

Dynamic Website Design and Development for Teda Health Science College Proposal

Proposed by:

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Project title

Website design and development for Teda Health Science College.

Project Description

The project will involve designing a website for Teda Health Science College.

The website will be designed to the very highest standard and will reflect client name's established corporate identity.

We will use **Word-press** a secured open source content management system (CMS) which will allow you to easily add content such as products, text and images to the website with a minimum technical knowledge, within a tightly defined design framework.

We will design the site with Google in mind, using search engine optimization (SEO) in order to maximize the number of visitors to the site.

The advantage having website for the college

Now a days the need for college education institutions to a have a reliable, effective and attractive web presence is increasing as online technology is becoming an important part of the educational process. The college education institutions play a vital role in the development of a society while college education websites have many roles to fill. They need to provide information for prospective students, current students, staffs and departments. They often need to include remains of information in a way that makes everything easy to explore. One of the goals that can be achieved by authorizing a college website is to ensure that education provided by institutions of specific college meets acceptable levels of quality. And also now having a website is one of the criteria to compute and measure colleges.

This website is used to promote college activities online as well as provide information on its achievement and other programs, because it gives an identity to the college worldwide and can be accessible to anyone from anywhere. It also helps to maintain the record of college by having a detailed academic profile of each departments. Also the profile of the staffs is online within this website which helps the staff of the college as an evidence as they are the staffs of the college, and also it helps the CV for the scholarships. This website is primarily the sources of presenting the college objectives to the visitors and especially to those visitors who are interested in seeking information. It also aims to facilitate their prospective students and scholars by providing the proper

guidelines on the website to help them accordingly. Nevertheless, of equal importance, a college website should serve the non-commercial information that is the need of its current students and college. Information like about the daily events and procedures that happens within a busy college the website has a crucial role in such a case.

The website have a feedback form which is very easy to use, the Internet visitors could easily post feedback on college services and other related issues which they would not bother with telephones and letters. With the interactive feature of your website, you can willingly respond to the queries and issues and also since the website support multi-lingual functionality it can be access very effectively inside our country and the outside world.

Scope

We would undertake to do the following:

- Determine technical requirements
- Photoshop / Fireworks design of homepage look and feel & client suggestions. Up to 2 alternative look-and-feel versions are included in the quote.
- Graphics like Image and Banner Design.(Fundamental image, video and audio editing)
- Design of up to 30 interior pages.
- Security Configuration and Developing custom security plug-in
- Statistics analysis
- Coding and cross-browser testing of all templates.
- Pages to be coded to be SEO friendly.
- Downloadable links
- Staff directory
- Contact us forms
- Dynamic web pages
- Map of the college
- Backup mechanisms
- Server installation and configuration (Linux OS, Apache2 server and SQL server)
- Writing and editing content
- Updating website
- Solving code problems
- Database design
- Adding Multi lingual functionality (Design Amharic webpage layout) optional
- Theme customization

• Plug-in selection and Installation

Basic Features of the new website

Security

WordPress itself is a very secure platform. However, it helps to add some extra security and firewall to your site by using a security plugin that enforces a lot of good security practices.to do that we integrate security plug-in which reduces security risk by checking for vulnerabilities, and by implementing and enforcing the latest recommended WordPress security practices and techniques. Our security and firewall rules are categorized into "basic", "intermediate" and "advanced". This way you can apply the firewall rules progressively without breaking your site's functionality.

Below is a list of the security and firewall features offered in our integrated plug-in

User Accounts Security

- Detect if there is a user account which has the default "admin" username and easily change the username to a value of your choice.
- The plugin will also detect if you have any WordPress user accounts which have identical login and display names. Having account's where display name is identical to login name is bad security practice because you are making it 50% easier for hackers because they already know the login name.
- Password strength tool to allow you to create very strong passwords.
- Stop user enumeration. So users/bots cannot discover user info via author permalink.

User Login Security

- Protect against "Brute Force Login Attack" with the Login Lockdown feature. Users with a certain IP address or range will be locked out of the system for a predetermined amount of time based on the configuration settings and you can also choose to be notified via email whenever somebody gets locked out due to too many login attempts.
- As the administrator you can view a list of all locked out users which are displayed in an
 easily readable and navigable table which also allows you to unlock individual or bulk IP
 addresses at the click of a button.
- Force logout of all users after a configurable time period
- Monitor/View failed login attempts which show the user's IP address, User ID/Username and Date/Time of the failed login attempt
- Monitor/View the account activity of all user accounts on your system by keeping track of the username, IP address, login date/time, and logout date/time.

- Ability to automatically lockout IP address ranges which attempt to login with an invalid username.
- Ability to see a list of all the users who are currently logged into your site.
- Allows you to specify one or more IP addresses in a special whitelist. The whitelisted IP addresses will have access to your WP login page.
- Add captcha to WordPress Login form.
- Add captcha to the forgot password form of your WP Login system.

User Registration Security

- Enable manual approval of WordPress user accounts. If your site allows people to create their
 own accounts via the WordPress registration form, then you can minimize SPAM or bogus
 registrations by manually approving each registration.
- Ability to add captcha to the WordPress user registration page to protect you from spam user registration.

Database Security

- Easily the default WP prefix to a value of your choice with the click of a button.
- Schedule automatic backups and email notifications or make an instant DB backup whenever you want with one click.

File System Security

- Identify files or folders which have permission settings which are not secure and set the permissions to the recommend secure values with click of a button.
- Protect your PHP code by disabling file editing from the WordPress administration area.
- Easily view and monitor all host system logs from a single menu page and stay informed of any issues or problems occurring on your server so you can address them quickly.
- Prevent people from accessing the readme.html, license.txt and wp-config-sample.php files of your WordPress site.

.htaccess ,wp-config.php, File Backup and Restore

- Easily backup your original .htaccess and wp-config.php files in case you will need to use them to restore broken functionality.
- Modify the contents of the currently active .htaccess or wp-config.php files from the admin dashboard with only a few clicks

Blacklist Functionality

- Ban users by specifying IP addresses or use a wild card to specify IP ranges.
- Ban users by specifying user agents.

Firewall Functionality

This plugin allows you to easily add a lot of firewall protection to your site via htaccess file. An htaccess file is processed by your web server before any other code on your site. So these firewall rules will stop malicious script(s) before it gets a chance to reach the WordPress code on your site.

- Access control facility.
- Instantly activate a selection of firewall settings ranging from basic, intermediate and advanced.
- Enable the famous "5G Blacklist" Firewall rules courtesy of <u>Perishable Press</u>
- Forbid proxy comment posting.
- Block access to debug log file.
- Disable trace and track.
- Deny bad or malicious query strings.
- Protect against Cross Site Scripting (XSS) by activating the comprehensive advanced character string filter. Or malicious bots who do not have a special cookie in their browser.
 You (the site admin) will know how to set this special cookie and be able to log into your site.
- WordPress Pingback Vulnerability Protection feature. This firewall feature allows the user to prohibit access to the xmlrpc.php file in order to protect against certain vulnerabilities in the pingback functionality. This is also helpful to block bots from constantly accessing the xmlrpc.php file and wasting your server resource.
- Ability to block fake Googlebots from crawling your site.
- Ability to prevent image hot linking. Use this to prevent others from hot linking your images.
- Ability to log all 404 events on your site. You can also choose to automatically block IP addresses that are hitting too many 404s.
- Ability to add custom rules to block access to various resources of your site.

Brute force login attack prevention

- Instantly block Brute Force Login Attacks via our special Cookie-Based Brute Force Login Prevention feature. This firewall functionality will block all login attempts from people and bots.
- Ability to add a simple math captcha to the WordPress login form to fight against brute force login attacks.
- Ability to hide admin login page. Rename your WordPress login page URL so that bots and hackers cannot access your real WordPress login URL. This feature allows you to change the default login page (wp-login.php) to something you configure.
- Ability to use Login Honeypot which will helps reduce brute force login attempts by robots.

WhoIs Lookup

Perform a Who Is lookup of a suspicious host or IP address and get full details.

Security Scanner

- The file change detection scanner can alert you if any files have changed in your WordPress system. You can then investigate and see if that was a legitimate change or some bad code was injected.
- Database scanner feature can be used to scan your database tables. It will look for any common suspicious-looking strings, JavaScript and html code in some of the WordPress core tables.

Comment SPAM Security

- Monitor the most active IP addresses which persistently produce the most SPAM comments and instantly block them with the click of a button.
- Prevent comments from being submitted if it doesn't originate from your domain (this should reduce some SPAM bot comment posting on your site).
- Add a captcha to your WordPress comment form to add security against comment spam.
- Automatically and permanently block IP addresses which have exceeded a certain number of comments labeled as SPAM.

Front-end Text Copy Protection

• Ability to disable the right click, text selection and copy option for your front-end.

Regular updates and additions of new security features

WordPress Security is something that evolves over time. We will be updating the All In One WP Security plugin with new security features (and fixes if required) on a regular basis so you can rest assured that your site will be on the cutting edge of security protection techniques.

Works with Most Popular WordPress Plugins

• It should work smoothly with most popular WordPress plugins.

Additional Features

- Ability to remove the WordPress Generator Meta information from the HTML source of your site.
- Ability to prevent people from accessing the readme.html, license.txt and wp-configsample.php files
- Ability to temporarily lock down the front end of your site from general visitors while you do various backend tasks (investigate security attacks, perform site upgrades, do maintenance work etc.)

- Ability to export/import the security settings.
- Prevent other sites from displaying your content via a frame or iframe.

Contact us form

If you visit a number of websites around the internet, it is very likely that the majority of those website will have a contact form. A contact form is basically a set of questions filled out on the webpage by your visitor that is automatically sent to your email when it is filled out.

A contact form can be used for just about anything you can think of but here are a few examples of reasons to use a contact form:

- **Feedback**: This is a contact form that is used for general comments from your visitors
- Questions: This form allows visitors to contact you with various questions they may have relating to your business
- **Service/ Information Request**: If your business sells a service, or product your customers can use this to inquire more information.

Some of the major benefits to using a contact form:

- 1. **Spam** Placing your email address on a contact page allows spam bots to find it and greatly increases the amount of spam you receive.
- 2. **Appearance** A contact form simply looks more professional than slapping your email address on a page. You want your website to look as nice as possible, right?
- 3. **User friendliness** Why make the user open their email client, cut and paste your email address, open a new message and compose an email? Think how much more convenient it is for them to just fill out a form and hit "Submit". What if they're not using their own computer, and they don't have a web-based email account? They'll have to remember to visit your site again once they have access to their email account.
- 4. **Accurate delivery** Your contact form can have a drop-down menu of all the departments in your organization. The user chooses the department they want to contact and their email is sent there. If you just list the email addresses of 30 departments or employees on your contact page, lazy users are going to email either the first address they see or maybe even all of the addresses on the list rather than search for the correct department or employee.
- 5. **Convenience** With a form, you can control the subject line of the emails users send you, you can control the email address those emails are sent from. You can store the emails you receive in a database in addition to receiving them via your email client. All of this will make

it easier for you to find specific emails, search them, gather statistics on your users and keep better track of who is contacting you and why.

Multi-lingual

A multilingual website helps expand a business. If you are currently operating only in your local market and you have intentions of gaining customers from around the world, using professional translation as a marketing tool is a wise move. Providing local versions of your website helps generate awareness and interest from your target audience abroad. You can do this by employing an efficient translation service that would translate your web content into different languages. People prefer to browse websites -- whether for obtaining information or buy goods and services -- that are in their own languages. English may be the universal language but it sure does not work for everyone. Websites in local dialects are becoming more appealing to a variety of Internet users from around the world. If you want to touch base with this market, maintaining a multilingual website would be the best way to go. A multilingual website enjoys a more impressive traffic. Since a greater percentage of Internet users prefer to browse websites that speak in their own language, you can expect lots of visitors coming in and out of your website. A heavy Internet traffic means an impressive amount of revenue on its own. You can capitalize on that to earn from online advertisements and gaining affiliates as well. Building a multilingual website helps build your company's credibility on the Internet arena. A high quality translation service does not come free of charge. In that sense, you will gain respect from your users. They will have confidence in you knowing that you are willing to invest a fairly good amount for their comfort and convenience. That kind of confidence, trust, and respect could be translated into increased sales and bigger revenues in the long run.

Map

The easiest to use Google maps plugin! Add a customized Google map to your WordPress posts and/or pages quickly and easily with the supplied short code. No fuss. No iframes and super easy to use! Perfect for contact page maps, routes, maps showing delivery areas and any other use you can think of!

While the free version of WP Google Maps allows you to create a Google map with as many markers as you like, the Pro version allows you to do so much more!

The Map allows you create custom Google maps with high quality markers containing locations, descriptions, images, categories, links and directions.

- The most popular Google Maps plugin on WordPress
- Super easy to use, no coding required!
- Create as many map markers as you need by simply typing in the address

- Responsive maps
- Edit your map markers with the click of a button
- 9 popular map themes to choose from
- Create or add your own map theme
- Drag map markers to an exact location
- Google Maps Street view supported
- UTF-8 character support
- Map widget functionality
- Support for localization
- Choose from four Google maps types: roadmap, terrain, satellite and hybrid
- Define your own width, height and zoom level for your Google Map
- Add animations to your map markers!
- Store locator functionality
- Restrict a store locator search by country
- Add Polygons to your Map
- Add Polylines / Routes to your map
- Create a map in less than a 30 seconds!
- Right click to add a marker to your Google map
- No advertising or links
- Google Maps Autocomplete
- Google Maps Transport Layer
- Set the max zoom level for your map
- Serve your map marker data via your database or an XML file
- Compatible with caching plugins
- Compatible with Cloud fare
- Latest Google Maps API (V3.14, V3.15 & V3.exp)

Statistics

A comprehensive plugin for your WordPress visitor statistics, come visit us at our <u>website</u> for all the latest news and information. Track statistics for your WordPress site without depending on external services and uses arrogate data whenever possible to respect your user's privacy. On screen statistics presented as graphs are easily viewed through the WordPress admin interface.

Features

• Online users, visits, visitors and page statistics

- Search Engines, see search queries and redirects from popular search engines like Google, Bing, DuckDuckGo, Yahoo, Yandex and Baidu
- Overview and detail pages for all kinds of data, including; browser versions, country stats, hits, exclusions, referrers, searches, search words and visitors
- GeoIP location by Country
- Support for hashing IP addresses in the database to protect your users privacy
- Interactive map of visitors location
- E-mail reports of statistics
- Set access level for view and manage roles based on WordPress roles
- Exclude users from statistics collection based on various criteria, including; user roles, common robots, IP subnets, page URL, login page, RSS pages, admin pages, Country, number of visits per day, hostname
- Record statistics on exclusions
- Automatic updates to the GeoIP database
- Automatically prune the databases of old data
- Export the data to XML, CSV or TSV files
- Widget to provide information to your users
- Short codes for many different types of data in both widgets and posts/pages
- Dashboard widgets for the admin area
- Comprehensive Admin Manual

A Mobile-Ready Version

Smartphones and tablets are <u>driving an increasing amount of web traffic</u>, and the numbers are only going to grow as mobile devices become cheaper and more mainstream. Andy Chu, director of <u>Bing for Mobile</u>, says <u>70% of task completion</u> happens within one hour on mobile sites, meaning that people are often browsing on the web with intent — they're looking to do something, buy something or go somewhere. If someone searches for a restaurant on his smartphone, he's likely to eat at that restaurant within the hour, says Chu. So your website better be readable on handheld devices.

"Until two years ago, designing for the web meant designing for a computer, now it means designing for anything with an internet connection," says Frankel, referring to laptops, tablets and smartphones, all of which have different screen sizes. So, how can you do it? Responsive design.

Responsive website design enables you to use fluid widths, so that your website layout will adapt to the screen on which it's being browsed. You can enter HTML code so that your sidebar takes up, say

20% of the screen width, and the remaining 80% is reserved for the body of your website. Layouts are adjustable and images are scalable to make for a better web experience on myriad devices.

Social network integration

<u>Twitter</u>. <u>Facebook</u>. <u>Tumblr</u>. <u>YouTube</u>. <u>Pinterest</u>. <u>Google+</u>. <u>LinkedIn</u>. <u>Instagram</u>. <u>Foursquare</u>. There are a lot of social platforms out there, and you should promote your presence on them on your website, because social media is critical part of marketing your business. Though not a traditional business, digital savvy <u>Team Coco</u> does a great job promoting its many social channels on the website.

Integrating these platforms into your website will help boost your SEO, improve your business' footprint on the social web and build your following across numerous social platforms. Is it worth it to maintain a presence on *so many* social platforms? Yes — as long as you actually *maintain* your content, you'll keep your brand top-of-mind and keep users engaged.

User friendly interface

A map is useless without a legend and a website is useless without clear navigation. Make sure you use easy-to-understand and logical names for the various pages of your site — contact, about, FAQ, etc. Being clever or cryptic will just be a turnoff for users.

When developing your navigation strategy, you should consider a call to action. What is it that you want people to do on your site? Place an order? Email for a quote? Become a member? Come to your brick-and-mortar store? Call to speak with a customer service rep? Make your goals clear and obvious.

Staff Directory

- Advantage of Staff Directory is to give information about the staff of the university. Those
 information includes
 - o Job Title
 - Academic profile
 - o Publications
 - Research interest
 - Activities
- It also uses as a reference for scholarship and different job opportunities.

System Requirement

System feature

• Processor family (optional)

Intel® Xeon® E5-2600 v3 product family; Intel® Xeon® E5-2600 v4 product family

• Number of processors (optional)

1 or 2

• Processor core available (optional)

22 or 20 or 18 or 16 or 14 or 12 or 10 or 8 or 4

• Form factor (fully configured) (optional)

5U Power supply type

- (4) Common Slot (optional)
- Expansion slots (optional)
 - (9) For detail descriptions reference the Quick Specs

Memory

Memory, maximum (optional)

1.5TB

Based on 64GB DDR4 RDIMM

Memory slots (optional)

24 DIMM slots

Memory type (optional)

DDR4 Smart Memory

Storage

Drive description (optional)

- (24) LFF SAS/SATA/SSD and
- (48) SFF SAS/SATA/SSD
- NV Me support via Express Bay will limit max drive capacity

Controller Cards

Network controller (optional)

- 1Gb 331i Ethernet Adapter 4 Ports per controller
- Embedded 4-port NIC controller

Storage controller (optional)

- Smart Array P440ar/2GB FBWC and/or
- Dynamic Smart Array B140i
- Depending on configuration

Server management

ILO Management (standard), Intelligent Provisioning (standard), ILO Advanced (optional), HP Insight Control (optional)

It better to host on tele because

- ➤ To host the website in the college it needs to have well organized data center/ network which have devices like firewall and so on.
 - ❖ Generally it is recommended to host the website on Tele Portal because they have full network ,storage and also power infrastructures than others, then try to buy domain, host server on tele port for yearly payment with in a free five (5)email account accessibility otherwise if you request to host in university of Gondar there is additional fee incurring.
 - ❖ N.B:- best server to host for the website is HPE ProLiant ML350 Gen9 Server.

Software requirements

To host the website based on the above hardware requirements we need to have the following software requirements:

- o Linux Ubuntu or debian operating system with latest version
- WordPress content management theme
- o Plugins
- o PHP version 5.2.4 or greater
- o MySQL version 5.0 or greater
- o Perl version 5.0 or greater

Cost estimation

Project Phases	Tasks	Estimated
		Cost(Birr)
Project Establishment	• Document Development – Business case, Project brief	3,000
	(technical, content and creative requirements) budget	
	and timeline	

	Internal review, resource and approval Droft project plan	
	Draft project plan	
Specifications	Technical specification	5,000
	 Functional specification 	
	 Creative specification 	
	• Content plan	
Tender and Appointment	Advertise	2,500
	• Evaluate	
	• Appoint	
	Contract manage	
Content	Content Audit	6,000
Content	 Identification of content custodians 	0,000
	 Gap Identification and Content Creation 	
	 Information architecture 	
	Site map	
	2.00 mg	
Design and Development	• Site design	27,000
	• Interface design	
	 Navigation and Information flow 	
	 Database and Forms design 	
	• Content migration	
	Multimedia development	
	 Additional functionality 	
	• Initial testing	

Integration and Quality	Technical testing	4,000
Assurance (QA)	Browser and platform testing	ĺ
	 Interface 	
	Usability	
	Accessibility	
	Integration	
	• Security	
	Security	
Launch and Handover	• Launch	8,000
	 Project Documentation 	3,000
	Project Completion	
	Training	
	Training	
Maintenance	Ongoing management	5,500
TVIAITICE IIIII	 Regular link check and maintenance 	3,500
	 Internet email management 	
	Disaster recovery planning and redundancy Training	
	• Training	
	Upgrade planning	
Review and Evaluation	Website statistics	7,000
	 Periodic usability testing 	.,
	 Periodic accessibility testing 	
	 Focus group testing 	
	Project evaluation and review	
	Total Estimated Cost:	68,000 birr
	Total Estimated Cost.	50,000 0111

Teda health Science College expected expense cost

As we explained in the above we recommend a website to be host on Ethio Telecom Portal And from two of one are efficient and suggested as a technical Expert so

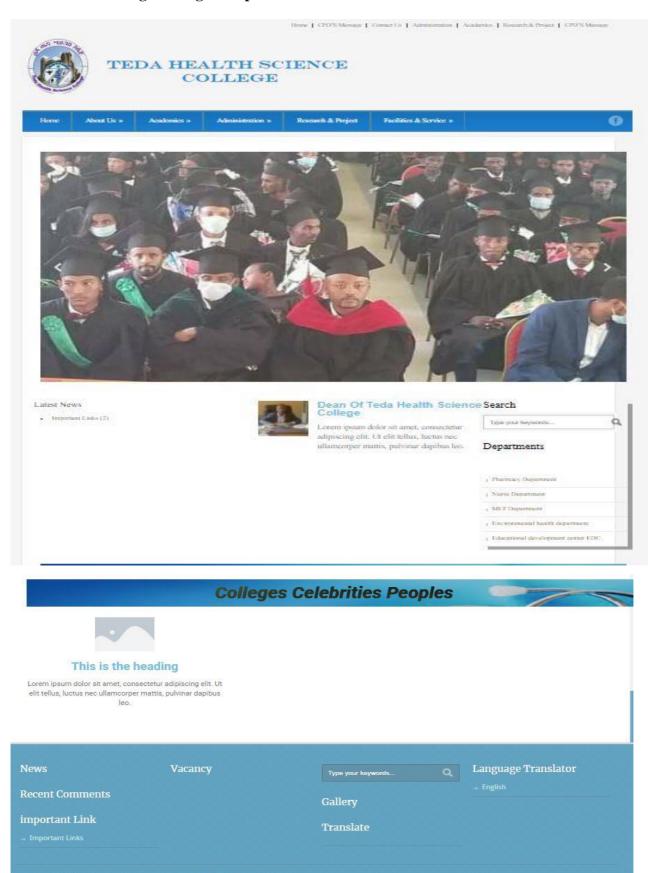
title	Reason	Cost and type
Web hosting	DNS and Hosting	Linux Gold 50GB storage and Unlimited Bandwidth 5 Database and 25 Email Account 1 Free Domain For 1 year 15 subdomain and Free SSL 5 website hosting and Plesk Control Panel ETB 3,800.00 Annually Linux Platinum 100GB storage and Unlimited Bandwidth 10 Database and 90 Email Account 1 Free Domain For 1 year Unlimited subdomain and Free SSL 10 website hosting Plesk Control Pane ETB 5,200.00 Annually

If Teda health Science College wishes Gondar University to go forward with the project, here is the schedule for payments of the fee:

- 50% due upon acceptance of the proposal before work commences
- 25% due upon delivering the completed design with the content management system in place 25% plus any incurred additional hourly fees no later than 30

days from when the completed design was delivered to Teda health Science College.

Design College Sample



Summary

Teda health science college seeks a website development firm to strengthen its web presence, to improve its capacity to easily edit content, and to improve its ability to communicate with current and prospective visitors, local and other worldwide stakeholders and we offers extensive design and development experience with college website, including university of Gondar, and proposes developing a complete yet lightweight and flexible site structure, enabling teda health science college to meet its needs while refreshing the website's design, improving the way the brand is communicated online (both on the website and on social media and other interactive spaces), and building user and stakeholder value.

Generally the college use this website as a tool to achieve its mission and vision by ascertain contact with the institution, partners of the college and university, bring college updates, accomplishments and issues to the readers, hunt monetary assistance through networking, harness journalistic skills among the students/staffs and also maximize utilization of the internet and information Technology.