



CASE STUDY

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Background

Today, the news came in from International Society for Technology in Education (ISTE 2010) conference in Denver that <http://www.thinkfinity.org/> was declared as the 'Best in Tech' website of 2010 by Scholastic Administrator magazine. This is one of the sites that Zigron developed from scratch: We developed its outlook, interface and technical design including CMS development and integration, Web 2.0 applications and widgets, UX designs, configuration management and project management. Let us explore how the site was developed, and what was the cutting edge that enabled it to become the best out of the best.

Thinkfinity is a non-profit organization founded by Verizon Inc (a major American broadband and telecommunications company) and is devoted to providing the free services to the educators by offering standard-based, grade specific, K-12 lesson plans and other student interactive activities provided in partnership with many of the top education and literacy experts and organizations in the US.

Challenges

The profession of teaching and any activity associated with it demands an extreme level of care and responsibility and we proved ourselves to be capable of handling this trust when Zigron was awarded the contract of the development of Thinkfinity's official website.

Where a usual perception about thinkfinity.org would be to be a normal, everyday site with usual 'stuff', our highly talented business and technical team viewed it as a mission to bring out such a site that will truly service the educational endeavors taken out by the dedicated educators in US. By assigning the top-notch project and highly experienced manager, our team for the thinkfinity.org project got all set to develop a state-of-the-art and a modern-age website. It was figured out that to rise above the rest and to provide such an experience to the user that will make educational encounter being felt like healthy entertainment, the site must be highly interactive and in a way, should speak to the user and help her¹ all the way from the moment she enters the site to the point where she logs off as a very pleased person after benefitting from the store of its huge resources. In fact, contemplation took place to find a manner and the format so that a user may be able to find all those resources that concern her and she may never miss anything that could be of use to her but couldn't be found merely because of the designing flaws in the site.

Accomplishments

To fulfill these requirements, it was figured out that data should be accessible to a user in many different alternatives and must be presented in such a way that she may never feel even a slight bit of confusion while going through any of the format. The general formats through which a user may explore different resources of thinkfinity.org are summarized below:

- **Calendar:** A user can go to the calendar feature that could be classified by year, month, week and day to see what series of events occurred on any day of any month and year. She can go back or forward to any year, month, week or day and observe the relevant entry of the historical events against her preferred day. The summary is

provided in a tooltip and detail can be found by clicking on that day. In short, we presented the historical facts (that are conventionally thought of as a dry subject matter) in an interactive, engaging but enjoyable format.

- **Flash:** Upon entering the site, a user can easily see the flash strip that is showing the highlights of the activities concerning Thinkfinity's scope of interest. The strip is dynamic with highlights changing automatically after a few intervals. The user can either pause on any one highlight or can also click on it to view its further details.
- **Feature Archive:** The section of Feature Archive is also an interactive section of thinkfinity.org which displays all the included specialties/events of a given month in a given year that can be selected by the user from a drop-down menu.
- **Widgets:** To make the content of thinkfinity.org more interactive and easily accessible for its visitors, a user can embed the special widgets containing the material from the databases of Thinkfinity in her profiles from online social activity websites like Facebook or MySpace or in her own website/blog. With this, a visitor browsing through a profile or blog of that user would be able to access the rich resources of thinkfinity.org. The widgets are available for Thinkfinity's features, calendar, search and resources.
- **Page Hierarchy:** thinkfinity.org is designed to facilitate the user to a maximum possible extent. The menu is hierarchical, with all the items of sub-menu appearing if a mouse is paused on any given item of the main menu. Wherever needed, the second level sub-menu is further categorized to a third level to contain any necessary information. This way, user gets the glimpse of everything and chance of getting strayed from her actual objective is minimal.
- **Video Collection:** We have also integrated a video portal within thinkfinity.org that features a collection of relevant videos being playable within the site.
- **Interactive Map:** We provided a map of US featuring all 51 states with distinction between the states where Thinkfinity and its partners are operational and where it has yet to start its operations. A summary of a state is displayed right on spot if the mouse pointer is paused on that state. On selecting it, the selected state becomes prominent and its relevant information is displayed on the same page.
- **Content Partners:** The content from the partners of Thinkfinity is also displayed in a suitable manner and can also found through search if needed (by setting the search options).
- **Generic Search:** A user can use our highly interactive and easy-to-use search feature to find anything related to Thinkfinity and its partners. The search can be classified according to various options at the disposal of the user. Also, the search page is capable of showing a summary of a search result right beneath it so that a user may get an idea of the page right there instead of going on a separate page and then closing it in disappointment if that page is not what she is looking for.
- **RSS and Sharing Features:** A user can subscribe to thinkfinity.org RSS feeds to get

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the latest of what's going on in the Thinkfinity's world. Also, the user can share any page of the website with her friends and family through her email, Facebook or Twitter accounts and other popular options. Also, thinkfinity.org is equipped with RSS reader which displays the RSS feeds of Thinkfinity's partners if sought by the user.

- **Thinkfinity Blog and Community:** To involve the users, thinkfinity.org Blog is a place where users can post their thoughts or respond to any article already posted. All interactive options like sharing any particular post are available. Additionally, widgets from Facebook and Twitter displaying the content of Thinkfinity's profile over these sites are provided. The concept of Thinkfinity Community provides for the interested individuals to gather at a common platform to share ideas and devise ways to improve their functioning in the education sector. The website caters to such communities' pages so that a user may be able to go through a community of her liking in a placid manner.

The implementation of features like these have helped us make a highly interactive site that albeit having a large amount of data is really easy to browse through. And this is not it, the work of our highly gifted engineers and developers can be elaborated by some statistics: Presently, the thinkfinity.org servers are hosting about 8.5 GB of data (with 1 – 2 GB of data being added on weekly bases), more than 2000 registered users (with about 100+ users registering on daily bases) and thousands of unregistered users. Even with such a heavy load, there is no delay in page reload and respond time is less than a second. Also, the load testing revealed that thinkfinity.org can bear at least more than 1200 concurrent hits, thanks to the load balancing techniques employed by the project architects.

Tools and Technology

The technology and software used for the project are as follows:

- Language: PHP 5.2.13
- Database: MySQL 5.0.77
- Web Server: Apache 2.2.3
- Environment: Red Hat Enterprise Linux Server 5.3
- CMS: Drupal 6.0
- JavaScript/AJAX: JQuery

Conclusion

The sites with similar purposes like those of thinkfinity.org may already be there in the market but we are proud to say that thinkfinity.org is the first of its kind that fulfills all purposes of Thinkfinity in such an interactive manner with all the necessary tweaks, tooltips, widgets, designs and information distribution as are the conventions of Web 2.0. Our customized developed version of Drupal CMS lets an administrator create the pages of exact design and carrying exact features and widgets that an already created page of her selection possesses. This is done even more easily than someone registering for an email account. Similarly, the administrator can add any date of any year for a historical event in History Timeline Calendar

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i.e. our calendar feature is unlimited. For example, she can even put historical events of the medieval ages, like about St Scholastica Riot of Oxford in our developed calendar in the Year: 1355, Month: February and Day: 10.

www.thinkfinity.org is the living proof of what Zigron can achieve through the application of its ideology and traditions of software development. Our ideology is simple (and an important reason for our success): to make a product which can be used without much of a hassle, which can function for the perfect service of our client and which makes a user fall in love with it. This ideology combined with the invaluable intelligence and experience of our professionals and our traditions of undergoing a project through our Zigron Agile Development Methodology (based on world-renowned processes like SDLC and CMMI) have always delivered a product that is created to be the best out of the best and to establish a trend that others follow.

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