Designing a SCLM

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Abstract – **Technology introduced many new ways of teaching and certainly shaped the history. The way how we present and deliver the learning material varies in many ways. The transition went from traditional classrooms, to presentations, smart boards and finally website teaching. Being aware that we all learn in different ways, web courses and e-learning integrated many techniques to satisfy all the conditions. The design of such courses requires various skills such as programming and graphical design. There are many development platforms created for this purposes and all of them require time and hard work. In this paper, we will talk about the tools used for designing web courses as well as how to be successful in web teaching.**

Index Terms – Shift Learning, Adobe, Visual Basic

Introduction

The technology progression and our awareness that learning techniques provide different results led to the transition from chalk boards to digital boards, web portals, etc. There are many reasons why this new techniques became popular and certainly some of them are availability, scalability, quality and efficiency of this method.

Everything started in 90's as Internet became more and more popular. Teachers realized that there are more efficient ways to learn students about different topics. Companies created e-learning sites to train employees, school offered interactive material for students. Moreover, this material is available to everybody and any time. Rich-full animations did much better job in explaining and illustration material and can be repeated over and over. So, the popularity is reasonable if we look at the efficiency of this learning technique.

This popular trend made people to create better software platforms and tools for developers. Consequently, new type of industry is born. Programming languages such as HTML, CSS, Java Script and PHP are some of the most common languages for developing Web teaching material. Today, we have tools which are able it produce the code for us while we do the design in PowerPoint manner. Some of the popular tools are Dream Viewer, Adobe Photoshop, Shift Learning, etc. There are many generic templates available which only need to be filled with the text. Some of them require the minimum skill.

Designing Tools

The first available tools where solely based on programing. The markup languages created for easier design improved over time and continue to offer various options for the user. Even thou these languages are much easier for programming comparing to functional and OOP languages, they require experience, knowledge and time. People demand more convenient tools which ordinary people can use to create the websites. Instead of using simple code editors, we created Integrated Development Environments (IDEs) which are collection of tools in one software and much more powerful. Some of them are Visual Basic created by Microsoft and Adobe Premier. They offer much more user friendly creation and lot of functions already implement. Drag and drop style for buttons, text box and other useful things makes our life easier. The basic concept of these IDEs is to make development easy in a sense of design layout, debugging, code complexity, stability and troubleshooting. However these tools are expensive which is major drawback.

People formed online communities to help each other in design learning. More experienced users are answering questions from newbies at no cost. This kind of support means a lot and most of the time it is a starting point for new users.

The popularity of interactive learning website increased even more by the fact that people can use templates to create web sites only by entering text and make minor changes. In this way, no programming is required and the final

product can look amazing. Of course the drawback is the customization and uniqueness.

Currently one of the most popular ways to create learning website are web application such as SHIFT Learning. Specialized in e-learning development, Shift Learning offers fully functional 15-days trial with unlimited support. After that, user needs to purchase the license. To be sure that customers are satisfied and that they are able to use offered tools, Shift Learning formed Shift Campus Academy. At this place, people can learn from tutorials how to use tools necessary from development of web courses. Live chat is available, too.

Recommended Design

As we talked about different teaching techniques we realized that they differ from each other greatly but there are some universal rules for creating and displaying learning materials. The same as with PowerPoint presentations, we must be careful with font size, wordiness, color, design contrast, etc. Sometimes, developers lost them self in designing process and forget the students and learning content is the most important. The rest is a supplement.

We must provide options which will make navigation easier. Students must be able to control the environment, yet the limitation must exit.

The material should be separated into modules and after every module students should be tested. The progress bar should be displayed clear so that the student knows what to expect. Student respond can be a text or multiple chose answers and there is certain requirement which student needs to accomplish in order to reach next level and unlock the next module.

What is completely new is that with the web course teaching we have to be sure that the content is available and protected if necessary. It sounds easier than it is but many problems can occur which can cause the website to be disrupted. Of course if the website needs to keep track of the student's progress, we must protect the accounts and preserve the integrity.

The website must be optimized for all major web explorers and devices such as tablets, phones, etc. This is one of the greatest advantages of web site learning modules because students can watch it anywhere and anytime.

Web Site Recommendations

The most important quality of teaching is the transfer of knowledge. Teacher must be able to measure learning by implementing quizzes or puzzles. This will effectively keep student's attention. Moreover, the feedback which website can provide is a great advantage. Students must be able to navigate

back and forth between the lectures. By doing this, they can find the answers, and more deeply understand the problem.

Every idea must be presented in textual and visual manner. In this way, both type of learner can benefit. Examples can be presented in videos or using animation. Good practice is to include many difficulty levels and challenge the students. In this way, they can really master the material. Collaboration between students can be accomplished using chat rooms. Occasionally, the teacher should answer the questions and clarify the material.

Course Web sites must be dynamic, adaptive and easy to edit. The creator must get the feedback from students and implement changes on weekly basis. Two-way communication is mandatory for success. There are many ways how developer can test the design and learning content. The most precious is the student feedback.

Conclusion

Technology forever changed the way we live. It certainly affected the way how we present learning material. Beside conventional teachings and presentations, we now use web sites to increase the learning efficiency. There are many advantages of this method comparing to others and some of them are availability, design, automaticity and scalability. The progress did not skip to influence the way we develop these kinds of learning platforms, so from writing code in editors, we now use much powerful IDEs and web applications. They are easier, time efficient and offer tools for better learning experience.

The future will bring many new ideas and hopefully increase the learning curve. The whole point of having different learning techniques is to increase the transfer of knowledge and we should not forget about that.

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