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TOPIC:

“DEVELOPMENT OF A WEB PORTAL USING THE FRAMEWORK LARAVEL AND BOOTSTRAP FOR THE TOURISM DISSEMINATION OF THE FABRICIO'S HOSTERY IN THE PARISH OF AMBUQUÍ”

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DEVELOPMENT OF A WEB PORTAL USING THE FRAMEWORK LARAVEL AND BOOTSTRAP FOR THE TOURISM DISSEMINATION OF THE FABRICIO'S HOSTERY IN THE PARISH OF AMBUQUÍ

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Abstract. New technologies, together with the Internet and information, created a new possibility to advertise and disseminate to companies or institutions through websites. In reality, the Internet is changing the way companies function, as well as how people work because of the fundamental role that information plays.

One of the problems in tourist sites is the lack of a means of tourist diffusion, which makes it difficult for it to be recognized and therefore does not allow it to excel economically; As well as the way in which the information is handled that is received and is issued, giving a regular service to the clients.

The purpose of this research is to develop a web portal that allows the Inn Fabricio's to spread tourism, as well as to help in the processing of the information of the services that they provide, making use of the Laravel framework that is written in PHP language and Bootstrap that serves to couple To any device.

Keywords

Diffusion, Laravel, Bootstrap, Technologies, Internet, Website, Inn.

1. Introduction

At present, tourism is part of the "first economic sector at a global level, with 12 percent of the world's Gross National Product estimated to be generated by tourist activities" (Antoni, 2013, p.27).

In Ecuador, Imbabura province, Ibarra canton, Ambuquí parish, is the Fabricio's Hosteria, legally constituted tourist site, meets all the norms and requirements necessary for its operation, is affiliated with the Chamber of Tourism of Imbabura (Zabala Arteaga, 2012).

With the perspective that the tourist activity constitutes an alternative of development, the hostel taking advantage of as opportunity the specialization or segmentation of tourism, offering new services among others. In this context the tourist sites are opting in the promotion and tourist diffusion for which it has adapted to the changes of the society of the knowledge betting by the new technologies of the communication and the information and, more specifically, by the digital communication As the most suitable platforms to present their tourism products to the world. Being also the main task of the software its tourist diffusion, automation in the manual processes and streamlining in the decision making on the part of its administration.

The massive use of intelligent devices to know and perform daily tasks (INEC, 2013) is a fundamental point for the realization of solutions that counteract the problem of tourist diffusion and process automation of the inn. It is also necessary to highlight the increase of people who access the internet and its tourism offers.

The continuous advancement of technology has allowed any website to be able to adapt to a device of low or high cost that are available to most low-middle-level people, speaking economically and making it vital for the education process (Alcázar Ponce, 2012)

The Laravel framework is written in PHP language and is open source, is oriented to the development of web applications, which in addition its components are based on other frameworks such as; Symfony, codeigniter. And due to its modularity, scalability, and robustness characteristics, it is among the main frameworks used by developers and requested by companies (Murthy, 2015).

The Bootstrap responsive design framework is designed to quickly and easily build dynamic web sites and dynamic web applications, making the website adaptable to all mobile devices. Due to its system characteristics, HTML5 and CSS3 support, Bootstrap license and documentation, is one of the best layout frameworks used by developers and companies (Solis, 2014).

The integration of the frameworks Laravel and Bootstrap, is a combination that allows to develop projects of robustness, clean, intuitive and adaptable,
picks the best of each one and among the great advantages of this type of applications we can emncionar that they are developed with languages web; PHP, HTML5, CSS3 and Javascript, and can be distributed on web platforms; XAMPP (Surguy, 2013).

This research is based on the development of a web portal that is the starting point where a user can access any type of information; As well as the entrance to the different processes carried out by the inn. This would improve the increase of people visiting the hostel and the efficiency in the use of the services offered by this tourist site, would also achieve savings in resources of time, money and help improve in appearance with competition from other places Tourism that exists in the area, positioning the hostel among one of the first of excellence in service.

2. Materials and Methods

For the project development we used the NetBeans development environment with extensions for PHP support, and in parallel the Atom text processor with plugins for JavaScript language support, for the Bootstrap framework view and a base management system PostgreSQL data, each for coding the web system and adapting to the size of any device.

With these tools, the web portal has five modules, together with authentication, taking into account that in the area of content management can not create and delete their information (Colimba, 2016).

After the analysis, the design phase included UML usage and artifacts such as use cases.
According to XP each iteration will have a deliverable in which the client will be able to interact with the system and if there is any inconvenience then correct it, for that it must take out the pertinent information, this is how the acceptance tests are used.

2.1 System Architecture

For the development of the web portal, it has been established to follow the architecture model MVC (Model Vista Controller), since it treats separately the data, the business logic, and the user interfaces; Thus achieving quality software.

To explain a little more about the MVC architecture pattern, we will explain each of its layers:

• Model. - It is that layer where all the data corresponding to the application work. It also manages all access and modification of information.

• Controller. - It has all the necessary code to respond to the requested actions of the application.

• View. - It presents the different user interfaces that will be used in the application. These are presented using Bootstrap using HTML5, CSS3, JavaScript / JQuery, in conjunction with Laravel PHP.

It is used as a XAMPP platform and PostgreSQL database, to run the Laravel model view controller framework, where Bootstrap enters the view and allows to display the web interface automatically adapted to the size of the computer, Tablet, cell phone or any device.

3. Results

It was successfully developed a web portal that serves as a gateway to know the information of the inn Fabricio’s, manage and manage the services that this tourist site provides in a fast, orderly and extensible.

The Database tools is PostgreSQL, the PHP programming language, Laravel and Bootstrap frameworks; was hosted on the local Apache server.

With the implementation of colors and bootstrap style design, the system is able to adapt to any size of screen, allowing greater acceptance and usability.
The codification of the project with web technologies allows it to be disseminated touristy inside and outside the country, through the internet; As well as the optimization of the processes that take place in the inn, can also be used in a common web browser.

The integration of the Laravel and Bootstrap frameworks are highly extensible and flexible since no major delays could be applied to the system.

The use of Bootstrap allowed a better view in the interface, as it manages to adapt to the size of any device, without distorting the information.

The agile XP software development methodology, which when broken down into short work cycles, was well adapted to the full scope of this application.

5. Thanks

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Bibliography


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Patricia COLIMBA  Student of the Degree in Computer Systems Engineering at Universidad Técnica del Norte, near to obtain a degree in Engineering in Computer Systems. His research interests include: research of technologies for web development and applications adaptable to any device.