# Development of a feature-rich, Web Rating System

# WEBRATER

# Submitted by

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# B. Tech

in

# **Computer Science & Engineering**

# Narula Institute of Technology



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**SIGNATURE:** 

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### 1. Abstract

This project aims to develop a website for the evaluation of other commercial (and non-commercial) websites. It will help the users determine the popularity of the websites registered on this site and help them take a decision of whether to trust these websites.

### 2. Introduction and Objectives of the Project

The project builds a website for the evaluation of other websites. These websites are validated by specialized people and then submitted to our website, where users can submit their reviews. These reviews are then analysed by an algorithm and given a rating. Thus the public opinions about these websites help others to take appropriate decisions.

### 3. Project Category

Web Application

# 4. <u>Tools/Platform, Hardware and Software Requirement specifications</u>

#### Tools

Dreamweaver CC 2017

#### **Platform**

Microsoft Windows 7/8/10

# **Hardware Requirement Specification**

CLIENT MACHINE		SERVER MACHINE	
HDD	200 MB	HDD	320 GB
PROCESSOR	Pentium 4 or newer processor supporting SSE2	PROCESSOR	Dual Core or newer processor
MEMORY	512 MB	MEMORY	2 GB

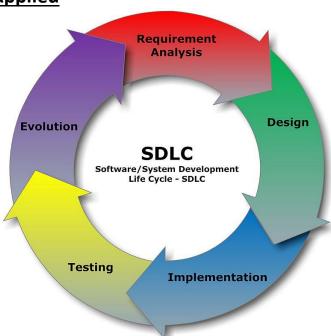
# **Software Requirement Specification**

CLIENT MACHINE		SERVER MACHINE		
Browser	Any Standard browser with JavaScript interpreter	Software	Apache	
Client-side mark- up/scripting languages	HTML, JavaScript	Database Management Software	MySQL, Python	
		Specification	MySQL-4.1, Python 3.6 (with PyMySQL and TextBlob package)	

# 5. Goals of Implementation

The implementation aims at identifying the genuineness of a various websites based on user comments by Sentiment Analysis.

# 6. SDLC Process Applied



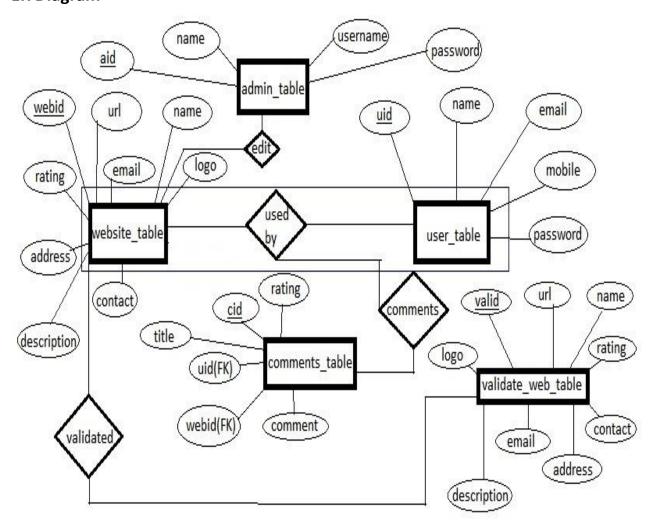
Often a customer defines a set of general objectives for software but does not identify detailed input, processing, or output requirements. In other cases the developer might be unsure of the efficiency of an algorithm, the adaptibility of an operating system, or the form that human/machine interaction should take. In these, and many other situations, a prototyping paradigm may offer the best approach.

The prototyping paradigm begins with **requirements gathering**. Developer and customer meet and define the overall objectives for the software, identify whatever requirements are known, and outline areas where further definition is mandatory. A "**quick design**" then occurs. The quick design focuses on a representation of those aspects of the software that will be visible to the customer/user (eg. Input approaches and output formats). The quick design leads to the construction of a prototype. The prototype is evaluated by the customer/user and used to refine requirements for the software to be developed. Iteration occurs as the protoype is tuned to satisfy the needs of the customer, while at the same time enabling the developer to better understand what needs to be done.

Ideally, the prototype serves as a mechanism for identifying software requirements. If a working prototype is built, the developer attempts to use existing program fragments or applies tools(eg. Report generators, window managers) that enable working programs to be generated quickly.

### 7. Data Model

### **ER Diagram**

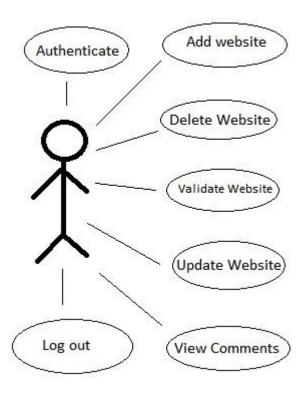


# 8. Functional Requirements

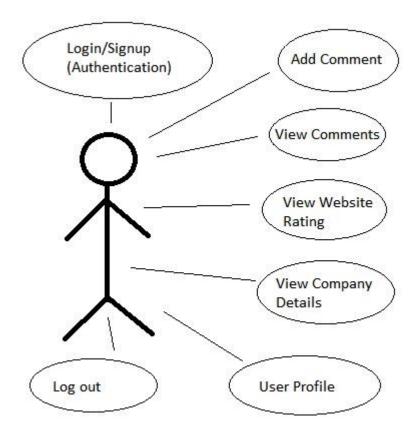
Functional Requirements are those that refer to the functionality of the system, i.e., what services it will provide to the user. Non functional (supplementary) requirements pertain to other information needed to produce the correct system and are detailed separately.

### **Use Case Diagram**

#### **Admin**



User



### **Use Case Descriptions**

### 9. Non-Functional Requirements

In addition to the obvious features and functions that you will provide in your system, there are other requirements that don't actually DO anything, but are important characteristics nevertheless. These are called "non-functional requirements" or sometimes "Quality Attributes." For example, attributes such as performance, security, usability, compatibility aren't a "feature" of the system, but are a required characteristic. You can't write a specific line of code to implement them; rather they are "emergent" properties that arise from the entire solution. The specification needs to describe any such attributes the customer requires. You must decide the kind of requirements that apply to your project and include those that are appropriate. Each requirement is simply stated in English. Each requirement must be objective and quantifiable; there must be some measurable way to assess whether the requirement has been met. Often deciding on quality attributes requires making trade-offs, e.g., between performance and maintainability. In the APPENDIX you must include an engineering analysis of any significant decisions regarding trade-offs between competing attributes.

Here are some examples of non-functional requirements:

### **Performance requirements**

Requirements about resources required, response time, transaction rates, throughput, benchmark specifications or anything else having to do with performance. For better performance the application will restrict the document size to 5 MB.

### **Operating Constraints**

List any run-time constraint. This could include system resources, people, needed software. The application must run without any manual intervention.

#### **Platform Constraints**

Discuss the target platform. Be as specific or general as the user requires. If the users don't care, there are still platform constraints.

Since the application will be developed in PHP it is platform independent.

### **Accuracy and Precision**

Requirements about the accuracy and precision of the data.

#### Modifiability

Requirements about the effort required to make changes in the software. Often, the measurement is personnel effort (person-months).

### **Minimal Portability**

The effort required to move the software to a different target platform. The measurement is most commonly person-months or % of modules that need changing.

#### **Minimal Reliability**

Requirements about how often the software fails. The measurement is often expressed in MTBF (mean time between failures). The definition of a failure must be clear. Also, don't confuse reliability with availability which is quite a different kind of requirement. Be sure to specify the consequences of software

failure, how to protect from failure, a strategy for error detection, and a strategy for correction.

### Security

One or more requirements about protection of your system and its data. The measurement can be expressed in a variety of ways (effort, skill level, time, ...) to break into the system. Do not discuss solutions (e.g. passwords) in a requirements document. Only secured users can access the application. No one can go to any independent page without logging in.

### **Usability**

Requirements about how difficult it will be to learn and operate the system. The requirements are often expressed in learning time or similar metrics.

### Legal

There may be legal issues involving privacy of information, intellectual property rights, export of restricted technologies, etc.

## 10. Feasibility Study

- Product: A general statement of the product; give a brief description of what the proposed system will do, highlighting where the proposed system meets the specified business requirements of the organization.
- Technical Feasibility: Will the proposed system perform to the required specification? Outline technical systems options you propose to use, which will give a technical solution satisfying the requirements and constraints of the system, as outlined in the terms of reference.
- Social Feasibility: Consideration of whether the proposed system would prove acceptable to the people who would be affected by its introduction. Describe the effect on users from the introduction of the new system; consider whether there will be a need for retraining the workforce. Will there be a need for relocation of some of the workforce? Will some jobs become deskilled? Will the current workforce be able to perform effectively any new tasks introduced by the proposed system?

Describe how you propose to ensure user co-operation before changes are introduced.

- Economic Feasibility: Consider the cost/benefits of the proposed system.
   Detail the costs that will be incurred by the organization adopting the
   new system; consider development costs and running costs. Detail
   benefits that the new system will bring, direct economic benefits such as
   reduced costs, and indirect benefits, such as improved management
   information and better customer service. Illustrate the cost/benefit of
   the new system by applying a suitable cost/benefit analysis method such
   as the payback method.
- Market Research: A comprehensive market research identifying a need for the product. Detail all market research you carried out, listing sources of information. Justify any conclusions you have drawn from your research. Identify the potential customer base for your product, together with evidence of customer need for the product. Describe how you propose to compete with similar products on the market.
- Alternative Solution: Consideration of alternative solutions should be documented. At least two alternative business or technical systems options should be considered. Detail the differences between these options and the proposed system. Justify your choice of the proposed system and the reasons for rejecting the alternative options.

# 11. Project Planning

- Activities
- Milestones
- Deliverables

A plan must be drawn up to guide the development towards the project goal. A plan is drawn up at the start of a project. This plan should be used as the driver for the project. The initial plan is not static, and must be modified as the project progresses.

Planning is required for development activities from specification through to delivery of the system.

# 12. Project Scheduling

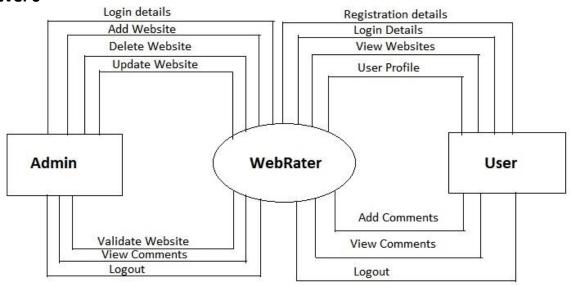
#### **GANTT Chart**

Task	Person(s)	Week 1	Week 2	Week 3	Week 4
	Responsible				
Requirement	Suryai Majumder				
analysis	Saptarshi Ghosh				
Design	Akash Kumar Gupta				
	Md Aamir Khan				
	Raka Mitra				
Implementation	Aditi Chattopadhyay				
	Mayuraksha Sikdar				
	Indrashis Chatterjee				
Testing	Sayak Suvra Samanta				
_	Arpita Bhattacharjee				
	Sourav Bhowmick				
Deployment	Ritwika Banerjee				
	Srimanta Roy Chowdhury				
	Bhargav Ranjan				
Maintenance	Mayuraksha Sikdar				
	Saptarshi Ghosh				

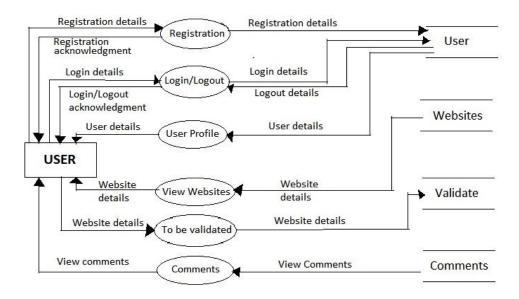
# 13. Software Engineering Paradigm applied

# **Data Flow Diagrams**

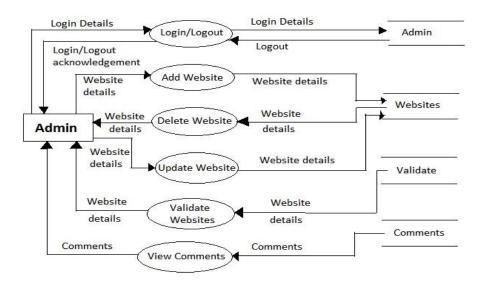
#### Level 0



# '1' Level Diagram for User



# '1' Level Diagram for Admin



# 14. Schema/Database Design

#### **Admin Table**

Name of Attributes	Data type	Key
aid	int(20)	Primary
name	varchar(60)	
username	varchar(60)	
password	varchar(60)	

# **Comments Table**

Name of Attributes	Data Type	Key
cid	int(10)	Primary
rating	decimal(4,2)	
webid	int(10)	Foreign(Website table)
uid	int(10)	Foreign(User table)
title	varchar(155)	
comment	varchar(255)	

### **User Table**

Name of Attributes	Data Type	Key
uid	int(30)	Primary
name	varchar(60)	
email	varchar(60)	
mobile	int(10)	
password	varchar(60)	

# **Validate Web Table**

Name of Attribute	Data type	Key
valid	int(30)	Primary
url	varchar(100)	
name	varchar(100)	
description	varchar(100)	
logo	text	
contact	int(11)	

email	varchar(50)	
address	varchar(50)	
rating	tinyint(4)	

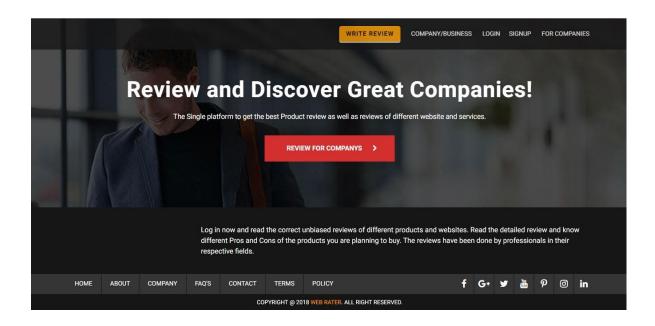
# **Website Table**

Name of Attribute	Data type	Key
webid	int(30)	Primary
url	varchar(100)	
name	varchar(100)	
description	varchar(100)	
logo	text	
contact	int(11)	
email	varchar(50)	
address	varchar(50)	
rating	tinyint(4)	

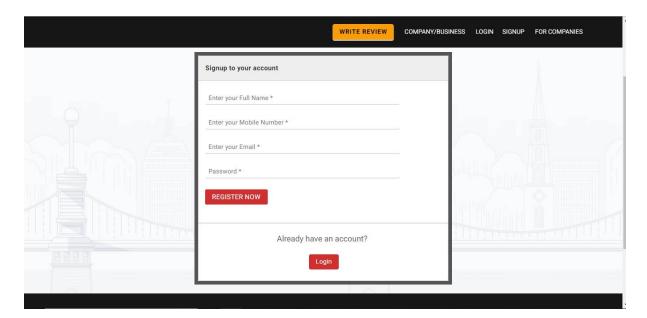
# 15. <u>User Interface Design</u>

# User

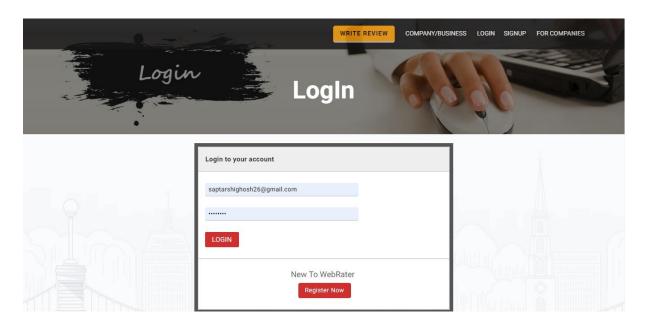
Home Page



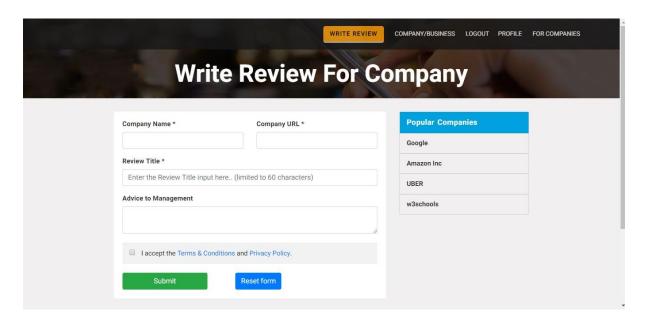
### **New User Registration**



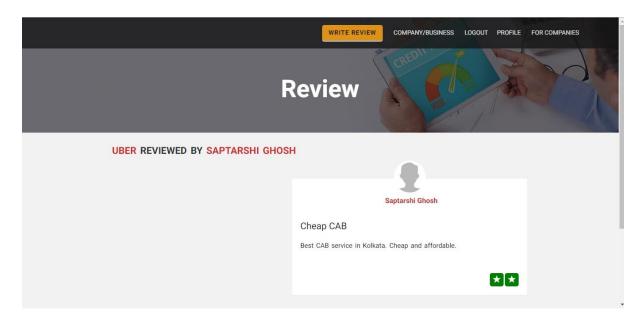
#### Log In



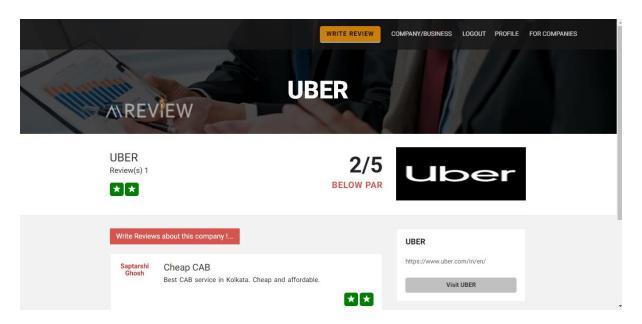
### **Write New Review**



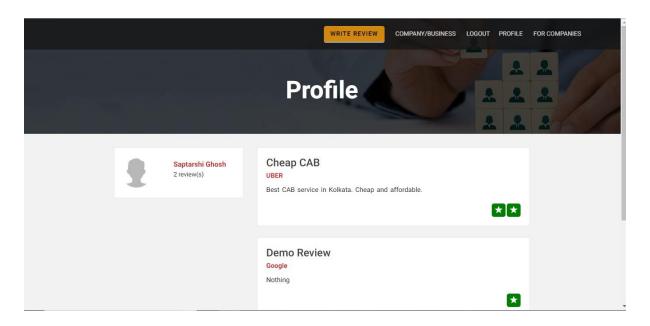
# **Reviews displayed individually**



# Company Page reviews section



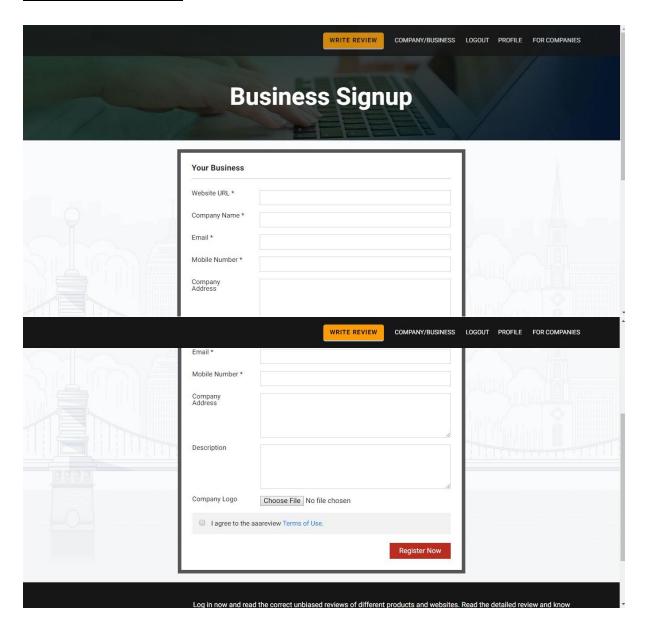
# **User Profile**



# **Recent Reviews**

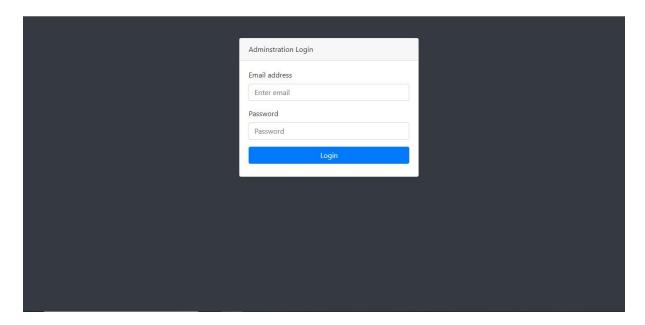


# New Business Signup

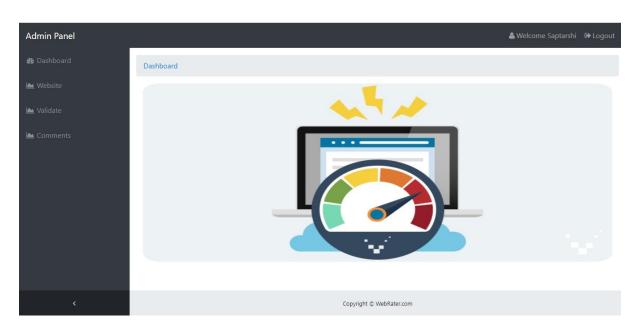


# Admin

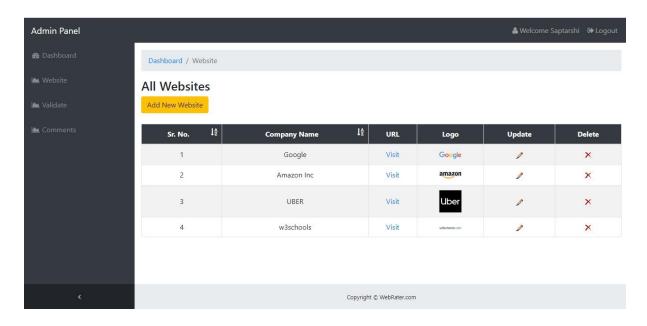
# <u>Login</u>



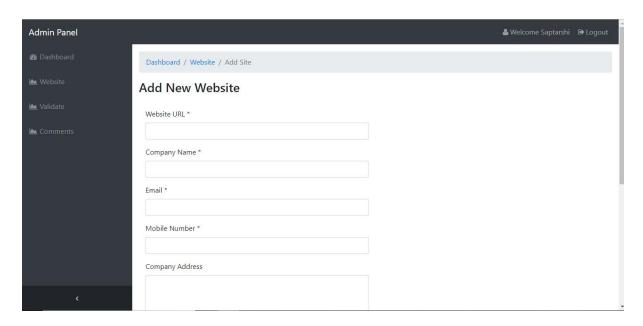
# <u>Dashboard</u>

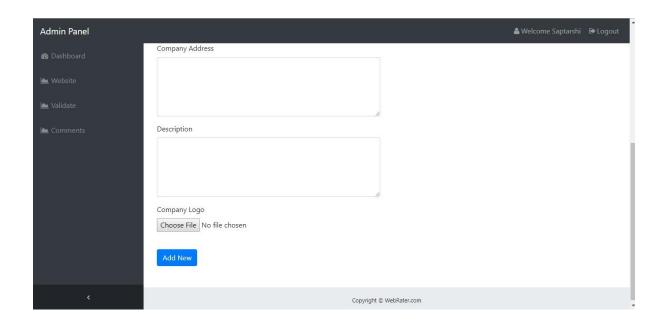


### Websites

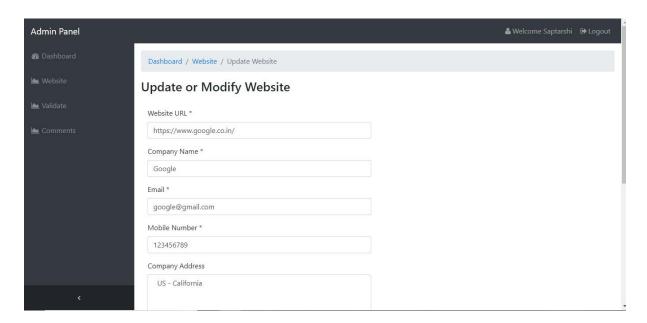


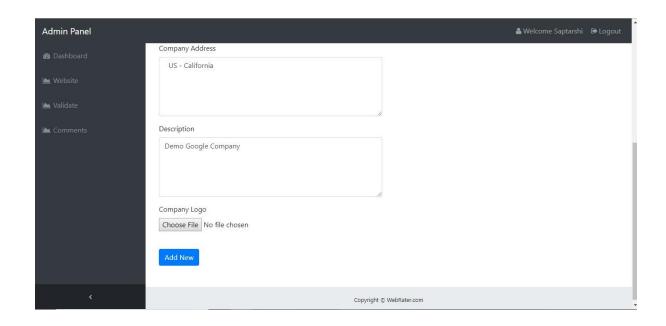
# **Add Websites**



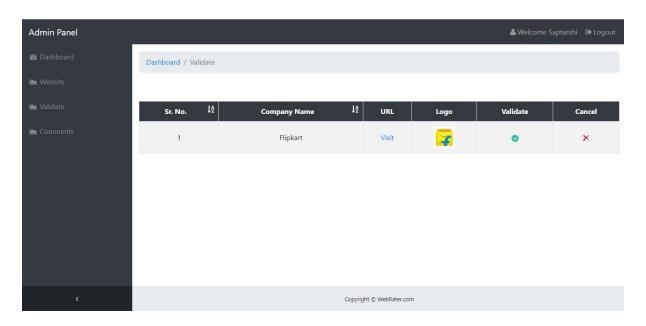


# **Update Websites**





### **Validate Websites**



# Comments

Admin Panel				≛v	Velcome Saptarsl	ni ເ∳Logout
<b>№</b> Dashboard	Dashboard /	Comments				
<b>l</b> Website						
<u>▶</u> Validate	Sr. No. 🍱	Comment(s)	User Name ↓Å	Company Name 🎉	Rating 🎼	Remove
La Comments	1	Best online E-commerce. Truly a modern day online market place for almost everything.	Mayuraksha Sikdar	Amazon Inc	2.00	×
	2	Best CAB service in Kolkata. Cheap and affordable.	Saptarshi Ghosh	UBER	1.75	×
	3	Best online learning platform for Web Developers. Interactive examples and suitable for college students.	Mayuraksha Sikdar	w3schools	1.50	×
	4	One of the leading companies in the world. Has a lot of services offered free of charge.	Mayuraksha Sikdar	Google	0.00	×
· ·			Copyright © WebRater.com			

## 16. Coding

### **User Panel – Writing Reviews/Comments**

<html lang="en"><head><meta http-equiv="content-type" content="text/html;charset=UTF-8">

new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0], j=d.createElement(s),dl=l!='dataLayer'?'&l='+l:'';j.async=true;j.src=

'../www.googletagmanager.com/gtm5445.html?id='+i+dl;f.parentNode.insertB efore(j,f);

})(window,document,'script','dataLayer','GTM-54BZHLF');</script>

<!-- Required meta tags -->

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no, user-scalable=no">

<meta name="google-site-verification"</pre>

content="C9cpydf3bpYpcSaYnLkR7k2x2QY-ImluJ2G65VCFcsc">

```
<title>Customer Review For Company and Products |
WebRater.com</title>
```

<meta content="Products Review company, marketing review, customer
review, write a review for company, write a review for products, best product
review sites, consumer review websites,best product reviews, get free stuff for
reviews,online product reviews" name="keywords">

```
<meta content="WebRater is community of professional products review,
Customer review for company and Digital marketing & Digital market
and share reviews on WebRater" name="description">
     <link rel="shortcut icon" href="images/Icon.png">
     <link rel="canonical" href="https%3b/www.WebRater.com/index.php">
     <link rel="alternate" href="https%3b/www.WebRater.com/index.php"</pre>
hreflang="x-default">
<!-- <li>k rel="shortcut icon" href="images/fav-icon.png"/>-->
           <link rel="stylesheet"</pre>
href="../stackpath.bootstrapcdn.com/bootstrap/4.1.0/css/bootstrap.min.css">
     <!-- font awesome-->
     k rel="stylesheet" href="css/font-awesome-4.7.0/css/font-
awesome.css">
     <!-- google font-->
     k href="https://fonts.googleapis.com/css?family=Roboto"
rel="stylesheet">
     k href="https://fonts.googleapis.com/css?family=PT+Sans"
rel="stylesheet">
     k href="https://fonts.googleapis.com/css?family=Andika"
rel="stylesheet">
     <!-- custom css-->
     <link rel="stylesheet" href="css/customreview.css">
  </head>
<body style="">
               <script src="../code.jquery.com/jquery-1.10.2.js"></script>
     <div style="display: none;">
        <script>
        (function() {
        var cx = '000713042199647530928:8rlrn-7vzco';
        var gcse = document.createElement('script');
        gcse.type = 'text/javascript';
        gcse.async = true;
```

```
gcse.src = '../cse.google.com/cse07b6.html?cx=' + cx;
   var s = document.getElementsByTagName('script')[0];
   s.parentNode.insertBefore(gcse, s);
   })();
   </script>
   <gcse:search></gcse:search>
  </div>
  <!-- Google Tag Manager (noscript) -->
  <noscript><iframe
src="https://www.googletagmanager.com/ns.html?id=GTM-54BZHLF"
  height="0" width="0"
style="display:none;visibility:hidden"></iframe></noscript>
  <!-- End Google Tag Manager (noscript) -->
  <!-- header-->
      <header>
      <div class="container">
            <div class="col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12">
             <div class="row">
                 <div class="col-xl-2 col-lg-2 col-md-2 col-sm-4 col-8">
                   <div class="logo">
                        <a href="index.php"><img src="images/logo1.png"
<!--
alt="logo1" height="42px"/></a>-->
                   </div><!-- logo-->
                 </div><!-- col-xl-2 col-lg-2 col-md-2 col-sm-4 col-8-->
                 <div class="col-xl-10 col-lg-10">
                   <div class="navigation-bar text-right" id="panel11">
                        ul>
                         <a class="w-review-nav-btn"
id="flip1"><span>WRITE REVIEW <i class="fa fa-chevron-circle-down" aria-
hidden="true"></i></span></a>
                             style="padding:0;">
```

```
999;"><a href="write-company-review.php">WRITE REVIEW FOR
COMPANY/BUSINESS</a>
                            <!-- <li><a
href="https://www.WebRater.com/write-product-review">WRITE REVIEW FOR
PRODUCT</a>-->
                           <a href="company-
review.php">COMPANY/BUSINESS</a>
                       <!-- <li><a
href="https://www.WebRater.com/product-review">PRODUCT</a>-->
                                      <a
href="logout.php">LOGOUT</a><a
href="profile.php">PROFILE</a>
     <a href="business-signup.php">FOR COMPANIES</a>
                      </div><!-- navigation-bar-->
                </div><!-- col-xl-10 col-lg-10-->
                <div class="col-md-10 col-sm-8 col-4 text-right">
                 <div class="mobile-menu" id="flip11">
                      <i class="fa fa-bars" aria-hidden="true"></i>
                 </div><!-- mobile-menu-->
                </div><!-- col-md-10 col-sm-8 col-4 text-right -->
            </div><!-- row-->
           </div><!-- col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12-->
      </div><!-- container-->
     </header> <!-- header-->
<!-- Header -->
           <div class="w-company-banner">
     <div class="w-company-banner-text">
       <h2>Write Review For Company</h2>
     </div>
     <!-- w-company-banner-text-->
    </div>
    <!-- w-company-banner-->
           <div class="modal fade" id="mobile-search-modal" tabindex="-1"</pre>
role="dialog" aria-labelledby="exampleModalLabel" aria-hidden="true">
            <div class="modal-dialog" role="document">
```

```
<div class="modal-content">
                   <div class="modal-header">
                        <h2>Search Companies Review Here !</h2>
                        <button type="button" class="close" data-
dismiss="modal" aria-label="Close">
                         <span aria-hidden="true">x</span>
                        </button>
                   </div><!-- modal-header-->
                   <div class="modal-body">
                        <form>
                         <div class="input-group mb-3">
                              <input type="text" class="form-control"
placeholder="Search" aria-label="Recipient's username" aria-
describedby="basic-addon2">
                         <div class="input-group-append">
                               <button class="input-group-text" id="basic-
addon2">Search</button>
                              </div><!-- input-group-append-->
                         </div><!-- input-group mb-3-->
                        </form>
                   </div><!-- modal-body-->
                  </div><!-- modal-content-->
             </div><!-- modal-dialog-->
            </div><!-- modal-->
            <div class="write-review-mid">
      <div class="inner-container">
        <div class="col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12">
         <div class="row float-center">
           <div class="col-xl-8 col-lg-8 col-md-8 col-sm-12 col-12">
            <div class="write-review-company">
            <!-- w-review-company-logo-->
              <div class="w-review-company-inner-sec">
               <div id="resp"></div>
                <form id="myForm" method="post">
<!--
                     <input type="hidden" name=" token"
value="05XlRipeVvraT4NEeJal0Bhxyuu2VY91WDbkufVF">-->
                  <div class="row">
                                                       <div class="col-xl-6">
```

```
<div
class="form-group" style="position:relative;">
      <label>Company Name *</label>
                                                                     <input
type="text" autocomplete="off" id="name" class="form-control" required="">
<div class="dropdown-menu" aria-labelledby="dropdownMenuButton"</pre>
style="visibility: visible;width:100%;">
</div>
                                                             </div>
                                                       </div>
                                                       <div class="col-xl-6">
                                                       <!-- form-group-->
                                                             <div
class="form-group">
      <label>Company URL *</label>
      <input type="url" id="url" name="website_domain" class="searchdata</pre>
form-control" required="">
                                                             </div>
                                                       </div>
                                                       </div>
                                                 <!-- form-group-->
                 <div class="form-group">
                   <label>Review Title *</label>
                   <input type="text" id="title" name="review title"
class="form-control" maxlength="60" placeholder="Enter the Review Title
input here.. (limited to 60 characters)" required="">
                   <span id="remainingC"></span>
                 </div>
                 <!-- form-group-->
                 <div class="form-group ">
                   <label>Advice to Management
                   <textarea id="comment" class="form-control"
name="management advice" maxlength="250"></textarea>
                         </div>
                 <!-- form-group-->
                 <div class="w-review-agree-sec">
                   <input type="checkbox" required="" id="check">
```

```
<span>I accept the <a href="terms-condition.html">Terms
& Conditions</a> and <a href="privacy-policy.html">Privacy
Policy</a>.</span>
                </div>
                <!-- w-review-agree-sec-->
                <div>
                     <i class="fa fa-edit" aria-hidden="true"></i>-->
<!--
                 <input type="submit" value="Submit" class="btn btn-
success col-4 float-left" id="submit">
                 <span style="cursor:</pre>
default">     
         
                 <input type="reset" class="btn btn-primary" value="Reset
form">
                </div><!-- logsign-button-sec-->
               </form>
             </div>
             <!-- w-review-company-inner-sec-->
           </div>
           <!-- write-review-company-->
          </div>
          <!-- col-xl-8 col-lg-8 col-md-8 col-sm-8 col-8-->
          <div class="col-xl-4 col-lg-4 col-md-4 col-sm-12 col-12">
           <div class="web-product-more-detail">
<!--
            <div class="w-review-for-product-link">
              <a href="write-product-review.html">Write Review For
Product</a>
            </div> <!-- w-review-for-product-link -->
             <div class="recent-review-side-sec">
              <h2>Popular Companies</h2>
              ul>
                                                      <
               <a href="company view.php?webid=2"
target="_blank">Google</a>
               <a href="company view.php?webid=3"
target="_blank">Amazon Inc</a>
```

```
<a href="company view.php?webid=4"
target=" blank">UBER</a>
              <a href="company view.php?webid=39"
target="_blank">w3schools</a>
              <!--
              <a href="company-overview/735104742-best-it-
company.html">Best it company</a>
              <a href="company-overview/248593519-good-experience-
with-aqusag-technologies-india.html">Good experience with aqusag
technologies india</a>
              <a href="company-overview/250240973-good-company-for-
fresher-%26-experienced.html">Good company for fresher & experienced</a>
              <a href="company-overview/1884076969-great-company---
love-it-here.html">Great company - love it here</a>
              <a href="company-overview/889810925-mix-experience-
with-velocity.html">Mix experience with velocity</a>
              <a href="company-overview/231148388-magic-software-
company-is-best-for-fresher.html">Magic software company is best for
fresher</a>
              <a href="company-overview/111013932-best-it-
company.html">Best it company</a>
```

```
<a href="company-overview/1333713090-very-good-
experience-with-e2logy.html">Very good experience with e2logy</a>
                <a href="company-overview/244542022-amazing-
environment.html">Amazing environment</a>
                -->
               </div><!-- recent-review-side-sec-->
             </div><!-- web-product-more-detail-->
           </div>
           <!-- col-xl-4 col-lg-4 col-md-4 col-sm-4 col-4-->
         </div>
         <!-- row-->
        </div>
        <!-- col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12-->
      </div>
      <!-- inner-container-->
    </div>
    <!-- write-review-mid-->
<!-- footer -->
  <!-- footer-->
      <footer>
       <div class="container">
            <div class="col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12">
             <div class="row">
                  <div class="col-xl-3 col-lg-3 col-md-3 col-sm-12 col-12">
                   <div class="footer-logo">
             <!--
                                     <a href="index.php"><img
src="images/logo1.png" alt="logo1"/></a>-->
                   </div><!-- footer-logo-->
                  </div><!-- col-xl-3 col-lg-3 col-md-3 col-sm-12 col-12-->
```

```
<div class="col-xl-9 col-lg-9 col-md-9 col-sm-12 col-12">
                  <div class="footer-text">
                       Log in now and read the correct unbiased reviews
of different products and websites. Read the detailed review and know
different Pros and Cons of the products you are planning to buy. The reviews
have been done by professionals in their respective fields.
                  </div><!-- footer-text-->
                 </div><!-- col-xl-9 col-lg-9 col-md-9 col-sm-12 col-12-->
            </div><!-- row-->
           </div><!-- col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12-->
      </div><!-- container-->
     </footer>
     <div class="footer-nav-social-sec">
      <div class="container">
           <div class="col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12">
            <div class="row">
                 <div class="col-xl-8 col-lg-8 col-md-7 col-sm-12 col-12">
                  <div class="footer-nav-sec">
                       ul>
                        <a
href="index.php">      Home</a>
                        <a href="about.html">About</a>
                        <a href="company-
review.php">Company</a>
                        <a href="fag.html">Fag's</a>
                        <a href="contact.php">Contact</a>
                        <a href="terms-condition.html">Terms</a>
                        <a href="privacy-policy.html">Policy</a>
                       </div><!-- footer-nav-sec-->
                 </div><!-- col-xl-8 col-lg-8 col-md-7 col-sm-12 col-12-->
                 <div class="col-xl-4 col-lg-4 col-md-5 col-sm-12 col-12</pre>
clearfix">
                  <div class="footer-social-sec pull-right">
                       <a href="#" target=" blank" class="footer-</li>
facebook"><i class="fa fa-facebook" aria-hidden="true"></i></a>
                        <a href="#" target=" blank" class="footer-</li>
google-plus"><i class="fa fa-google-plus" aria-hidden="true"></i></a>
```

```
<a href="#" target=" blank" class="footer-</a>
twitter"><i class="fa fa-twitter" aria-hidden="true"></i></a>
                          <a href="#" target=" blank" class="footer-</li>
youtube"><i class="fa fa-youtube" aria-hidden="true"></i></a>
                          <a href="#" target=" blank" class="footer-</li>
pintrest"><i class="fa fa-pinterest-p" aria-hidden="true"></i></i></a>
                          <a href="#" target=" blank" class="footer-</li>
instagram"><i class="fa fa-instagram" aria-hidden="true"></i></i>
                          <a href="#" target=" blank" class="footer-</li>
linkedin"><i class="fa fa-linkedin" aria-hidden="true"></i></a>
                         </div><!-- footer-social-sec-->
                  </div><!-- col-xl-4 col-lg-4 col-md-5 col-sm-12 col-12
clearfix-->
             </div><!-- row-->
            </div><!-- col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12-->
       </div><!-- container-->
      </div><!-- footer-nav-social-sec-->
      <div class="copyright-sec">
       <div class="container">
            <div class="col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12">
             Copyright @ 2018 <a</pre>
href="index.php">Web Rater</a>. All Right Reserved.
            </div><!-- col-xl-12 col-lg-12 col-md-12 col-sm-12 col-12-->
       </div><!-- container-->
      </div><!-- copyright-sec-->
            <!-- footer-->
            <!-- ¡Query first, then Popper.js, then Bootstrap JS -->
            <script src="../code.jquery.com/jquery-
3.3.1.slim.min.js"></script>
            <script
src="../cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.0/umd/popper.min.js"><
/script>
            <script
src="../stackpath.bootstrapcdn.com/bootstrap/4.1.0/js/bootstrap.min.js"></sc
ript>
            <script
src="../ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
            <script src="js1/custom.js"></script>
            <!-- Global site tag (gtag.js) - Google Analytics -->
```

```
<script async=""
src="https://www.googletagmanager.com/gtag/js?id=UA-116657181-
7"></script>
            <script>
             window.dataLayer = window.dataLayer | | [];
             function gtag(){dataLayer.push(arguments);}
             gtag('js', new Date());
             gtag('config', 'UA-116657181-7');
            </script>
<!--
<script>$(document).ready(function(){
      $("#search").on('keyup',function(){
            var searchText=$(this).val();
            if(searchText!="){
                  var _html=";
                  $.ajax({
                        url: 'write-company-review-code.php',
                        method: POST',
                        dataType:'json',
                        data:{'action':'get_data','searchText':searchText},
                        beforeSend:function(){
                              $(".ajax-data").html('Loading...');
                        },
                        success:function(response){
                              if(response.bool==true){
                                     response.allData;
      $.each(response.allData,function(index,value){
      html+=''+value.username+'';
      html+=''+value.email+'';
                                    $(".ajax-data").html(_html);
                              }else{
                                     $(".ajax-data").html('No data found!!');
                              }
                        }
```

```
});
             }else{
                   $(".ajax-data").html('Please enter something!!');
             }
      });
});
</script>-->
<script>
    $(document).ready(function() {
                   //var data = new FormData();
                   $('#myForm').submit(function(e){
                          if($('#url').val() != "" && $('#name').val() != "" &&
$('#title').val() != ""){
                                e.preventDefault();}
                   });
                   $('.dropdown-menu').on('click', 'a',function(){
                          $('.dropdown-menu').css("display", "none");
                          var url=$(this).attr("url");
                          var name=$(this).attr("name");
                          var webid=$(this).attr("webid");
                          $('#url').val(url);
                          $('#name').val(name);
                   });
                   $('#name').on('keyup', function(){
                          var cname = $('#name').val();
                          if(cname!="){
                                $.ajax({
                                       url: 'write-company-review-code.php',
                                       type: 'post',
                                       data: {
                                                    name: cname,
                                                    type: 'search',
                                              },
                                       success: function(resp){
                                              //console.log(resp);
                                              var data = JSON.parse(resp);
                                              $('.dropdown-menu').html('');
                                              $('.dropdown-
menu').css("display","block");
```

```
data.forEach(function(item){
                                                   $('.dropdown-
menu').append('<a class="dropdown-item suggestionItem"
webid="'+item.webid+" url="'+item.url+" name="'+item.name+"
href="#">'+item.name+'</a>');
                                             });
                                      }
                                });
                         }
                         else{
                                $('.dropdown-menu').html('');
                                $('.dropdown-menu').css("display","none");
                         }
                   });
      $('#submit').on('click', function(){
                         var url = $('#url').val();
                         var name = $('#name').val();
                         var title = $('#title').val();
                         var comment = $('#comment').val();
                         if (url != "" && name != "" && title != "" &&
$('#check').is(':checked')){
                          $.ajax({
                                url: 'write-company-review-code.php',
                                type: 'post',
                                data: {
                                             url: url,
                                             name: name,
                                             title: title,
                                             comment: comment
                                      },
                                success: function(resp){
                                       $('#myForm').hide();
                                       $('#resp').html(resp);
                                }
                         });}
                   });
    });
  </script></body></html>
```

#### **Admin Panel – Websites Page**

```
<html lang="en"><head>
 <meta charset="utf-8">
 <meta http-equiv="X-UA-Compatible" content="IE=edge">
 <meta name="viewport" content="width=device-width, initial-scale=1, shrink-</pre>
to-fit=no">
 <meta name="description" content="">
 <meta name="author" content="">
 <title>Website | WebRater.com</title>
 <!-- Bootstrap core CSS-->
 <link href="../vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
 <!-- Custom fonts for this template-->
 k href="../vendor/font-awesome/css/font-awesome.min.css"
rel="stylesheet" type="text/css">
 <!-- Custom styles for this template-->
 <link href="../css/sb-admin.css" rel="stylesheet">
</head>
<body class="fixed-nav sticky-footer bg-dark" id="page-top">
 <!-- Navigation-->
<link href="../../vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet"</pre>
type="text/css">
 <!-- Custom fonts for this template-->
 k href="../vendor/font-awesome/css/font-awesome.min.css"
rel="stylesheet" type="text/css">
 <!-- Custom styles for this template-->
 <link href="../css/sb-admin.css" rel="stylesheet">
 k href="http://netdna.bootstrapcdn.com/font-awesome/3.2.1/css/font-
awesome.css" rel="stylesheet">
 <link href="../vendor/bootstrap/js/bootstrap.min.js" type="text/javascript">
 <link href="../vendor/jquery/jquery.min.js" type="text/javascript">
<nav class="navbar navbar-expand-lg navbar-dark bg-dark fixed-top"
id="mainNav">
  <a class="navbar-brand" href="index.html">Admin Panel</a>
  <button class="navbar-toggler navbar-toggler-right" type="button" data-
toggle="collapse" data-target="#navbarResponsive" aria-
```

```
controls="navbarResponsive" aria-expanded="false" aria-label="Toggle
navigation">
  <span class="navbar-toggler-icon"></span>
 </button>
 <div class="collapse navbar-collapse" id="navbarResponsive">
  class="nav-item" data-toggle="tooltip" data-placement="right"
title="Dashboard">
    <a class="nav-link" href="index.php">
     <i class="fa fa-fw fa-dashboard"></i>
     <span class="nav-link-text">Dashboard</span>
    </a>
   title="Order">
    <a class="nav-link" href="website.php">
     <i class="fa fa-fw fa-area-chart"></i>
     <span class="nav-link-text">Website</span>
    </a>
   title="Category">
    <a class="nav-link" href="validate.php">
     <i class="fa fa-fw fa-area-chart"></i>
     <span class="nav-link-text">Validate</span>
    </a>
   class="nav-item" data-toggle="tooltip" data-placement="right"
title="Items">
    <a class="nav-link" href="comments.php">
     <i class="fa fa-fw fa-area-chart"></i>
     <span class="nav-link-text">Comments</span>
    </a>
   ul class="navbar-nav sidenav-toggler">
   cli class="nav-item">
    <a class="nav-link text-center" id="sidenavToggler">
     <i class="fa fa-fw fa-angle-left"></i>
```

```
</a>
   ul class="navbar-nav ml-auto">
                cli class="nav-item">
          <a href="index.php" class="nav-link text-center">
                 <i class="fa fa-fw fa-user"></i>Welcome Saptarshi</a>
     cli class="nav-item">
    <a href="log_out.php" class="nav-link text-center" name="user"><i
class="fa fa-fw fa-sign-out" id="logout"></i>Logout</a>
   </div>
</nav> <div class="content-wrapper">
 <div class="container-fluid">
  <!-- Breadcrumbs-->
  <a href="index.php">Dashboard</a>
   Website
  <div class="row">
   <div class="col-12">
    <h3>All Websites</h3>
    <a href="website add.php" class="btn btn-warning">Add New
Website</a>
    <br>
           <br>
      <table cellpadding="10" class="col-12 table-hover table-bordered text-
center table-striped" id="cat_table">
      <thead class="text-white bg-dark">
          Sr. No.<i class="fa float-right fa-sort-alpha-asc"
onclick="sortTable(0)" style="cursor: pointer"></i>
         Company Name<i class="fa float-right fa-sort-alpha-asc"
onclick="sortTable(1)" style="cursor: pointer"></i>
         URL
```

```
Logo
       Update
       Delete
      </thead>
     1
                         Google
                         <a
href="https://www.google.co.in/" target="_blank">Visit</a>
                         <tmg src="../../Company
Images/45084154googlelogo_color_272x92dp.png" width="50">
                         <a
href="website_update.php?id=2"><img src="../images/edit.png"></a>
                         <a
href="website_delete.php?id=2"><img src="../images/delete.png"></a>
       2
                         Amazon Inc
                         <a href="https://www.amazon.in/"
target="_blank">Visit</a>
                         <tmg src="../../Company
Images/30105005download.jpg" width="50">
                         <a
href="website_update.php?id=3"><img src="../images/edit.png"></a>
                         <a
href="website delete.php?id=3"><img src="../images/delete.png"></a>
       3
                         UBER
                         <a
href="https://www.uber.com/in/en/" target=" blank">Visit</a>
                         Company
Images/56739358download.png" width="50">
                         <a
href="website_update.php?id=4"><img src="../images/edit.png"></a>
```

```
<a
href="website_delete.php?id=4"><img src="../images/delete.png"></a>
         4
                                w3schools
                                <a
href="https://www.w3schools.com/" target=" blank">Visit</a>
                                <tmg src="../../Company
Images/12345678download(1).png" width="50">
                                <a
href="website_update.php?id=39"><img src="../images/edit.png"></a>
                                <a
href="website_delete.php?id=39"><img src="../images/delete.png"></a>
         </div>
  </div>
  </div>
  <!-- /.container-fluid-->
  <!-- /.content-wrapper-->
  <script>
          function sortTable(n) {
           var table, rows, switching, i, x, y, shouldSwitch, dir, switchcount =
0;
           table = document.getElementById("cat table");
           switching = true;
           // Set the sorting direction to ascending:
           dir = "asc";
           /* Make a loop that will continue until
           no switching has been done: */
           while (switching) {
                // Start by saying: no switching is done:
                switching = false;
                rows = table.rows;
                /* Loop through all table rows (except the
                first, which contains table headers): */
                for (i = 1; i < (rows.length - 1); i++) {
```

```
// Start by saying there should be no switching:
                    shouldSwitch = false;
                    /* Get the two elements you want to compare,
                    one from current row and one from the next: */
                    x = rows[i].getElementsByTagName("TD")[n];
                    y = rows[i + 1].getElementsByTagName("TD")[n];
                    /* Check if the two rows should switch place,
                    based on the direction, asc or desc: */
                    if (dir == "asc") {
                         if (x.innerHTML.toLowerCase() >
y.innerHTML.toLowerCase()) {
                          // If so, mark as a switch and break the loop:
                          shouldSwitch = true;
                          break;
                    } else if (dir == "desc") {
                         if (x.innerHTML.toLowerCase() <</pre>
y.innerHTML.toLowerCase()) {
                          // If so, mark as a switch and break the loop:
                          shouldSwitch = true;
                          break;
                    }
                   if (shouldSwitch) {
                    /* If a switch has been marked, make the switch
                    and mark that a switch has been done: */
                    rows[i].parentNode.insertBefore(rows[i + 1], rows[i]);
                    switching = true;
                    // Each time a switch is done, increase this count by 1:
                    switchcount ++;
                   } else {
                    /* If no switching has been done AND the direction is
"asc",
                    set the direction to "desc" and run the while loop again. */
                    if (switchcount == 0 && dir == "asc") {
                         dir = "desc";
                         switching = true;
                    }
                   }
```

```
}
      </script>
      <footer class="sticky-footer">
   <div class="container">
    <div class="text-center">
     <small>Copyright © WebRater.com</small>
    </div>
   </div>
  </footer>
  <!-- Scroll to Top Button-->
  <a class="scroll-to-top rounded" href="#page-top">
   <i class="fa fa-angle-up"></i>
  </a>
  <!-- Logout Modal-->
  <div class="modal fade" id="exampleModal" tabindex="-1" role="dialog"</pre>
aria-labelledby="exampleModalLabel" aria-hidden="true">
   <div class="modal-dialog" role="document">
    <div class="modal-content">
     <div class="modal-header">
      <h5 class="modal-title" id="exampleModalLabel">Ready to Leave?</h5>
      <button class="close" type="button" data-dismiss="modal" aria-
label="Close">
       <span aria-hidden="true">x</span>
      </button>
     </div>
     <div class="modal-body">Select "Logout" below if you are ready to end
your current session.</div>
     <div class="modal-footer">
      <button class="btn btn-secondary" type="button" data-
dismiss="modal">Cancel</button>
      <a class="btn btn-primary" href="login.html">Logout</a>
     </div>
    </div>
   </div>
  </div>
  <!-- Bootstrap core JavaScript-->
  <script src="../vendor/jquery/jquery.min.js"></script>
  <script src="../vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
```

```
<!-- Core plugin JavaScript-->
  <script src="../vendor/jquery-easing/jquery.easing.min.js"></script>
  <!-- Custom scripts for all pages-->
  <script src="../js/sb-admin.min.js"></script>
  </div>
  </body></html>
```

## 17. Testing

#### Level of interaction necessary:

- The Test team worked closely with the Development Team to achieve a high-quality design and user interface specifications based on customer requirements. The Test team visualized test cases and raised quality issues and concerns during meetings.
- The Test team and Development team worked closely to determine whether the application met standards for completeness. If an areas wasn't acceptable for testing, the code completed date was pushed out, giving the developers additional time to stabilize the area.
- Since the application interacts with a back-end system component, the Test team was needed to include a plan for integration testing. This was executed successfully prior to system testing.

### **Test Objective**

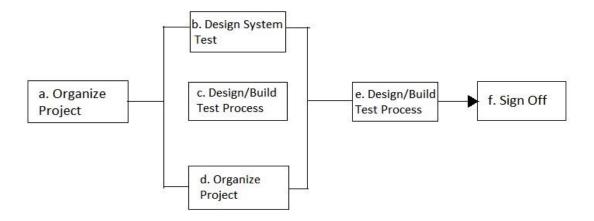
The objective of the test plan was to find and report as many bugs as possible to improve the integrity of the program. Although exhaustive testing was not possible, a broad range of tests were exercised to achieve the goal. A Binary Search Tree Application utilizing a pre-order traversal was tested. There were eight key functions used to manage the application: load, store, clear, search, insert, delete, list in ascending order, and list in descending order. The user interface to utilize these functions is designed to be user-friendly and provide easy manipulation of the tree. The application was only used as a demonstration tool, but it was ensured that it could be run from a variety of platforms with little impact on performance and utility.

#### **Process Overview**

The overall flow of the testing process:

- 1. Identification of requirements to be tested. All test cases derived using the current Program Specification.
- 2. Identifying which test(s) to be used in each module.
- 3. Reviewing the test data and test cases to ensure that the unit has been thoroughly verified and that the test data and test cases are adequate to verify proper operation of the unit.
- 4. Identifying the expected results for each test.
- 5. Documenting the test case configuration, test data, and expected results.
- 6. Performing the test(s).
- 7. Documenting the test data, test cases and test configuration used during the testing process. Information submitted via the Unit/System Test Report (STR).
- 8. Successful unit testing done before the unit is eligible for component integration/system testing.
- 9. Bug Report Form generated for unsuccessful testing. This document described the test case, the problem encountered, its possible cause, and the sequence of events leading to that problem. Used as a basis for later technical analysis.
- 10.Test documents and reports submission. Any specifications to be reviewed, revised, or updated handled immediately.

#### **Testing Process**



The diagram outlines the test process followed.

- **a. Organize Project** involves creating a System Test Plan, Schedule and Test Approach, and assigning responsibilities.
- b. Design/Build System Test involves identifying Test Cycles, Test Cases, Entrance and Exit Criteria, Expected Results, etc. In general, test conditions/expected results are identified by the Test Team in conjunction with the Development Team. The Test team then identifies Test Cases and the Data required. The Test conditions are derived from the Program Specifications Document.
- **c. Design/Build Test Procedures** includes setting up procedures such as Error Management systems and Status reporting.
- **d. Build Test Environment** includes requesting/building hardware, software and data setups.
- e. Execute System Tests The tests identified in the Design/Build Test Procedures are executed. All results are documented and Bug Report Forms are filled out and given to the Development Team as necessary.
- **f. Signoff** happens when all pre-defined exit criteria have been achieved.

# **Testing Strategy**

# Test Cases:

Tested By:	Sayak Suvra Samanta	
Test Type :	Unit Testing	
Test Case Number :	1	
Test Case Name :	User identification	
Test Case Description	Correct user id and password has to be entered to access further options. The test checks whether access is denied if incorrect user id and/or password is given.	
Item(s) to be tested		
1	Verification of user id and password with the record in the database.	
Specifications		
Input	Expected Output/Result	
Correct user id and password	Successful login	
Incorrect user id and/or password	Failure Message	

Tested By :	Sourav Bhowmick	
Test Type :	Unit Testing	
Test Case Number :	2	
Test Case Name :	New Website/Company sign-up	
Test Case Description	While adding a new Website or Company, this test checks whether all the required are fields filled correctly.	
Item(s) to be tested		
1	Check whether all the fields are correctly filled	
Specifications		
Input	Expected Output/Result	
Correct information given in the specific fields	Successful sign-up/registration	
Incorrect user id and/or password	Failure Message	

Tested By:	Arpita	
Test Type :	Unit Testing	
Test Case Number :	3	
Test Case Name :	User sign-up	
Test Case Description	The user must add details for successful registration. The test checks whether an error message is given if all the mandatory fields are not filled.	
Item(s) to be tested		
1	Check whether all the mandatory fields are filled up.	
Specifications		
Input	Expected Output/Result	
Submission with mandatory fields filled.	Successful registration	
Submission without all mandatory fields filled.	Error Message	

Tested By :	Saptarshi Ghosh	
Test Type :	Unit Testing	
Test Case Number :	4	
Test Case Name :	Comments	
Test Case Description	User searches for the website to comment on.	
	This test verifies whether the website that is	
	being commented on is registered on	
	WebRater.	
Item(s) to be tested		
1	Verification of website name with the record	
	in the database	
Specifications		
Input	Expected Output/Result	
Registered Website	User can move to comments section	
Website not registered	Error Message	

# **Unit Testing**

Unit Testing done at the source or code level for language-specific programming errors such as bad syntax, logic errors, or to test particular functions or code modules. The unit tests are designed to test the validity of the program's correctness.

#### **White Box Testing**

In white box testing, the UI is bypassed. Inputs and outputs are tested directly at the code level and the results are compared against specifications. This form of testing ignores the function of the program under test and will focus only on its code and the structure of that code. Test case designers generate cases that not only cause each condition to take on all possible values at least once, but that cause each such condition to be executed at least once. To ensure this happens, we applied Branch Testing. Because the functionality of the program is relatively simple, this method was feasible to apply. Each function of the binary tree repository was executed independently; therefore, a program flow for each function has been derived from the code.

#### **Black Box Testing**

Black box testing involved running through every possible input to verify that it results in the right outputs using the software as an end-user would. We have performed Equivalence Partitioning and Boundary Value Analysis testing on our application.

#### **System Testing**

The goals of system testing were to detect faults that can only be exposed by testing the entire integrated system or some major part of it. Generally, system testing is mainly concerned with areas such as performance, security, validation, load/stress, and configuration sensitivity. But in our case, we focused only on function validation and performance. And in both cases, we used the black-box method of testing.

# 18. <u>System Security Measures (Implementation of security for the project developed)</u>

 Only authorized users are allowed. Without signing in users are not allowed to go to an intermediate page by typing an URL. For all such efforts, users will be redirected to the home page. • Website details can be modified by an admin only. Addition or Updating of websites cannot be done by users.

# 19. Database/Data Security

- Database is present in remote machine.
- PHP's default securities are applied.

## 20. Creation of User Profiles and Access Rights

- The users can create their own profiles
- The admin cannot create more admins

# 21. Future Scope and Further Enhancement of the Project

- More accurate Sentiment Analysis
- Reply section for particular comment
- New Admin creation using validation of all other admins
- Anonymous comment (without Login)
- More options for User Profile

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