

# Proposal for Redesign, Development and Maintenance of Website for W3C

By Zaptech Solutions Pvt. Ltd. 10<sup>th</sup> December, 2019

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# **Company Profile**

- Zaptech Solutions PVT LTD is a privately owned global information technology company headquartered in Ahmedabad India with offices in USA.
- Founded in May 2008 under the leadership of Mr. Hemant Kumar, the company employs around 120 plus Skilled Engineers in the field of development, Designing and Testing.
- Our comprehensive in-house capabilities and strategic international presence enables us to make IT more accessible, affordable and relevant even to the most demanding customers across the globe.

#### **Key Facts**

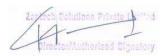
- Established in May 2008, over 11 years of robust experience in providing Software Development and IT Consulting Services.
- Global Presence in USA with Headquartered and Delivery Center in Gujarat India.
- Team of 120 plus IT Professionals
- Worked with 200+ clients
- ISO 9001:2015 and ISO 27001:2013 Certified Company
- 99 % Client Retention
- Nasscom and GESIA Members since Year 2010
- Strict Confidentiality Policy with 0 % IP related Complaints till Date

Zaptech Solutions specializes in providing Software Development services to its clients globally.

Our expertise lies in the complete transformation of our customers' IT portfolio by reducing costs, Bringing innovation and enhancing productivity. By improving reliability, speed and agility, we enable our customers to achieve sustainable Differential advantage over their competitors.

We spread our wings in the business of Application Development, Web Designing & Multimedia, Custom Internet Solutions, E commerce, Product Development & Support, Technical and Data Helpdesk, Consulting and Support Services, Legacy Applications Reengineering, Mobile Application Development, Data Warehousing and Business Intelligence. We have built core competency in providing consultation to our Client rather than sticking to only solution development. We have consultant and analyst team who will analyze your software needs and provides best suitable solution considering current market trends and business objective.

Find attached Company Profile PPT.





#### **Solution Overview**

The World Wide Web Consortium (W3C) is an international community where Member organizations, a full-time staff, and the public work together to develop Web standards. One of W3C's primary goals is to make these benefits available to all people, whatever their hardware, software, network infrastructure, device, native language, culture, geographical location, or physical or mental ability. W3C's standards define key parts of what makes the World Wide Web work.

Our proposed solution consists of Design and Development of Website for W3C and subsequent maintenance to make it modern, mobile ready, intuitive and ease of use for all intended users as per W3C and WCAG guidelines for accessibility. The new website would be ready to conform to the UUU trilogy i.e. user-centric, user-friendly & universally accessible at all stages: starting from launch, continuing g during its operations as well as match consistency of other trail websites in terms of uniformity of content, map navigation and standardized details of content. The website will have role based access for users including Super Administrator, Other administrative staff, volunteers and other staff for authorized activities content generation and related operations.

After creating website, the publically available content would be available to all citizens, including those with different abilities such as audio-visual impairments. For example, it can make available the text content of an audio so that audio-impaired citizens can read it or the same text content can be read by screen readers to help visually challenged citizens. We would provide the website with alternative white and black theme switch to provide better visibility to all citizens. At the same time the proposed solution would also fulfill all mandatory guidelines/checkpoints identified by accessibility matrix for the publically visible portion of website with respect to accessibility, identity, content and design. This will make the revamped website become truly inclusive to the needs of all citizens aspiring its information and service.

In order to formalize the process during execution of contract, we would work with following two-point target as below.

- Publically visible user interface is fully complaint.
- Backend policies are honored fully.

We have identified Word press Latest Stable version as secure and stable as appropriate platform to design and develop the website smoothly and in more efficient manner with user friendly nature of its backend operations.

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The responsibility to ensure all functions and compliances ready is shared between 3 stakeholders.

- Website Information Manager. We will provide W3C authorized WIM (Website Information Manager) and other staff with "Capacity Building" training and manual to operate and sustain the guideline in day to day work.
- Hosting Service Provider. We consider W3C would provide hosting environment to deploy the website and maintain up to contract period.
- Development Agency. That's us "Zaptech Solutions Pvt. Ltd." who are proposing this solution.

We have identified and listed down following features to develop in latest stable Word Press platform to achieve goals of website design and development as per W3C and WACG standards with role for each stakeholder.





# **Our Project Understanding**

# Website Design & Slicing

#### Landing Page Layout Design

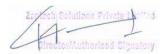
- Our Designers will go through similar Websites you would like to design for this website and prepare clean, interactive and user friendly yet Professional design.
- We will insert existing logo and determine attractive color palette and theming options based on that.
- Information on the content and Navigation is finalized and sent across for a mock up.
- Upon confirmation, our designers will customize the home page Mock ups and present it to you for your review. You may take a day for evaluation and send us your feedback. Once feedback is received we sent you revised mockup of the homepage based on your feedback.
- We will provide minimum 3 layout template options to choose from and finalize based on collaboration with W3C Point of Contact.

# Inner Pages Layout Design

- Once everything is approved we move ahead with the Inner pages and send them for your approval. In the mean while we suggest that the client sends us the content and other important information that he would like the designer to use in his/her website.
- o Inner Pages modification & finalization.

#### Design Slicing

- Design to HTML5/CSS3 conversion.
   Our Designers will convert finalized PSD/AI Design to HTML5 web pages along with CSS3 implementation.
- Once the HTML5 Web pages would be ready, we would integrate them to Wordpress Framework during Development phase.





# **Website Development**

We have listed down Website pages, block of content information, functional features & work flow of how each targeted user type uses & what they will be able to do but not limited to,

#### Home Page

It would be Landing Page of the website with information about the W3C module and service offerings to end users. It would display automated feed of News on home page. Home page will also have options to navigate to other pages as well. This would contain

- o Header
- Navigation Menu
- Brief about Organization
- Promotional Blocks
- Latest Blogs/ News
- Footer
  - Copyright Text
  - Address & Contact Details
  - Social Media Icons

#### About Us

It provides more detailed information about the work of W3C, its mission and its past history. This tab will have below pages like

- About Us
- Mission
- History
- Facts

#### • Events

It provides upcoming Events info to users. It says what W3C is doing overall. Users can get to archived events info too.

#### Blog/ News

It allows users to go through blog & news posts available on website. It provides current happenings about W3C what they are doing.



#### Donate

It promotes users to donate and contribute to the efforts of the W3C Fund.

#### Partners and Stakeholders

It allows users to go thorough W3C partners and Stakeholders. It tells how they are associated with others and promoting the activities overall with them.

#### • Other Content Pages

We would work on different content types and set up content pages as per your requirements. You will be able to create and manager content pages text and images.

#### Photo/ Video Gallery

It presents Photo and Video Gallery related to W3C work and their activities.

#### Careers

Users would be able to browse through available open vacancies at W3C and apply for the same.

#### Contact Us/Feedback

It provides form to contact W3C for inquiry as well as list of staff contacts.

#### Social Media Links

It provides social media links where users can follow IREDA and get to aware about their ongoing activities through social media channels.

#### • SEO Friendly Website

Website would be SEO friendly URLs and contains Meta data which will help search engines to identify and promote website relatively.

#### Google Analytics Integration

We would integrate Google Analytics to your website and you can monitor website analytics on a daily/ monthly/ yearly basis.

#### • Mobile Responsiveness

We would keep entire website fully mobile responsive so that it can be accessed easily across desktop, tablet and mobile browsers quickly and easily.

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# **Technical Specifications**

- Word Press CMS Framework, JavaScript, HTML5/ CSS3
- Database MySQL
- Browser (Mozilla 40 & higher/ IE 11 & Edge/ Chrome 50 & higher/ Safari 7.0 & higher
   Windows/Mac OS).
- Mobile Browser compatibility all iPhone 5/5S/5c, iPhone 6/6 plus/6s/6s plus, 7/7 plus, 8/8 plus, iPhone X/XS/XR, iPad 2/3/4, Pro & mini as well as android mobile & tablet devices with resolutions 480 x 800, 720 x 1280, 1080 x 1920, 1440 x 2560 for portrait/ landscape orientations.
- Web Language would be English.

#### **Notes:**

- W3C would provide necessary infrastructure (Server, Operating System, Database, Licenses for development framework, if any). related to hosting of website. Zaptech Solutions shall assist to deploy the website on provided hosting server.
- W3C would need to provide domain access details, if needed. We would help to point domain to website hosting.
- W3C would make 128 bit encrypted SSL certificate available to be integrated. We would install SSL to domain/ server hosting.

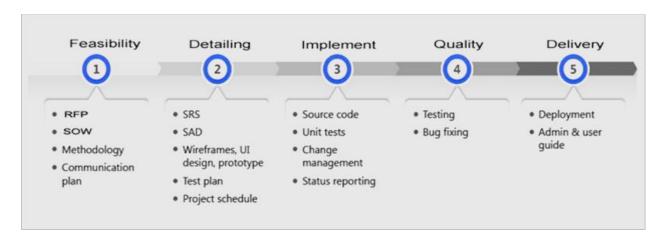




# **Execution Methodology**

To generalize the implementation plan below is the phase breakdown for it. Overall we breakdown the whole development cycle in below phases,

- Feasibility Study
- Detailing or Visual representation of the flow
- Implementation
- Quality of deliverables
- End Product delivery



#### • Feasibility Study

In this phase we Gather all the required information about project scope, prepare RFP, SOW and share with client. Theses document will contain methodology, Communication plan, Project Structure and Costing. This will help client to choose specific vendor and give idea about vendor's capabilities and technical skills.

#### Detailing

In this phase we prepare SRS, SAD, Wireframes, and Prototype and share them with client for approval. Once we got Scope and designed freeze from client, Project lead, Team lead and QA lead will create Test Plan and Unit Test Plan for whole scope. Project lead will also create milestones or sprint plan and share it with client so that client have an idea about the development phase.

#### Implementation

After freezing the scope development team starts working on scope. Everything will be updated on basecamp, Jira and Bugzilla throughout the whole lifecycle of development so that all team will be in sync for milestones. Mobile app team works on specific software for Android along with Unit Testing Framework. Source code will be maintained on Git with versioning. In any phase if any changes from client comes





as CR dev team have to implement those changes in specific Sprint only and deliver to client in that milestone.

Status report should be done by Project lead to client for proper communication and giving client a clear picture what has been done and what is status of deliverables. There should always be a proper communication between client team and Project lead to fix things in that millstone only. Similarly web team will do development according to the ready infrastructure.

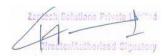
#### Quality

Once after manual and unit testing from development team QA team will do Automated and load testing on the Mobile app, Admin Panel, Web Services, DB etc. to make sure out results are of best quality. If QA team find out any issues in build it will be log into Bugzilla and Jira and assigned to respective person and will re verify once all the issues are closed. Final delivery will be made once all the issues are closed in Jira and Bugzilla.

#### Delivery

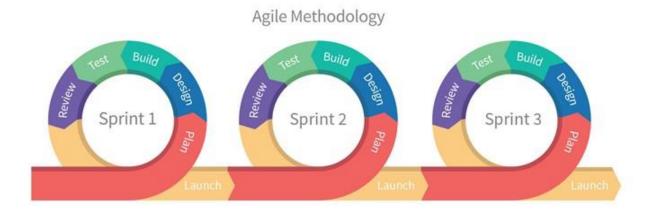
QA verified deliverables will be sent to Client for UAT and if everything is fine team will be migrating everything on Client's production environment. Our team will also be assisting client for Apple and Google Account setup and uploading mobile build to Apple or Google Play Store. In case of post-production bugs or in scope changes team will assist client in every possible manner. New changes or suggestions will be treated as CR.

From start to end we follow agile methodology for the development to provide quality service to client. The agile methodology for mobile application development seeks to provide an alternative to traditional methods of project management such as the waterfall methodology. This approach enables requirements and solutions to evolve through the combined effort of the development team and the customer. It promotes adaptive planning, evolutionary development, early delivery and continuous improvements. This iterative and flexible approach can be used in complex projects where the customer requirements change frequently. A big project can be broken down into smaller parts and agile methodology can be applied to each of these small parts. As this method requires high customer engagement to take in the customer's requirements at each step and his feedback after every step into account hence it can be used in projects where the customer is committing to engage in interactive communication from time to time. Now when it comes to understanding the role of agile methodology for mobile application development then one need to take into account that the mobile application developers make an app for a device with small screen, less memory and less processing speed. Moreover with the sheer number of mobiles present with different operating systems and different carriers making a mobile app which is fit on one and all devices becomes quite a difficult task for the developers. Apart from this the developers also face the issues of Short Software life cycle development, limited





hardware, rapidly changing technology and the changing user demands according to the changes in technology. Plus, the developers also need to create an app which can be updated easily, can be downloaded easily and has an excellent UX design. We do follow this



methodology as we have a self-driven and motivated team, which can work without much monitoring and supervision.

We follow agile with Scrum to achieve below targets,

- Constant supply of valuable and quality deliverables.
- Ability to make changes to the project and to put forward new demands to it at any stage .of development (even before the release).
- Constant close contact between the Client and developers at all stages of the project.
- Regular delivery of the project's software elements.
- Priority information exchange method is a personal conversation, which gives opportunities for all participants of the project.
- The main indicator of agile implementation success is the high-quality working application.
- Developers, customers and sponsors have the opportunity to control and maintain a constant pace of work.
- Constant contact and control gives possibilities for permanent improvement of the product at the design stage.
- Self-organizing team performing particular tasks, often give better results than a large team dedicated to everything at once.
- The presence of individual units that perform individual tasks is a guarantee of rapid adaptation to any new conditions to the project.





# **Capacity Building & Training Strategy**

We propose following capacity building & related training measures as per requirement and W3C compliance ready process during entire development life cycle for website.

We have listed down Website features & work flow of various administrative user roles and their operations for following user roles required but not limited to.

- 1. Super Administrator as WIM(Website Information Manager)
- 2. Sub Administrator as TM(Technical Manager)
- 3. Other Administrative Staff.

Here are the standards we follow and take care while developing the website.

- 1. For WIM (Website Information Manager) Role We would build manual for Website Information Manager appointed by W3C to follow and provide training. The manual would act as a guidance tool for each scenario related to following.
  - Policies of Content Management Creation, Moderation, Approval, Publishing and Archival. This will ensure that all content on the website is up-to-date, authentic and obsolete information are either archived or removed completely.
  - **Automated Content Report** The report for WIM to provide list of broken links on the site which can be corrected or removed.
  - WIM Contact Details Since Website Information Manager is overall responsible for quality and quantity of information on the website, we will co-ordinate and provide W3C authorized WIM's contact details at the time of production deployment of the website.
  - Feedback Support The website would provide Website Information Manager and/or authorized staff an effective mechanism to view and answer public feedback/query in backend with secure login. This will be in conjunction with us providing custom form for public feedback for inquiries and grievances.
- **2. For TM (Technical Manager) Role** We would provide technical handbook and training demo for Website Technical Manager appointed by W3C to perform following duties.
  - **Monitoring** Regular monitoring of website for Performance, Security and Availability within backend portal of revamped website.
  - **Policy Compliance** Ensuring Compliance with organizational, regulatory and legislative policies that may require changes in website content and security in the





- form of help tool tips for each content section in backend to be decided in close consultation and co-ordination with authorized personal.
- Website Traffic Analysis We will provide Google analytics report integrated for Website traffic analysis to Technical Manager and the user role authorized by him/her.
- 3. Website Promotion Techniques We would provide general guideline and message system within administrative department of website which can be communicated to all concerned administrative users within the system by Website Information Manager regarding website promotional techniques to ensure that all the advertisements/public messages including press releases, notifications etc. issued in print/media or online have the website URL as part of it.
- **4. Search Engine Optimization** We would provide administrative mechanism for each aspect of content of the website for Search Engine Optimization to ensure best practices of SEO are followed by Website Information Manager and/or other authorized administrators of the website. While the guidance will be provided by our SEO Expert in close consultation with Website Information Manager, the website's administrative mechanism will include standard steps of checklist to achieve maximum visibility in search engine out of which main steps are,
  - Administrative mechanism to decide clean urls.
  - Administrative mechanism to decide Meta tags for each page and content.
  - Optimizing Content for faster recognition by search engine.
  - Integrate Google webmaster tool to analyze how Google bot indexes your site.
- 5. Website General Policies We would closely work with Website Information Manager of Department Of Commerce to formulate following policies as per the requirement and have a rule defined to add/modify/delete each policy description. The authorized administrative user will only be able to publicize each policy addition/change after approval of the Website information Manager.
  - **Domain Policy** We would co-ordinate with W3C to make sure the availability of the existing domain by renewing when due within the contract period.
  - **Copyright Policy** There are liberal, moderate or conservative copyright policies in nature. Generally the Non-Government Initiatives have moderate copyright



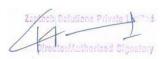


- policy which means that the public material on the website may be reproduced but in accurate manner with credit which we propose to W3C.
- Hyperlink Policy We would work closely in assisting website information manager or authorized personal to determine Hyperlink policy for the website related to posting other website links in content.
  - i. We would provide mechanism for non-website hyperlink content to check if it's valid or not.
- Terms & Conditions We would work closely in assisting website information manager or authorized personal to determine Terms & Conditions for the website related for following aspects.
  - i. Ownership Details.
  - ii. Usage Policy of Content.
  - iii. Legal Aspects.
  - iv. Responsibility towards Hyperlinked sites.
- Content Source Policy We would work closely in assisting website information
  manager or authorized personal to determine policy for source of documents not
  owned by W3C to be reproduced. This also includes permission policy for
  publishing copyrighted content of others on the website and owned content
  reproduced by others.
- Privacy Policy - We would work closely in assisting website information manager or authorized personal to determine privacy policy content to provide transparent knowledge to the website visitors of collecting their private information.
- Content Contribution, Moderation & Approval (CMAP) Policy We propose 2-tired CMAP policy where the authorized staff adds/modifies content which is both moderated and approved by Website Information Manager considering the size and scope of work. We would also provide private content access for user role which requires login based authentication. Ex. Staff which doesn't have administrative rights but a role for them can be created for accessing specific private content.
- Content Archival (CAP) Policy We would work closely with you in deciding
  policy to archive documents. The revamped website would provide way to
  configure time to decide archival and/or permanent deletion of documents
  automatically by Website Information Manager or authorized personal by WIM.
- **Website Monitoring Plan** We would work closely with hosting provider and website information manager to determine following aspects of plan for website monitoring.





- i. **Performance** We ensure performance tuning to optimize site loading and download time by following actions.
  - 1. Combine CSS, JS scripts and HTML files together.
  - 2. Use CSS instead of images whenever possible.
  - 3. Reduce the number of elements on every web page if possible.
  - 4. Install a caching plugin.
  - **5.** Reduce redirects, which create additional HTTP requests to your server and increase your page load time.
- ii. Functionality We ensure all modules of the website are properly tested.
  For more details refer to our "QA and Testing Services".
- **iii. Broken Links** We would provide administrative module to identify broken links in the system and way to remove it.
- iv. **Traffic Analysis** We would provide Google analytics tool for website traffic analysis.
- **Contingency Management Plan** We would work closely with hosting provider and Department Of Commerce's Website Information Manager to determine contingency policy for following events.
  - i. **Defacement of website** We would block the website from public in close co-ordination with hosting provider and redirect to a maintenance page.
  - ii. Data Corruption We would provide a module which would automatically schedule backup of data on the website so in the event of data corruption it can be restored after showing maintenance page to the public.
  - iii. Hardware/Software Crash We would co-ordinate with hosting provider to have routine backup of the website on redundant server in the rare event of crashing of server so the domain of the website can be remapped to the redundant server till alternate arrangement is made.
  - iv. **Natural Disasters** We would closely work our server administrator to maintain traditional backups in different location than hosting server in case of natural disasters.
- Security Policy We at organization level have internal mechanism for data protection during the development phase and migration of content. We intend to focus on following web level security policy.
  - i. Access Control The mechanism we propose protects both front-end and back-end data on the website by controlling access to your web resources. It does this by implementing restrictions on what members can do, what they can access. Access control also has to take into account the





backdoor access to your site. In the event a hacker gets into the site, one of the first things he/she may do is to install a backdoor access so he or she can retrieve sensitive information with little effort. The access control component of your web application has to be able to identify the backdoor access points, block access and render them useless and notify you of their existence and location so they can be removed. This provides good control over file level and document level security.

- ii. **Login Protection** It can be easy to forget that a big threat against your website and company's well-being is someone simply being able to crack an administrator's login information. Our Login protection guards against this through authentication and encryption of data.
- **Search Policy** We would provide facility to search content full or part of it in most generic manner from all over the website dynamic content. The end search result would be sorted in "Latest Results First" manner.
- Backup Policy We would provide facility to manually take backup of current source code/database as well as auto scheduling feature.
- **6. Website Development Policy** We would provide following development technology related policies to ensure standards for redesigning of website.
  - Markup Languages
    - i. We would validate the website to follow following published grammars.
      - 1. HTML 5.0
      - 2. XHTML 1.0
      - 3. XML 1.0
    - ii. We would test the Web pages against W3C markup and validate required standards.
  - Cascading Style Sheets(CSS)
    - i. We would ensure to use CSS to revamp website as per W3 standards provided for CSS.
    - ii. We would make website responsive using CSS.
    - iii. We would make sure that website remains readable even when CSS is turned off.
  - Scripting Languages
    - i. We have identified and proposing WordPress as best platform for revamping the website for W3C & WCAG compliance.
  - File Formats





- i. We would provide support for uploading and viewing image and graphic components with JPEG, PNG and GIF file formats with compressed version without compromising their visual quality.
- ii. We would provide support for uploading and viewing Documents in HTML format or other format where link is provided to download that format tool.

## • User Friendly Instructions

- i. Labels or instructions will be provided when content requires user input.
- ii. We will provide extended time limit for visually impaired citizens for time bound public activities such as filling out forms.
- iii. We would provide proper error details both in text format and audio interpretation using screen reader tools for form validation activities.
- iv. We would include page title, language attribute with proper Meta data field details to fill by Website information manager or other authorized personal in the backend.
- v. We would make sure to provide tool in a way that content is provided with proper start and end tags and unique IDs and attributes to make assistive technologies like screen reader tools to accurately interpret content for visually impaired citizens.
- vi. Instructions provided for understanding and operating content do not rely solely on sensory characteristics such as shape, size, visual location, orientation, or sound for visually impaired people. Ex. A round button is provided on a form to submit the form and move onto the next step in a progression. The button is labeled with the text "go." The instructions state, "To submit the form press the round button labeled *go*". This includes both shape and textual information to locate the button.
- vii. All functionality that is available on the web page is operable through keyboard.
- viii. Complete web page is navigable using keyboard only (using tab or arrow keys).
- ix. Current navigation location (Keyboard focus indicator) is visible on the webpage while operating or navigating the page through a keyboard.
- x. If a webpage can be navigated sequentially and the navigation sequence affect the meaning of operation, then all components must receive focus in the same meaningful sequence (Creating a logical tab order through links, form controls, and objects).
- xi. The purpose of each link is clear.

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- xii. Time limit for time dependent web functions is adjustable by the users. Ex. Visually impaired users filling online form.
- xiii. When any component on the web page receives focus or its settings are changed it does not initiate change in context. I.e. the change is only on click and not on focus.
- xiv. Changing the setting of any user interface components does not automatically cause a change in context.
- xv. If an input error is detected, the item is identified and the error is described to the user in text. Suggestions for correction if known are provided to the user.
- xvi. For Web pages that cause legal commitments or financial transactions a mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.
- xvii. Name and Role of all interface components can be programmatically determined.

#### • Validation & Testing

- i. We would provide Validation and Testing services for more details refer to "QA and Testing Services" Section below.
- **7. Quality of Content** We would take following actions in consultation with Website Information Manager to make sure that quality of content is maintained.
  - **Documents** Ensure that all documents have published date on main page.
  - Language Ensuring that content is spell checked and grammatically correct by providing spell checker module.
  - Information, structure, and relationships that are conveyed visually on a web page must also be programmatically determined or are available in text.
  - When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.
  - Headings wherever used, correctly describe topic or purpose of content.
  - Language of the complete web page has been indicated. If there is a change in language within a webpage it also indicated.
  - Common components that have the same functionality are uniform across the website.
- **8. Content Download Policy** We would provide following information for any downloadable files as part of standardization process.
  - Self-explanatory title of the document/file.
  - Download and use instructions (install, open, view).

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• File format and file size.

#### 9. Design Policy -

- We would make sure that there are no direct links to pages like "Under Construction."
- We would make sure that home page is visible from all sections of website.
- We would provide global "Search" page visible across all public pages of the website which is easily readable to all citizens.
- We would provide consistency in navigation mechanism for all sections of the website unless altered by Website Information Manager.
- Text is readable both in electronic and print format and the content prints correctly on an A4 size paper.
- All non-text content (like images) has a text alternative that provides equivalent information as the image itself.
- Ensure that Scanned Images of text have not been used.
- The visual presentation of text and images of text has a contrast ratio of at least 4.5:1 between the foreground and background. Large scale text and images of text have a contrast ratio of 3:1.
- Text can be resized without assistive technology up to 200 percent without loss of content or functionality.
- Ensure that there is a mechanism to pause, stop or hide scrolling, blinking or auto updating content and audio that starts automatically and lasts for more than 5 seconds.
- Web pages do not contain any content that flashes for more than three times in a second.
- Ensure that color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. Ex. All red color texts will represent Errors and Green as Success.
- Ensure that Captions or transcript are provided for all prerecorded and live audio and video content.
- Web pages allow the user to bypass blocks of content like navigation menus that are repeated on multiple pages (by using the skip to content link).
- Any web page within the website is locatable either through "search" or a "sitemap".
- Navigational mechanisms that are repeated across the website occur in the same relative order on each page.
- Ensure that the website has been tested on multiple browsers.

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- **10. Website Reporting Policy** We would provide customized reports in administrative backend to be visible to Website information Manager or other authorized role as following but not limited to,
  - Number of successful visitors pear year/month/date
- **11. Website Hosting Policy** We would assist the hosting provider in maintaining following standards.
  - State-of-the art multi-tier security infrastructure as well as devices such as firewall and intrusion prevention systems.
  - Redundant server infrastructure for high availability.
  - Backups in a geographically distant location.
  - Helpdesk & technical support on 18x7x365 basis.





# **Proposed Development Team Member Resumes**

**Resources Proposed:** 1 PM + 1 Web Design (UI/UX) + 1 Sr. WordPress/ PHP Developer + 1 QA

#### 1) PM

Name of Firm: Zaptech Solutions Pvt. Ltd.

Profession: Information Technology Professional

Total Years of Experience: 10+ years

Detailed Tasks Assigned: Requirements Gathering, Technical Analysis, Milestones & other documentations, Resource allocation, Team Handling, Client Management, and Project Delivery

#### **Professional Summary:**

- 10+ Years of Work Experience in Handling PHP/.Net programming, Database designing, websites & web applications development, Web services development,
- Experience with Web Based projects using PHP, AJAX, ASP.NET, HTML5/CSS3, JavaScript, JQuery tools
- Worked in Technology like WordPress, Joomla, Drupal, Prestashop, Opencart, PHP, MySQL, HTML, JavaScript and CSS.
- Working knowledge of Database Designing, Normalization, Relationships and Analyzing RDBMS Projects.
- Version Control systems used: SVN / GIT
- Client interaction: Participate in requirement analysis, technical analysis, client meetings during project delivery.
- Handled multiple dedicated clients and provides daily updates to clients
- Very good in Open source (LAMP) applications such as core PHP, Code Igniter, Yii, Laravel and Custom PHP
- Good in client communication and ability to handle project individually with team lead quality.
- Project leadership experience in large scale projects & corporate training in higher Functions effectively in a fast-paced collaborative agency environment; prioritizes and successfully manages multiple projects/ deadlines simultaneously.
- Demonstrates sound judgment/reasoning, decision-making, negotiation, organizational and presentation skills.
- Ensure timely delivery of project and motivate the team to meet the deadlines

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#### **Technical Skills:**

Programming languages	PHP, Asp.Net
CMS/ Ecommerce Platform	WordPress, Joomla, Drupal, Prestashop, Opencart
Web Tools	HTML/DHTML, VBScript XML, HTML5, CSS3
Front End Scripts	JavaScript, jQuery, Angular JS, Twitter Bootstrap
Databases	MySQL, Postgre SQL, MongoDB, MS Access, MS SQL Server
Web Services	SOAP, REST
Operating Systems	Windows System, Linux, Unix, Mac

#### Education:

- **B. E.** (Bachelor of Engineering in Computer Science)
- A. D. Patel Institute of Technology, Sardar Patel University, Ahmedabad

#### Job Responsibilities/ Project Tasks worked:

- Involved in project planning, designing, prototyping and successful execution that meets all functional specifications on time
- Monitor, Supports & Coordinates the team members of Design, Development & Quality assurance
- Client interaction at technical level and deliver solutions to problem areas
- Project updated given to client about work progress and follow up and closures of issues
- Responsible for development of Plug-in and WordPress Website development
- Responsible for quality control and testing of web programming to ensure functionality
- Initiation cross-training with other departments to improve work flow and streamline project completion
- Project Planning & Resource allocation, Project Reviewing, Daily client updates
- Bugs identification & solving
- Maintain continuous alignment of program scope with strategic business objectives, and make recommendations to modify the program to enhance effectiveness toward the business result or strategic intent.
- Executed and maintained program management processes and disciplines in the areas of: program schedule and quality management; communications management; human resource management; cost management; procurement management; risk / issue management; change management





## 2) Web Designer (UI/UX)

Name of Firm: Zaptech Solutions Pvt. Ltd.

Profession: Information Technology Professional

Total Experience: 8+

Current Responsibility: PSD Slicing, Programming, Magento Theming, WordPress Theming, and Mobile Website Development

# **Professional Summary:**

- Technically and professionally competent with 8+ years of experience in Web & Mobile Development & Maintenance of sites, currently spearheading efforts with Zaptech Solutions as Web Designer (UI/ UX Team Lead)
- Having good experience in PSD Slicing and converting into HTML5/CSS3 Web Pages
- Experience in developing Magento & WordPress/ CMS themes as well as Magento Themes Customization
- Well versed with AJAX, JQuery & JavaScript Integration, HTML5/CSS3, Browser comparability, Responsive Web Development
- Expert-level experience in web standards front-end development including semantic XHTML 1.1/HTML 4.0 and 5, CSS 2.1/3, unobtrusive JavaScript with the jQuery framework and AJAX technologies with heavy emphasis on cross-browser compatibility issues
- Developed fully responsive websites using jQuery, media queries and flexible layouts.
- Experienced in using code pre-processors such as Bootstrap, SASS
- Design integration to PHP frameworks Code Igniter, Laravel, Yii, Zend, Symphony as well as efficient at Cross Browser compatibility check
- Version Control systems used: SVN / Bitbucket/ GIT
- Focused and hardworking, self-motivated and team oriented; with proven capability to meet high-pressure deadlines and coordinate multiple projects

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## **Technical Skills:**

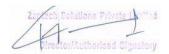
Development Tools	Adobe Photoshop CS5, Dreamweaver, illustrator, Notepad ++ ,
Development roots	Net Beans
Ecommerce/CMS	Magento, PrestaShop, WordPress, Drupal
Languages	HTML5, CSS3, XHTML 4.0, PHP, AJAX,
Scripting	JQuery, Java Script

#### **Education**:

**B.C.A** (Bachelor of computer science and application), Jiwaji University, Madhya Pradesh, India

# Job Responsibilities/ Project Tasks worked:

- Involved in project planning, designing, prototyping and successful execution that meets all functional specifications on time
- Monitor, Supports & Coordinates the team members of Design, Development & Quality assurance
- HTML5/CSS3, JavaScript programming and development
- Worked on PSD Slicing and Drupal/ WordPress Theme Development
- JQuery and JavaScript Scripting to aid web development
- Developing Mobile Websites
- Client interaction at technical level and deliver solutions to problem areas
- Responsible for Cross Browser UI Testing and modifications
- Closely work with development Team and client





# 3) Sr. WordPress/ PHP Developer

Name of Firm: Zaptech Solutions Pvt. Ltd.

Profession: Information Technology Professional

Total Experience: 7+ years

Current Responsibility: Design Integration, Website & Web Apps Programming/ Development, CMS Website Development & Customization, Database query implementation, Web Services Development

#### **Professional Summary:**

- 7+ Years of Experience in Websites & Web Applications development & customization, Databases creation & management, currently spearheading efforts with Zaptech Solutions as Sr. WordPress/ PHP Developer
- Proficient in Core PHP, Open Source CMS, AJAX, JQuery, Node.JS, Web services (SOAP/Restful), HTML5, CSS3, Responsive Web Development, Database Design and Development like ORM
- Open Source Framework: Laravel, Zend framework, Code Igniter as well as working on CMS: Drupal, WordPress, Joomla
- Developed PHP based Websites & Web Applications
- Confortable with HTML5/CSS3 implementation & modifications
- Good Experience in PSD Slicing and converting into php frameworks Theming, application development, design, documentation, testing, Code Reviews, Implementation and System Support of software/ web applications
- L Doing on page SEO tasks for Website completed
- Proven capability to meet high-pressure deadlines and working on multiple projects
- Version Control systems used: SVN / GIT
- Excellent communication and inter-personal skills, accustomed to working in both large and small team environments.
- Ability to adapt to a changing environment and can work in diverse team environment

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#### **Technical Skills:**

Programming languages	PHP, HTML5/CSS3, XHTML
PHP Frameworks	Laravel V 5.x, Code Igniter, CakePHP
CMS	Drupal, WordPress, Webflow
Scripting language	JavaScript, JQuery
Databases	MySQL, SQL Server, Oracle, MS Access
OS	Windows, Linux, Unix

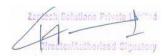
#### **Education**:

#### B. Tech (Electrical and Electronics Engineering)

BVC Engineering College, Odalarevu, Jawaharlal Nehru Technological University

#### Job Responsibilities:

- Working with the business team to collect the business requirements from client, security and service level requirements and technical documentation
- Design Requirement documents and functional document for the development team
- Team management and technical mentoring
- Developing PHP based websites & web Applications
- Assisting customers by architecting large scale and robust solutions
- Responsible for development of web application and web services
- Client interaction at technical level and deliver solutions to problem areas
- Project Tracking and Execution
- Offer technical guidance and reviews to team members





# 4) QA

Name of Firm: Zaptech Solutions Pvt. Ltd.

Profession: Information Technology Professional

Total Experience: 6+ years

Current Responsibility: Websites and Mobile Applications Testing, Test cases preparation, Functional Testing, Integration & Regression Testing, UI/UX testing

#### **Professional Summary:**

- Having 6+ years of experience in the areas of Project Planning, Functional Support and Quality Assurance & Control.
- Expertise in Functional, Integration, Regression, Load testing and User Documentation
- Worked on various Websites & web applications as well as iOS/ android applications testing
- Experience in UI/UX testing and providing clean, simple professional touch to web & mobile projects
- Good Experience in Test Cases Preparation based on Functional Specification documents
- Expertise in database testing in Microsoft SQL Server environments including designing and manipulating test data, validating stored procedures, jobs, triggers and replication.
- In depth understanding of Software Development Life Cycle (SDLC) and comfortable with both traditional and agile approaches
- proven capability to meet high-pressure deadlines and working on multiple projects
- Excellent communication and inter-personal skills, accustomed to working in both large and small team environments.

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#### **Technical Skills:**

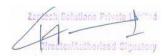
Bug Reporting Tools	Bugzilla, FogBugz, Mantis, Jira, TeamTrack
Test Case Management	Testuff, TestLink, Salome
Databases	MySQL, SQL Server, Oracle, MS Access
Operating Systems	MS Windows, Mac, Linux

#### **Education:**

**Bachelor of Engineering in Information Science,** Karavali Engineering College, Visvesvaraya Technological University (VTU, Karnataka)

#### Job Responsibilities/ Project Tasks worked:

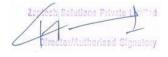
- Responsible for Web & Mobile Applications Testing being developed in house
- Requirements study, preparing document of understanding, functional requirements
- Creating functional test plans with unit and integration test cases.
- Doing Automation Testing with Selenium & other Tools
- Functional, integration and regression testing
- Doing UI/UX testing
- Issue management identifying, categorizing and logging issues in issue tracking tool.
- Involved in software Build activity (like performing build/packaging for .Net and Java applications, deployment, release and support task).
- Leading Team Members and Guide them to get QA work done





# **Implementation Plan**

Phase	Description	Web Duration (Days)
Discovery	Kick-off, Understanding and Collaboration Meeting to be one the same page	Day 1 to Day 5
Phase 1 – SRS & Finalization	System Requirement Specification Preparation System Requirement Specification Finalization and Approval from W3C representative.	Day 6 to Day 15
Phase 2 –Website Setup, Design &	WordPress setup with necessary dependencies as per requirements + Database Design	Day 16 to Day 30
Finalization	Design Approval for logo, colors and create/use W3C complaint Theme. Using W3C and WCAG complaint markup language and CSS we will 2-3 layouts and revisions for approval. <b>Note</b> The position of elements will remain consistent in all.	Day 16 to Day 45
Phase 3 –Theme integration	Integrate Finalized Design into Drupal based website to create responsive design layout.	Day 46 to Day 60
Phase 3 Development – Website Development of Backend features & Unit Testing	<ul> <li>Development of Features for all backend administrative modules which includes,</li> <li>All backend features required for web features as per current website section</li> <li>Unit Testing by developers</li> </ul>	Day 31 to Day 140
Phase 4 –Website Development of Frontend Features & Unit Testing	<ul> <li>Development of customizable features which includes,</li> <li>All Frontend features for web app described in "Project Understanding "section</li> <li>Unit Testing by developers</li> </ul>	Day 101 to Day 140
Final QA	Final QA includes Entire system's  • Web Browser Testing  • Functional Testing  • Script Testing  • Security Compliance Testing	Day 141 to Day 170





Documentation For Capacity Building	Technical Documentation which includes how to operate backend as well as frontend knowhow in technical manner and what level of customization is done.  End-User/Functional Documentation in describing purpose of various pages.	Day 1 to Day 170
Training For Capacity Building	Training includes:  • Backend Management  • Updating Procedure  • Content Migration Procedure  • Data Backup & Restore Procedure  • Reports	Day 171 to Day 190
UAT by W3C IT Team	The final review by W3C team which includes end user testing and case study testing. Zaptech will do final changes based on team feedback.	Day 171 to Day 190
Final Deployment	Corrections, procedures to go live and after final go ahead by W3C Authority  Production Server Deployment after verifying on the existing server hosting	Day 191 to Day 200





#### Similar Work - Websites & Portals

Here are some of the intuitive and mobile ready websites we have designed and developed as part of our portfolio for USA and other international clients but not limited to.

# 1. **Jobstop** - <u>www.jobstop.be</u>

Jobstop is Belgium based travel organization and promotes users be as Volunteers, get started as au pair and showcase their work there. We have got interactive Map based website built where multiple users can register/login and put their work stories and travel adventure /experience all together for others to browse.

#### 2. Rustic Trades Furniture - www.rustictradesfurniture.com

Rustic Trades is a custom furniture company based out of Atlanta, Georgia and Denver, Colorado specializing in handcrafted farm tables. We built ecommerce website along with CMS pages where users can get to know more about company information and order Tables & other furniture. We came up with attractive website that highlights products and sell them too.

#### 3. Sportexsafety – <a href="https://www.sportexsafety.com">www.sportexsafety.com</a>

Sportexsafety is a manufacturer of Apparels & Accessories for safety equipment industry. We have got iOS App built which will communicate with Sportexsafety website via API and allow Sportexsafety admin users to login and manage their customers and their credit points and Gift certificate codes they can use. We have designed and developed their website too.

#### 4. TopComp - www.topcomp.com

TopComp Homes is a Real estate company in Scottsdale, AZ and provides services to sell one's home for top dollar. We built simple yet intuitive website that represents their company and properties information. We designed their website in a way best to represent their services and properties offered.





#### 5. Trainup - www.trainup.com

TrainUp.com is the web's largest training marketplace and has partnered with hundreds of industry-leading providers including New Horizons Computer Learning Centers, Global Knowledge, SkillPath, The Learning Tree, Lorman Education, Skillsoft, Mind Leaders and many more. We built the TrainUp.com platform built and customized and take education to next level where they can provide better services with seamless experience.

## 6. Outdoor Makeover - www.outdoormakeover.net

Outdoor Makeover is comprised of three departments working together to serve all of our clients' design needs in landscaping, outdoor construction and landscape lighting. We built clean and user friendly CMS website where they can showcase their services and work to end users.

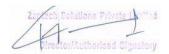
#### 7. **Bugatchi** – www.bugatchi.com

Bugatchi is a high-end fashion brand and clothing manufacturer looking to modernize, streamline, and enhance their online brand presence capabilities. We built website which provides modern flat look & feel with improved featured to their customers.

#### 8. Omnilert - www.omnilert.com

Omnilert is leader in the enhancement of such critical capabilities as Omnimodal Notifications, Scenarios management, and response team training and mobilization. Client got online marketing platform from where they can share & promote useful content, resources & media to their users.

Please find attached Work Order and Project completion certificates.





# **Indian E-governance Projects**

We have worked on following E-Governance project in India as website and mobile apps.

- 1. Oil India (<a href="www.oilenajori.in">www.oilenajori.in</a>): We have worked on web app for their retired employees where they can register/ login as well as claim their medical insurances which Oil India's zonal nodal officers will accept or reject based on medical policy under which retired employee resides at the time of retirement.
- 2. DGP, Home Dept., Government of Gujarat: We have worked on Web App and iOS/ Android Mobile App which will allow them to manage SRPF and other units of Gujarat Police personnel deployment on request/demand basis for various events from external citizens/other Govt. Bodies/Private companies as well as internal Police Staff and MIS Reports based Decision Support System.
- 3. **IIIT, Pune** (<a href="http://www.iiitp.ac.in">http://www.iiitp.ac.in</a>): We have worked on redesigning and development of IIIT Pune Website which will provide useful information to students and parents with modern look & feel and allow admin & faculty members to manage the content website easily. We have got Security Audit & STQC certification covered too.
- 4. **Customs, Central Excise and Service Tax Settlement Commission, Chennai:** We have done redesigning and development of Web app which makes their online presence more visible, secure, as per government guidelines and more user friendly. We have got Security Audit & STQC certification covered too.

Please find attached Work Order/ Project Completion docs and Resumes of our Team Members.

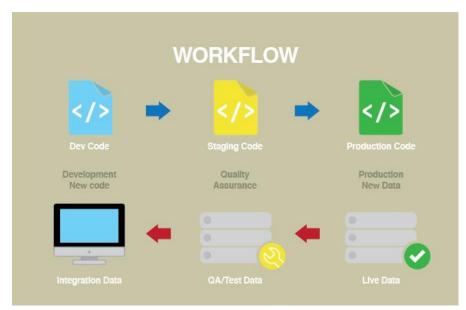




# **Source Code Handover Strategy**

We understand the importance of source code preservation. Following are key transition aspects which are considered for source code handover.

- Minimum disruption to business during Handover.
- Risk free and secure handover.
- Provide Technical Documentation.
- Provide Transition Plan.
- During post production, Zaptech will host Website Source Code on its own staging server.
- It is executed in following stages.



- The development code Resides on Local server of the developer.
- Code is daily pushed to staging server of Zaptech using code versioning tool.
- Code is pushed to Production environment (which is not public yet) for UAT testing after completion of sprint/milestone & Zaptech Internal QA depending on the SLA.
- Production Code is integrated and tested with live data as part of UAT (User Acceptance Testing).

#### **Deployment Tools in Use**

At Zaptech, internal deployment tool Gitlab for code versioning and backup. It allows
multiple resources to work with greater control over their code, better code
tracking, helps maintain code tracking, integrity in relatively secure development
environment and less chance of code corruption.

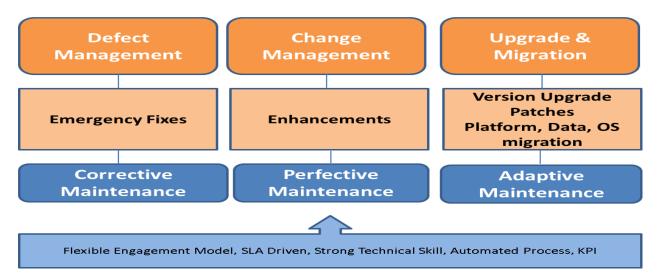
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# **Maintenance & Support Services**

Zaptech's proposed one year maintenance support and maintenance cycle for bugs will be powered by a ticket management system which will act as a backbone for all the support related activities. Application maintenance support will fall into three categories.

- Corrective Maintenance
- Perfective Maintenance
- Adaptive Maintenance



The handshake between Department of Commerce and Zaptech solutions will be handled through Zaptech's ticket management system iTop.

#### **Data Integrity and Availability**

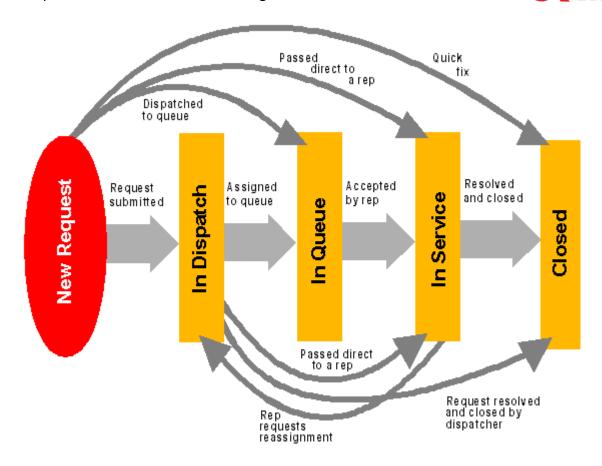
We would provide your representative with full back up and restore functionality in the event of database failure in the Web App administrative backend.

#### **Helpdesk Support**

We at Zaptech have internalized helpdesk mechanism for any query, troubleshooting or new change request.







# Following is the process for support request system with automated email notification for each stage of support request.

- Step 1 When new request is created, it is submitted to appropriate support as per the type of request selected with in dispatch status.
- Step 2 When in dispatched status, it waits for the service request to be assigned to queue.
- Step 3 When in queue status, it waits for the service request to be accepted by rep.
- Step 4 When accepted, it goes to in service status.
- Step 5 When resolved, the ticket is closed.

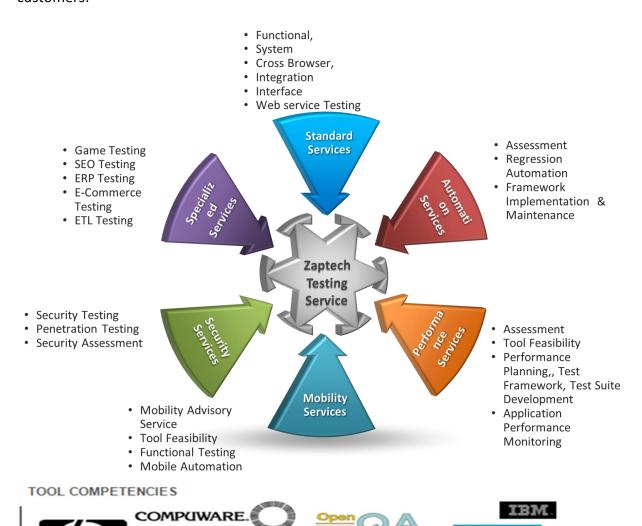




# **QA and Testing Services**

Testing is a distinct and independent service offering. Our testing methodology is developed as outcome of our experience of providing services to our clients. The testing organization at Zaptech comprises of a pool of dedicated testers who are domain-certified, subject matter experts, test automation experts and experts in industry best practices.

We leverage the following test capabilities to deliver the scope of testing services for its customers:







#### **Zaptech Scope of Services**

#### **Standard Testing Services**

Zaptech uses a combination of skilled software engineering teams, proven testing tools, and unique methodologies to rapidly deploy a full spectrum of testing solutions in a variety of situations. This includes new product/application development, application development, reengineering, enhancement, implementation, customization, and integration.

#### **Automated Services**

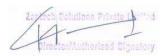
Zaptech test automation services are structured, holistic and tool agnostic. We implement a structured ROI driven approach to automation on with the founding belief to automate because it adds value and not because you can. Every test automation assignment is assessed for benefits and suitability of implementation and the ROI is derived. Based on the assessment, we select the right tool, the best framework and reporting mechanism. Combining all these factors, we create the best suited test automation strategy and implement it by applying proven best practices.

#### **Performance Testing Services**

Zaptech has a dedicated performance team to providing comprehensive performance testing solutions to its customers.

#### **Key Highlights:**

- Skilled and efficient resources with end-to-end capabilities from defining a performance testing approach, identification of appropriate tools and methodologies to setting up performance test factory
- Process metrics to provide quality services to its customers
- Capability to carry out performance test across technologies like e-Business, client server, mainframe, packaged applications and distributed components
- Capability to execute performance testing using various industry standard tools





#### **Our Services:**

Zaptech provides comprehensive performance solution for its clients due to its experience in handling the following types of performance testing and providing following offerings:

- Load Testing evaluates the capability of a system or application up to predefined goals
- Stress Testing evaluates the capability of a system or application up to saturation or breaking point
- **Volume Testing** load testing with varying volumes of system data to evaluate the impact on responsiveness and system utilization
- **Soak Testing** investigate the impact of load over long durations on responsiveness and system performance
- **Scalability Testing** evaluation of different elements of a system to determine its ability to handle changing and future needs

#### **Security testing services**

Zaptech has rich experience in Security Testing of enterprise applications, catering to diversified business needs. We offer a systematic process lifecycle aimed at enhancing the security posture of customers' web applications. Our approach is based on a comprehensive process to effectively identify vulnerabilities, validate and rate them and suggest appropriate remediation strategies

#### **Our Services**

**Security Testing**: Network security assessment of internal as well as external infrastructure of the corporate network to address vulnerabilities.

**Penetration Testing**: Uncover vulnerabilities in applications and ensures the application risks are minimized. Address the inbuilt securities of the application against the simulated attack Penetration testing of web application. This is primarily focused towards the Information security and is offered along with vulnerability-assessment and web/security testing.

