

# [The online reservation systems computer science](https://assignbuster.com/the-online-reservation-systems-computer-science/)

The literature review phase is the one of the main stage that we need to focus on, so far the stage explains the main aims of the system and how the system is going to operate and the benefit of the system over environment.

Firstly, Travel agent hotel suppliers will have way in to the travel agent extranet system to load room rates and allotments, instead of keeping rate and allotment contract manually.

The travel agency application system is an online system that which let customers to make their reservation comfortably from anywhere. That’s All customers should be able to way in the agency services information 24 hours a day.

Because of the rapid spread of the internet, the hotel adopted a reservation system that is a powerful factor to gain new sales. The travel agency began to present their own on-line reservation system. The travel agency gived some hotel with reservation systems that will normally liked to the various programs and special offers which adds to their ability to capture the travel and leisure market. These are some plan that the online travel agencies and travel agents cannot achieve because of the limitation in their services. However, this system also feels drawbacks. Most of the hotel sites do not allow for easy price comparison, some will only book reservations on the hotel which have the site. (Kearney & Robinson, 2004).

2. 3 Why online reservation system

As a commercial medium, the Web offers a number of advantages for all the customer and companies. From the customer point of view, using the web instead of a traditional approach call for tickets or go to a travel agency means way in to a greater amount of information and also more flexibility in choosing, analyzing and comparing the offers.

Having more choices with just a click away helps customers find a better deal, in possible less time.

For the companies, the use of Web means decrease costs for information processing, reduced costs to suppliers, the possibility of building stronger customer relationships by having customers interact directly with the web site, the possibility of creating user profiles to be used in marketing development and also an easy way of information partnership, involving the cooperation between different companies. Travel Agent Reservation System to enhance effectiveness in keeping hotel contracting room and allotment updated in real-time manner.

2. 4 Online Travel Agency

There are many traditional travel agencies that are operating on-line, but only insufficient are known by the passengers. The transaction between the travel agents and hotels is through the commission base. However, because of the direct booking of other passengers the commission basis is slow diminishing and they have to rate the customers for the service fee. The usual offers they give be contingent on their strategy and advertisement and not part of the hotels (Kearney & Robinson, 2004).

2. 5 Guda Travel Agency Application System Services

The travel agency online application service will need the user’s city of destination, desired hotel quality, check-in date, and check-out date. It will departure the hotels that match the criteria, and also return the hotel name, address, check-in time, check-out time, cost per night, and total cost of the length of stay. Travel Simplified has its own database with the hotels and charge. It also has a Java application to have the hotels and rates. The Web service will need to use the tools in Application Developer Integration Edition to create a service from the application so that users can search hotels for their travels whenever they want.

2. 6 Reservation systems analysis

Internet presence and online application are the two business models most frequently used by the travel reservation systems we studied. The services offered in the two models are related: in Internet presence, the customers find information about the service; some examples are check hotel in Internet presence and book hotel.

There are also two different services, information about special offers in Internet presence and the possibility to save the itineraries already defined in online store an itinerary consists of a hotel, usually round trip and possibly of a reserved room in one or more hotels.

2. 7 User value model of a Guda Travel Agency Application System

Landvogt (2004) explained online booking engines as tools to store, publish and update the dynamic data availability and prices, and moreover provide the users with a regular reservation process. A specific characteristic of the guda travel agency application system is that users can make and see the changes in reservation status online.

But users can only see descriptions and pictures of hotels, sometimes rates but they could not check availability and make bookings online. This means that all business models which provide the possibility for an online booking electronic booking service, electronic travel agent, electronic market place, and flexible comparison shopping services are compatible with above mentioned definition of website quality.

2. 8 Customer needs

One of the main importance’s in developing this application system for Guda Travel Agency application system is to satisfy the customer needs. One must remember that electronic commerce has to compete with the real-life methods of making reservation and completing customer transactions. Customers can choose between different reservations methods electronic or real-life and they will always prefer the one which best gratify their need.

2. 8. 1 Customer needs presentation

In the case of online reservation systems we identified six main important customer needs:

Lack of difficulty

system status information

error tolerance and system stability

ˆ query refinement for achieving customer’s goal

ˆ customer profiles

2. 8. 1. 1 Lack of difficulty

Lack of difficulties is one of the major problems for customers. The user interface of the online systems should be designed in such a way that all services are easy to understand and use. It can often happen that customers may want to use a service, but they don’t know how to do it or the user interface does not allow them to do so. It is the case of the registration process when using online travel reservations. This system Guda Travel Agency Application system allow timetable consultation only after registering which can take quite a lot of time, or they allow consultation but there is no price information before registration.

System status information and feed forward

The status of the system are accessing database, computing solutions must be always indicated to the customer. Different mechanisms should be employed to give clear feedback to the customer, for error messages, data input required, no solutions found, etc. When possible, the messages should contain explanations and provide suggestions for future actions e. g. no solution was found, customer has to try to enlarge the domains for his travel constraints: dates, hotel, and time.

2. 8. 1. 3 Error tolerance and system stability

An easy and efficient way out should be provided in case of errors. This makes customers feel more confident and at ease. In the case of a customer mistake, it is important that the reservation process is restarted from a point close to the one where the mistake was generated, the customer shouldn’t be sent back to the beginning.

Query refinement for achieving customer’s goal

It often happens that customers are not satisfied with the first solutions they get from the online hotel reservation system. In this case, most of the current systems allow customers to search for hotel next day, or on a newly defined day. If they are still not happy with what they get, they can come back to the query definition and change their input data. This way of interaction is quite heavy and time-consuming, using a lot of the system and customer resources.

In the second part of our paper, I propose a new interaction model in which the customers can modify their initial queries directly in the result table. It is easier for customers to find exactly what they want or to find out if what they want exists or not, starting from possible existing solutions.

Customer profiles

The use of customer profiles in online reservation systems is connected to the registration process. The same question arises, when is the best moment to ask customers to register and/or to create their own profiles. The systems I studied have different approaches, but most of them leave the profile creation at customers’ control, they can do it when and if they want. The customer profiles are currently used in the same way by all the systems, but each system has its own profile implementation, which makes difficult a possible communication and data interchange. A future improvement in online travel industry would be a standard personalization technique to be adopted by all online systems providing in this way both efficiency and interoperability.

2. 9 PROCEDUREs for electronic commerce

Commerce in the real world is a very rich set of interaction procedures with a very complex set of constraints. The protocols used in electronic commerce systems must respect at least some of the real world models and add also new interaction techniques. Flexibility combined with ease of use and understandings are primary requirements, as rigid and restricted protocols lead to frustration for both users and developers.

2. 10 Customers application PROCEDURE

All existing online travel systems offer consumer application procedure. The customer must interact directly with the system in order to receive results for his query. A general model for the protocols offered by the online travel systems for booking hotel is the following: “[register] – input data (travel constraints) – see results – evaluate – book” The registration step can be sometimes avoided customers have the possibility to use the system as guests or to register only if they want to make a booking. Adriana Jurca, Adriana Jurca Dmt-isr – 1999

programming’s and techniques for developing the system

Php is an extensively used general-purpose scripting language that was originally designed for web development to produce dynamic web pages. For this purpose, php code is embedded direct to the HTML source document and interpreted by a web server with a php processor module, which generates the web page document. As a specific programming language, php code is processed by an interpreter application in command-line mode performing desired operating system operations and producing program output on its standard output channel. It also function as a graphical application. Php is existing as a processor for most modern web servers and as standalone interpreter on most operating systems and computing platforms.

2. 11. 1 History of PHP

Php was originally created by Rasmus Lerdorf in 1995 and has been in continuous development ever since. The main implementation of PHP is now produced by the php clicks and serves as the de facto standard for PHP as there is no formal specification. Php is free software released under the php License.

In other to used php they is need for basic understanding the following those are bellow:

1. HTML or XHTML

2. Java Scrip

2. 11. 2 USES of php.

Php is a general main scripting language that is especially suited to server-side web development where php generally runs on a web server.

Any php code in a requested file is executed by the php runtime, usually to create dynamic web page content. It can also be used for command line scripting and client-side GUI applications. Php can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems.

It is available free of charge, and the php clicks provides the complete source code for users to build, customize and extend for their own use.

Php primarily present as a filter, taking input from a file or stream containing text and/php instructions and outputs another stream of data; most commonly the output will be html.

2. 11. 3 FEATURES OF PHP

Access Logging – With the way in logging capabilities of php, users can maintain their own hit counting and logging. It doesn’t use the system’s central access log files in any way, and it provides real-time access monitoring. The Log Viewer Script provides a quick summary of the way in to a set of pages owned by an individual user.

Access Control – A develop in web based configuration screen handles access control configuration. It is possible to create setting rules for some web pages owned by a certain person which place various restrictions on who can view these pages and how they will be viewed. The Pages can be password protected, completely restricted, logging disabled and more based on the client’s domain, browser, e-mail address or even the referring document.

SQL Support -the php supports embedding SQL queries directly in . html files.

File Upload Support -And It lets users upload files to a web server and provides the actual Mime decoding to make this work and also provides the additional framework to do something useful with the uploaded file once it has been received.

HTTP based authentication control – the php can be used to create customized http based authentication mechanisms for the Apache web server.

Variables, Arrays, Associative Arrays -the php supports typed variables, arrays and even Perl-like associative arrays. And with these can all be passed from one web page to another using either GET or POST method forms.

Conditionals, While Loops -the php supports a full featured C like scripting language. You can have if/then/elseif/else/endif conditions as well as while loops and switch or case statements to guide the logical flow of how the html page should be displayed.

Extended Regular Expressions – Regular expressions are freely used for pattern matching, pattern substitutions and general string manipulation. And then the php supports all common regular expression operations.

HTTP Header Control – The ability to have web pages send customized http headers based on some condition is essential for high-level web site design. A frequently use is to send a Location URL header to redirect the calling client to some other URL. It can also be used to turn off caching or manipulate the last update header of pages.

ISP Safe Mode support – php supports a unique Safe Mode which makes it safe to have multiple users run php scripts on the same server.

2. 11. 4 Advantages of php

You can develop web applications in php as compile and link is eliminated in php scripting language.

The Php applications are very stable and do not depend on the browser technologies unlike JavaScript applications which depend on browsers.

Php has excellent database connectivity to all SQL database servers.

php has partial support for Object oriented features

Php runs on all UNIX’s, Linux, Windows 95/NT/2000 and is more powerful than ASP, JSP and others.

The Php has a very large user base and developer base.

2. 11. 4 PHP AND HTML

Php and html interact a lot because the php has the ability to generate html and the html has the ability to pass the information to php

my sql

MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases.

Advantages of MySQL

MySQL is a popular database with Web developers. Its speed and small size make it ideal for a Web site.

It’s fast. The main aim of the folks who developed MySQL was speed.

Thus, the software was designed from the beginning with speed in mind.

It’s Inexpensive. MySQL is free under the open source GPL license, and the price for a commercial license is reasonable.

It’s Easy to use. And then you can build and interact with a MySQL database by using a few simple statements in the SQL language, which is the standard language for communicating with RDBMSs.

How MySQL and PHP work together

2. 12. 1 The Main Features of MySQL

Is written in C and C++

It easily uses multiple CPUs if they are available.

Provides transactional and non transactional storage engines.

Relatively easy to add another storage engine. This is useful if you want to add an SQL interface to an in house database.

A very fast thread based memory allocation system.

Very fast joins using an optimized one-sweep multi join.

In memory hash tables which are used as temporary tables.

SQL functions are implemented using a highly optimized class library and should be as fast as possible.

The server is available as a separate program for use in a client/server networked environment.

Tested with a broad range of di¬ˆerent compilers.

Works on many deferent platforms

2. 13 What Is a Web Server

Web server is a software application that listens for client connection a specific network port. When a connection is made, the Web server then waits request from the client application. The client is usually a Web browser, but it could be a Web site indexing utility, or perhaps an interactive telnet session. The resources request, usually a request to send the contents of a file stored on the server, is a phrased in some version of the Hypertext Transfer Protocol (HTTP)

Although the Web server’s primary purpose is to distribute information from a central computer, modern Web servers perform other tasks as well. Before the file transfer, most modern Web servers send descriptive information about the requested resource, instructing the client how to interpret or format the resource.

2. 13. 1 Features of web sever

Many Web servers perform user authentication and data encryption to permit applications like online credit card purchasing.

Another common feature of Web servers is that they provide database access on behalf of the client, eliminating the need for the client to use a full-featured database client application. Apache provides all of these features

2. 13. 2 Apache http sever of this project

The Apache HTTP Server Project is an effort to develop and maintain an open-source http server for modern operating systems including Windows 7. The main aim of this project is to provide a secure, efficient and extensible server that provides http services in sync with the current http standards.

2. 13. 3 THE APACHE http server

Apache is a powerful, flexible, http compliant web server

Its Implements the latest protocols, including http

Its highly configurable and extensible with third-party modules

It provides full source code and comes with an unrestrictive license

It runs on Windows NT/9x, Netware 5. x and above, OS/2, and most versions of Unix, as well as several other operating systems

is actively being developed

it encourages user feedback through new ideas, bug reports and patches

it implements many frequently requested features

2. 13. 4 Features of apache server

DBM databases for authentication:

Usually allows you to easily set up password protected pages with enormous numbers of authorized users, without bogging down the server.

Customized responses to errors and problems:

Allows you to set up files, or even CGI scripts, which are returned by the server in response to errors and problems, e. g. setup a script to intercept 500 Server Errors and it perform on-the-fly diagnostics for both users and yourself.

Multiple Directory Index directives

Allows you to say Directory index. html index, which allows the server to either send back index. html or run index when a directory URL is requested, whichever it finds in the directory.

Unlimited flexible URL rewriting and aliasing

The Apache has no fixed limit on the numbers of Aliases and Redirects which may be declared in the config files. And then In addition, a powerful rewriting engine can be used to solve most URL manipulation problems.

Content negotiation

the ability to automatically serve clients of varying sophistication and HTML level compliance, with documents which offer the best representation of information that the client is capable of accepting.

Virtual Hosts

This allows the server to distinguish between requests made to different IP addresses or names mapped to the same machine. And is also offers dynamically configurable mass virtual hosting.

Configurable Reliable Piped Logs

You can configure Apache to generate logs in the format that you want. Apache can send log files to a pipe, allowing for log rotation, hit filtering, real-time splitting of multiple hosts into separate logs,

Tools require for implementing the systemDreamweaver:

Adobe Dreamweaver is a web development application created by Macromedia, and is now developed by Adobe Systems, which acquired Macromedia in 2005.

The Dreamweaver is available for both Mac and Windows operating systems. The Recent versions

have incorporated support for web technologies such as CSS, JavaScript, and various

server-side scripting languages and frameworks including ASP, ColdFusion, and PHP.

Adobe Flash

Adobe Flash is a multimedia platform acquired by Macromedia and currently developed and distributed by Adobe Systems. Since 1996 flash has become a popular method for adding animation and interactivity to web pages. The Flash is commonly used to create animation, advertisements, and various web page Flash components, to integrate video into web pages, and more recently, to develop rich Internet applications. And the Flash can be manipulated vector and raster graphics, and supports bidirectional streaming of audio and video. And It contains a scripting language called Action Script.

Adobe Photoshop

The Adobe Photoshop is a graphics editing program developed and Published by Adobe System. And it is the current market leader for commercial bitmap and image manipulation software, and is the flagship product of Adobe Systems. And It has been described as “ an industry standard for graphics professionals and was one of the early “ killer applications” on the Macintosh, later also for MS Windows.