of a particular word would generate the web page with the meaning a, grammar, usage, synonyms and the antonyms.

*Attributes:* word, grammar, synonyms, antonyms, origin, meaning

*Operations:*

Search\_word()

Display()

*Arguments:* word

*Pre-condition:* the requested word should be a valid one.

*Post-condition:* on input of a particular word, the page info would be displayed.

*Exceptions:* None

*Flow of Events:*

1. word entry
2. search word database
3. show results

## 6. DATASTRUCTURE DESIGN:

DATAFIELD TYPE AND SIZES:

<b>ATTRIBUTE NAME</b>	<b>ATTRIBUTE TYPE</b>	<b>SIZE</b>
Word	Varchar	200
Meaning	Varchar	200
Antonym	Varchar	200
Synonym	Varchar	200
Grammar	Varchar	200
Origin	Varchar	200
Ques_no	Int	20
Question	Varchar	500
Option_a	Varchar	200
Option_b	Varchar	200
Option_c	Varchar	200
Option_d	Varchar	200
Correct_answer	Varchar	200
Exam_type	Varchar	20
Level	Varchar	5
Username	Varchar	20
Password	Varchar	20
Name	Varchar	20
Age	Varchar	5
Gender	Varchar	2
Security_ques	Varchar	100
Email_id	Varchar	20

## 7. USE CASE DIAGRAM

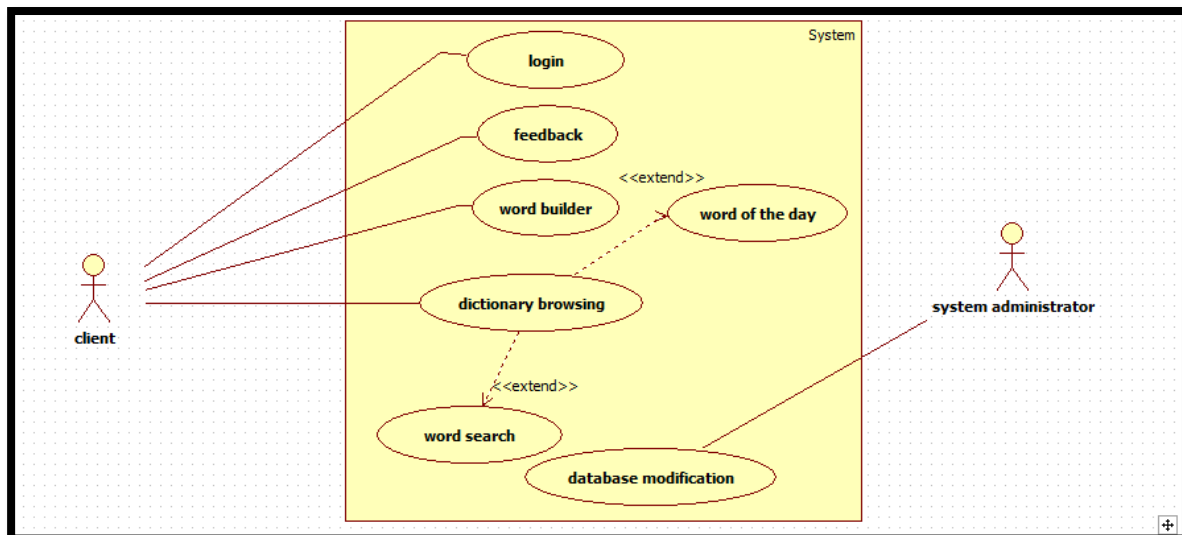
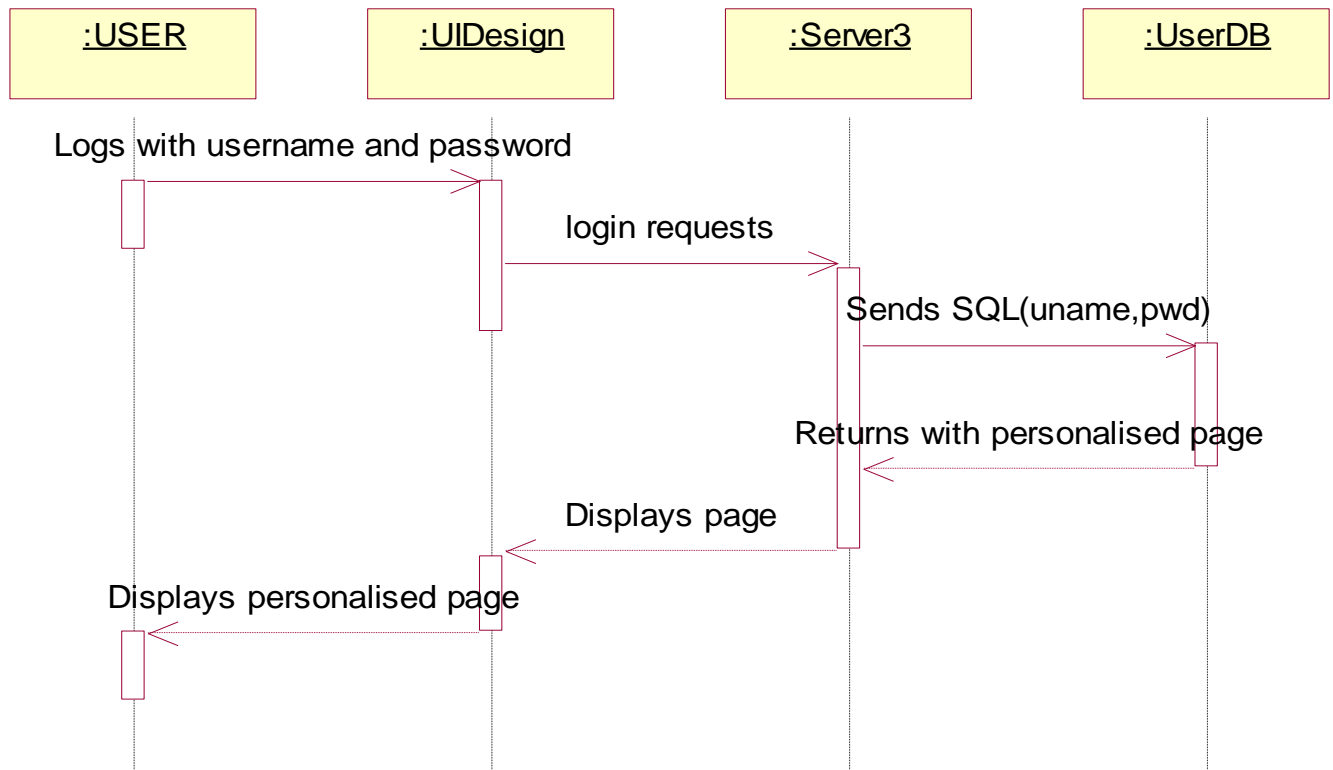


Fig 2. THE USE CASE DIAGRAM FOR THE ONLINE DICTIONARY SYSTEM:

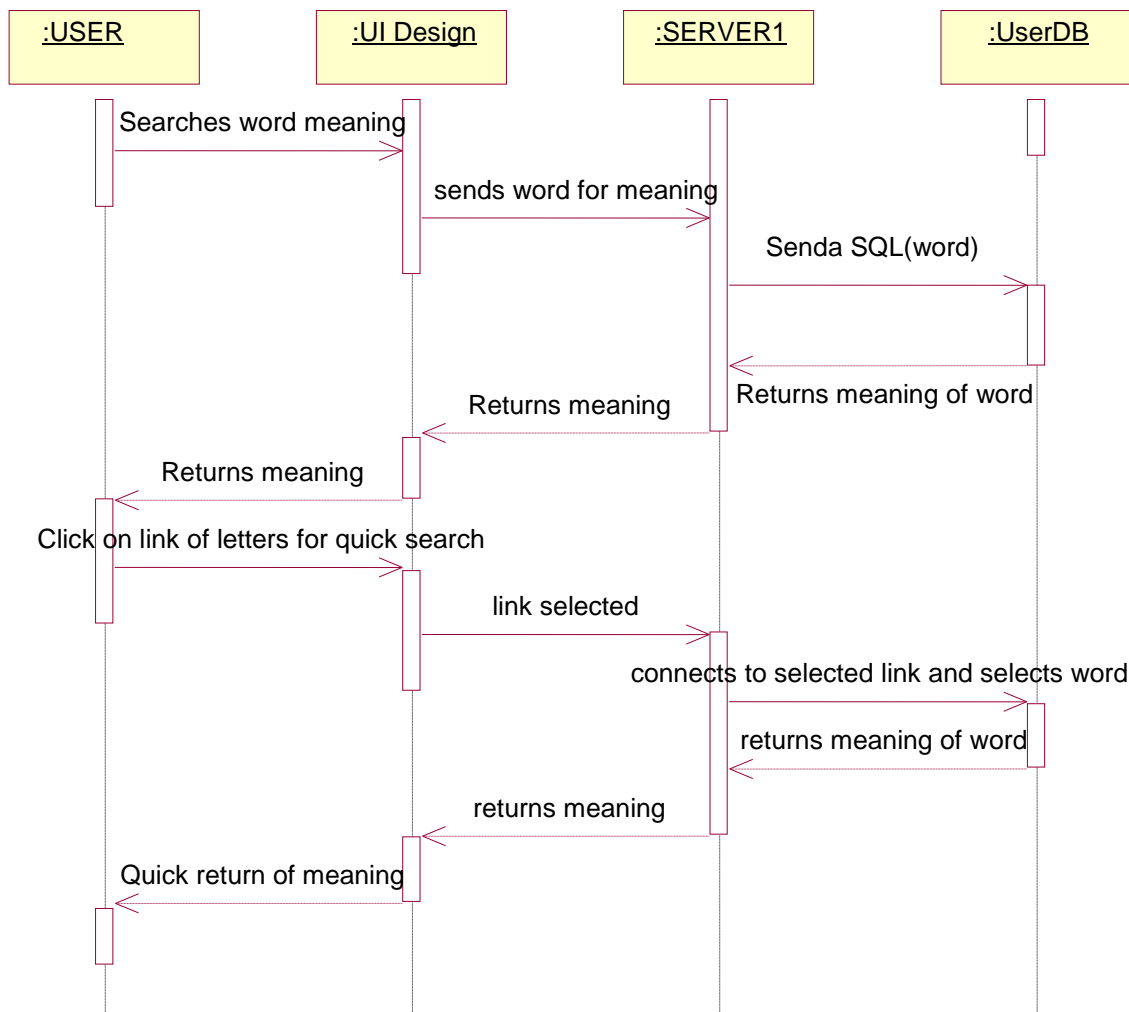
## 8. SEQUENCE DIAGRAM

### 8.1 Use-case : Login



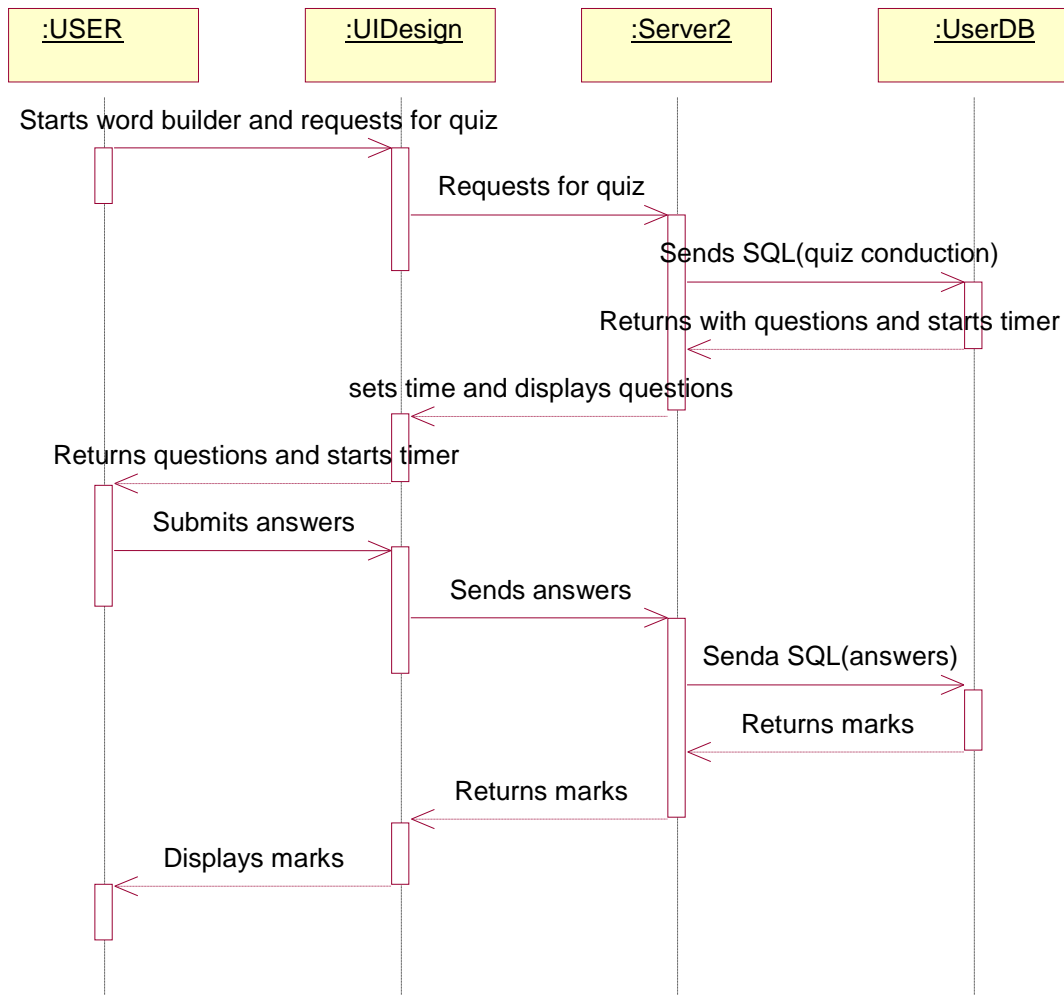
**Figure 3**  
User login sequence diagram

## 8.2 Use-case : Thesaurus



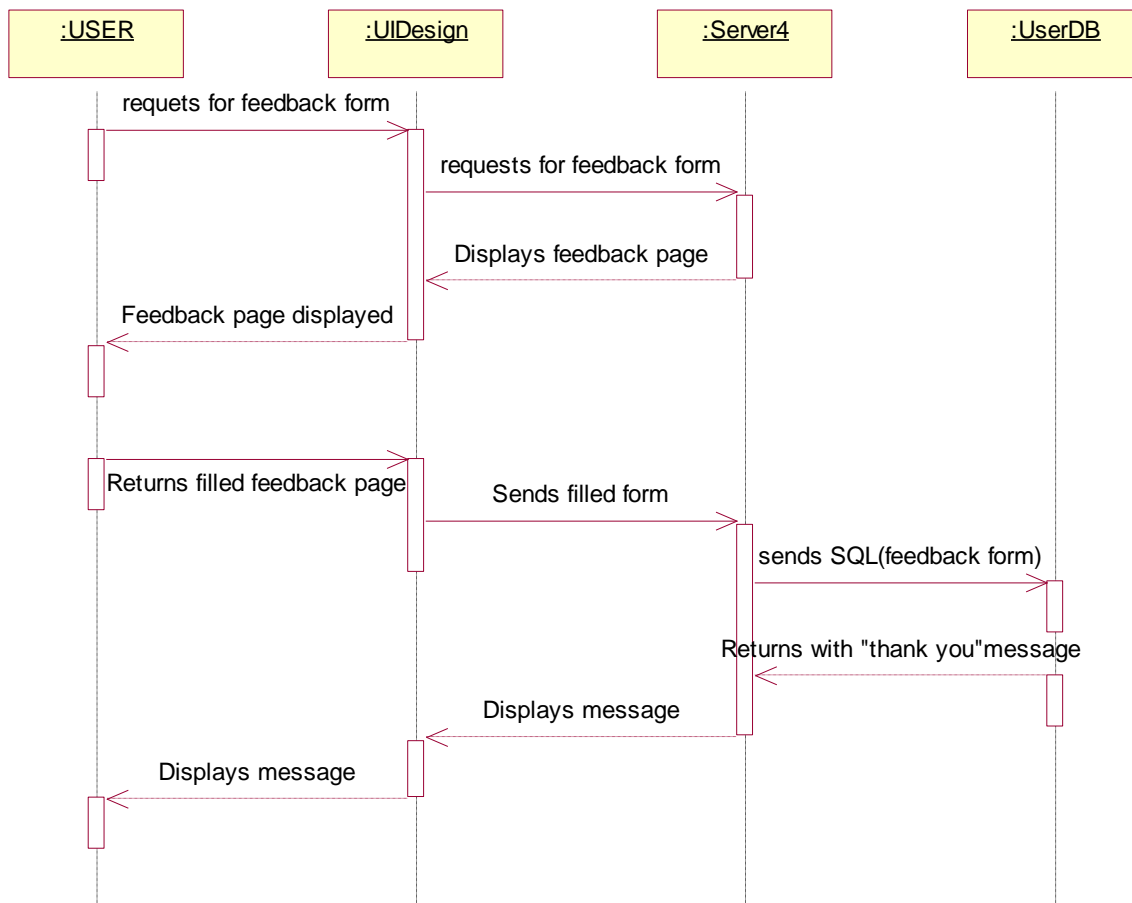
**Figure 4**  
Thesaurus Sequence diagram

### 8.3 Use-case : Word builder



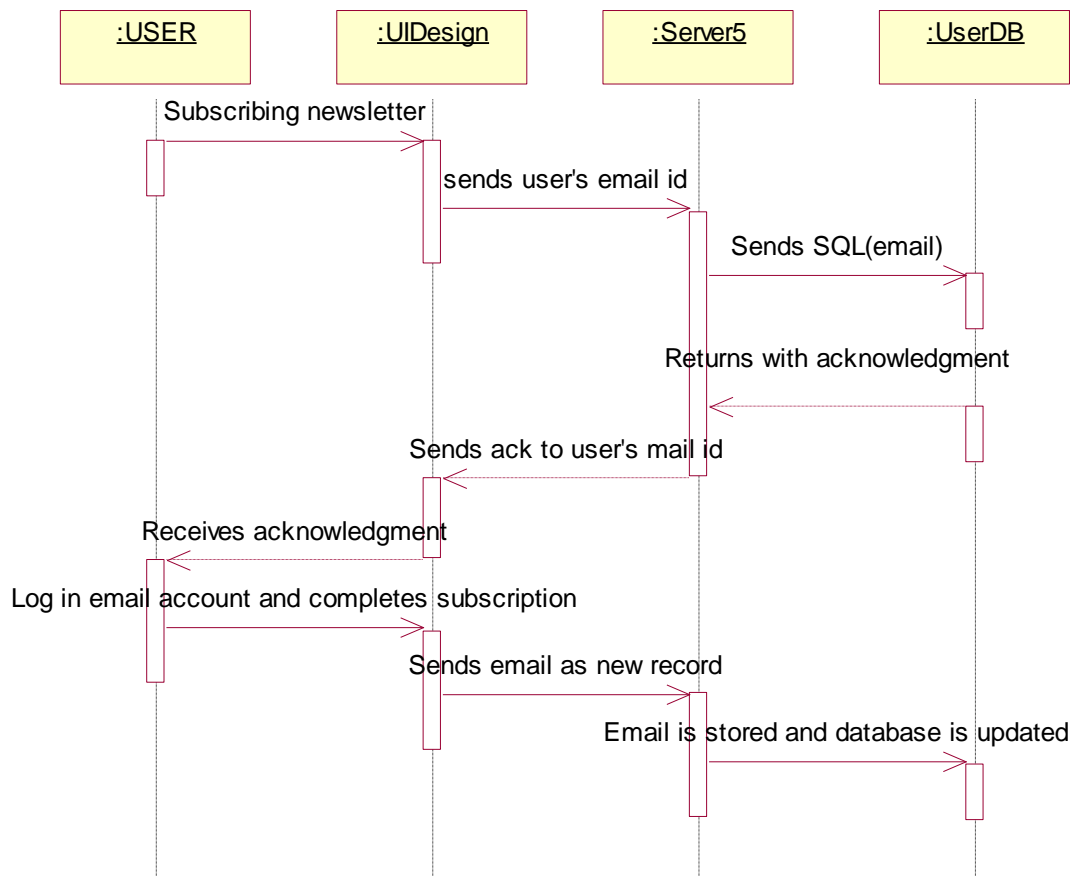
**Figure 5**  
Word builder Sequence diagram

#### 8.4 Use-case : Newsletter subscription



**Figure 6**  
Newsletter subscription Sequence diagram

## 8.5 Use-case : Feedback Form

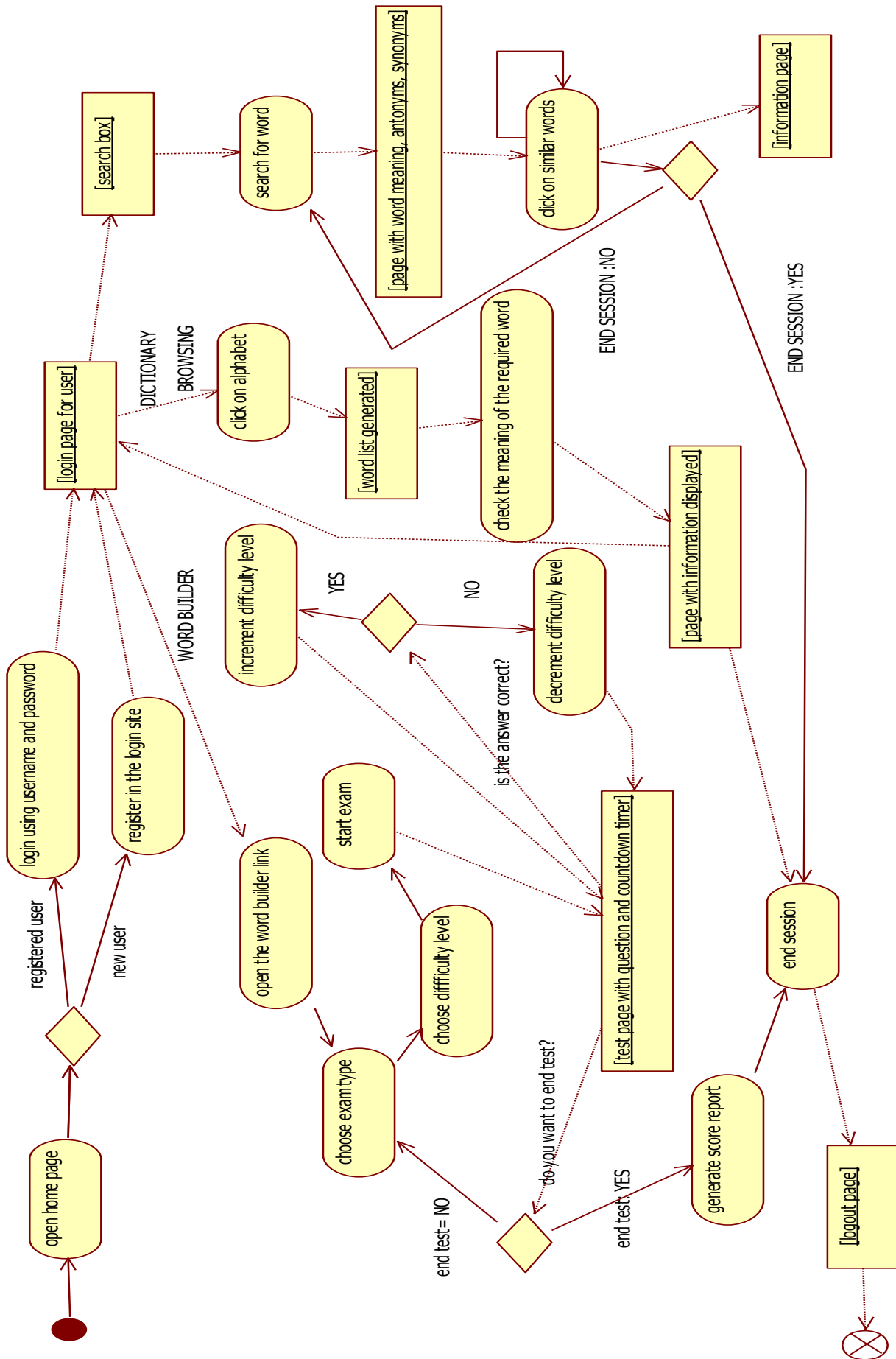


**Figure 7**  
Feedback form Sequence diagram

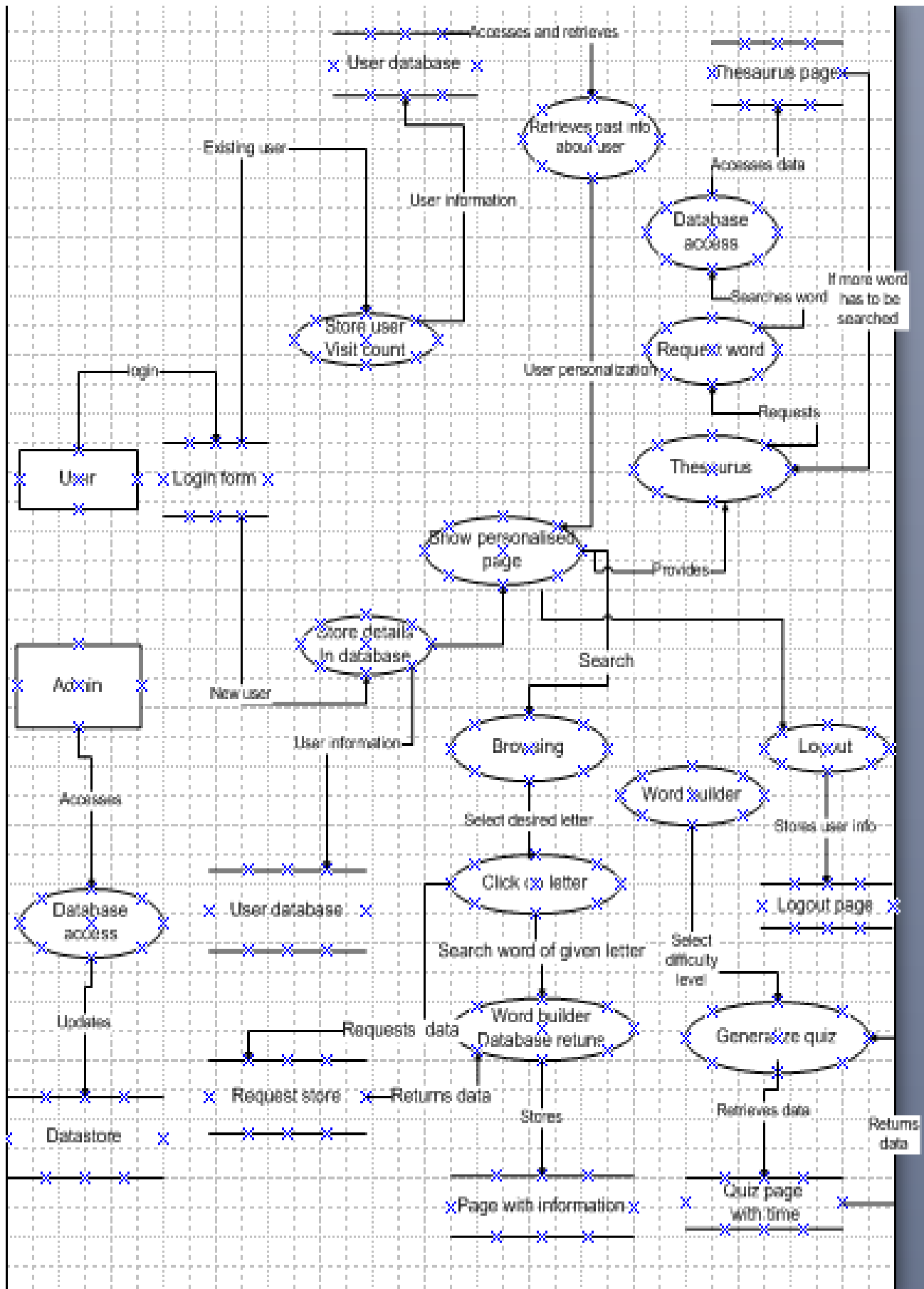




## 9. ACTIVITY DIAGRAM



## 10. DATAFLOW DIAGRAM



## 11. Test Summary

The Online Dictionary System was tested and passed the test. There were no major issues noticed during this testing. Detailed test cases have been reported in the next subtopic.

### 11.1 Detailed Test Cases

#### (i) Test Case for Login

**Precondition-** the home page should open on the users browser.

**Procedure-** Enter username, password.

**Post condition-** Click on submit button.

case #	Test Data	Expected Output	Actual Output	Comments
1.	Username=abcd,password=123456	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
2.	Username=abcd,password=1	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
3.	Username=abcd,password=""	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
4.	Username=Mary, password=123456	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
5.	Username=aditi, password=aditi	Enter into system	Enter into system	<b>Passed</b>
6.	Username=Robert, password=""	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
7.	Username="",password=123456	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
8.	Username="",password=1	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>
9.	Username="",password=""	Unsuccessful login message	Unsuccessful login message	<b>Passed</b>

#### (ii) Test Case for Registering Users

**Precondition-** Admin should be on Add User Screen

**Procedure-** Enter the user details.

**Postcondition-** Click on add ,reset or exit button.

case #	Test Data	Expected Output	Actual Output	Comments
1.	First name=shubham, last name=mathur,dob=24-jun-1991,qual=btech,email= <a href="mailto:shubham.cs.e@vit.ac.in">shubham.cs.e@vit.ac.in</a> , phno="" ,button=add	Error message-phone number field can't be empty	Error message-phone number field can't be empty	<b>Passed</b>
2.	First name=1234,last name=mathur,dob=24-jun-1991,qual=btech,email= <a href="mailto:shubham.cs.e@vit.ac.in">shubham.cs.e@vit.ac.in</a> , phno=9934567896,button=add	Error message-first name should be alphabetic	Error message-first name should be alphabetic	<b>Passed</b>
3.	First name=shubham ,last name=1234,dob=24-jun-	Error message-last name should be	Error message-last name should be	<b>Passed</b>

	1991,qual=btech,email= <a href="mailto:shubham.cse@vit.ac.in">shubham.cse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=add	alphabetic	alphabetic	
4.	First name=shubham ,last name=mathur,dob=24-06-1991,qual=btech,email= <a href="mailto:shubham.cse@vit.ac.in">shubham.cse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=add	Error message-date should be in format 12-jun-1991	Error message-date should be in format 12-jun-1991	<b>Passed</b>
5.	First name=shubham ,last name=mathur,dob=24-jun-1991,qual=1234,email= <a href="mailto:shubham.cse@vit.ac.in">shubham.cse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=add	Error message-qual should be alphabetic	Error message-qual should be alphabetic	<b>Passed</b>
6.	First name=shubham,last name=mathur,dob=24-jun-1991,qual=btech, email= <a href="mailto:shubham@cse@vit.ac.in">shubham@cse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=add	Error message-invalid email	Error message-invalid email	<b>Passed</b>
7.	First name=shubham,last name=mathur,dob=24-jun-1991,qual=btech, email= <a href="mailto:shubhamcse@vit.ac.in">shubhamcse@vit.ac.in</a> , <a href="#">phno=9934567875</a> ,button=add	Error message-phone number should be ten digit long.	Error message-phone number should be ten digit long.	<b>Passed</b>
8.	First name=shubham,last name=mathur,dob=24-jun-1991,qual=btech, email= <a href="mailto:shubhamcse@vit.ac.in">shubhamcse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=reset	Form fields reset.	Form fields reset.	<b>Passed</b>
9.	First name=shubham,last name=mathur,dob=24-jun-1991,qual=btech, email= <a href="mailto:shubhamcse@vit.ac.in">shubhamcse@vit.ac.in</a> , <a href="#">phno=9934567896</a> ,button=exit	Back to main menu	Back to main menu	<b>Passed</b>

### (iii) Test Case For Browsing

**Precondition-**Admin should be on thesaurus page.

**Procedure-**Enter the word.

**Post condition-**Click on find, edit or exit button.

Test case #	Test Data	Expected Output	Actual Output	Comments
1.	Word="",button="find"	Error message-"all words in the dictionary"	Error message-" all words in dictionary"	<b>Passed</b>
2.	Word="rely",button="find"	Meaning displayed.	Meaning displayed.	<b>Passed</b>
3.	Word="relyy",button="find"	Error message-blank screen	Error message-blank screen.	<b>Passed</b>
4.	Word="rely",button="find"	Error message-blank screen	Error message—blank screen	<b>Passed</b>

#### (iv)Test Case For Thesaurus

**Precondition-**Admin should be on word builder employee page.

**Procedure-**Enter the word.

**Postcondition-**Click on find,or exit button.

Test Data	Expected Output	Actual Output	Comments
Word="savvy",button=find	Error message--blank	Error message--"blank"	Passed
Word="savvy",button="find"	Antonym, synonyms are displayed.	Antonym, synonyms are displayed.	Passed
Word="savvy",button="find"	Error message--blank.	Error message--blank.	Passed

#### (v)Test Case For Quiz Generation

**Precondition-**Admin should be on quiz generation page.

**Procedure-**Enter the answer for given questions or skip and go to another question.

**Postcondition-**Click on next ,previous, submit, end quiz or skip buttons.

Test Data	Expected Output	Actual Output	Comments
Question="",button="submit"	Answers are submitted	Answers are submitted	Passed
Question="",button="next"	Next question is displayed	Next question is displayed.	Passed
Question="",button="previous"	Previous question is displayed.	Previous question is displayed.	Passed
Question="",button="skip"	Question is skipped	Question is skipped	Passed
Question="",button="end quiz"	Quiz gets ended.	Quiz gets ended.	Passed

#### (vi)Test Case For Viewing Personalized Page

**Precondition-**User should be on the corresponding page.

**Procedure-**Enter the user id.

**Postcondition-**Click on view or exit button.

Test Data	Expected Output	Actual Output	Comments
User id="smathur",button=view	Error message--"employee does not exist"	Error message--"employee does not exist"	Passed
User id="smathur",button=exit	Back to main menu.	Back to main menu.	Passed
User id="smathur", button=view	Details displayed.	Details displayed.	Passed
User id="smathur",button=exit	Back to main menu.	Back to main menu.	Passed