CHAPTER 1

INTRODUCTION

1.1 Overview

Website is a collection of related web pages including multimedia content typically identified with a common domain name. A website may be accessible via public Internet Protocol(IP) or private local area network(LAN), by referencing uniform resource locator(URL) that identifies the site.

The user experience for a website is unlike the user experience for traditional desktop software. The location of data storage, limitations with the user interface, and limited access to operating system features are just some of the distinctions. However, as web applications have become more and more sophisticated, the differences in the user experience between desktop applications and web applications are becoming more and more blurred.

In the early days, the skills needed to create a website were pretty basic: one needed knowledge of the HTML and perhaps familiarity with editing and creating images. This type of website is commonly referred to as a static website, in that it consists only of HTML pages that look identical for all users at all times. Within a few years of the invention of the web, sites began to get more complicated as more and more sites began to use programs running on web servers to generate content dynamically. These server-based programs would read content from databases, interface with existing enterprise computer systems, communicate with financial institutions, and then output HTML that would be sent back to the users' browsers. This type of website is called as dynamic website because the page content is being created at run time by a program created by a programmer; this page content can vary from user to user.

"Namma Karnataka" is related to the Karnataka Tourism. This web site mainly categorize the places and gives the link below to book the hotels. Categories like temples, adventures, wild, heritage, nature and so on are included in this website. This project contains web pages like login and signup. Through the user signup, one can get the information about Karnataka's tourist places. By signing up to this site, the user can fetch the details about the numerous tourist places in the state of Karnataka. Through this site, just by siting in home, a person can know about too many places in Karnataka.

1.2 Applications

Nowadays web applications are used in almost all the areas ranging from science, engineering, medicine, business, industry, government, art, entertainment, education and training. The applications of this project are:

- This project provides online site to the users, so that they can view the tourist places of Karnataka.
- This reduces the burden on the users, by giving most of the information about the places under one roof.
- It is accessible from any Internet-enabled computer.
- It is usable with different operating systems and browser applications.

1.3 Problem statement

Currently, there is on spot registration for the JNNCE Techzone events. Number of students participating for this fest is increasing every year. This creates the burden for both the organizers and students to register. It is also time consuming. Also the students do not have the proper knowledge about the schedules and timings. In addition to this, the students of other colleges have less knowledge about Techzone. Organizers of the events also face the problems that they do not have the database of the students who are registered to the events at the earliest to organize the events well and quick.

1.4 Objectives

- The main objective of this project is to develop a site where in which, most of the accepts about the Karnataka's tourist places are covered.
- This helps the users to organize their trip at the earliest.
- The registered users can get the place details such as hotel booking and so on.

1.5 Web technologies

Hypertext Markup Language (HTML):

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad

of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically.HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items.

HTML elements are delineated by tags, written using angle brackets. Browsers do not display the HTML tags, but use them to interpret the content of the page. HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages.

Semantic HTML is way of writing HTML that emphasizes the meaning of encoded information over its presentation. HTML has included semantic markup from its inception, but also included presentational markup. There are also semantically neutral span and div tags. When cascading style sheets were beginning to work in most browsers, web authors have been encouraged to avoid the use of presentational HTML markup with a view to the separation of presentation and content.

Cascading Style Sheets (CSS):

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

PHP: Hypertext Preprocessor:

Hypertext Preprocessor (or simply PHP) is a server-side scripting language designed for Web development, and also used as a general-purpose programming language. It was originally created by RasmusLerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP originally stood for Personal Home Page, but it now stands for the recursive initialism PHP*:* Hypertext Preprocessor.

PHP code may be embedded into HTML code, or it can be used in combination with various web template systems, web content management systems, and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

In 2017, 3% of all vulnerabilities listed by National Vulnerability Database were linked to PHP, historically about 30 % of all vulnerabilities listed since 1996. Technical security flaws of the language itself or of its core libraries are not frequent. Recognizing that programmers make mistakes, some languages include taint checking to automatically detect the lack of input validation which induces many issues. Such a feature is being developed for PHP, but its inclusion into a release has been rejected several times in the past. Also, enabling the dynamic loading of PHP extensions in a shared web hosting environment can lead to security issues. In 2013, analysis of over 170,000 website defacements, published by Zone-H, the most frequently used technique was exploitation of file inclusion vulnerability, mostly related to the insecure usage of PHP functions include, require and allow_url_fopen.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

MySQL:

MySQL is an open source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

MySQL is a central component of the LAMP open-source web application software stack. LAMP is a an acronym for “Linux, Apache, MySQL, Perl/PHP/Python”. Applications that use the MySQL database include:TYPO3, MODx, Joomla, WordPress, Simple Machines Forum, phpBB, MyB, and Drupal. MySQL is also used in many high profiles, large scale websites including Google, Facebook, Twitter, Flickr and YouTube.

SESSIONS:

Server-side sessions are handy and efficient, but can become difficult to handle in conjunction with load-balancing/high-availability systems and are not usable at all in some embedded systems with no storage. The load-balancing problem can be solved by using shared storage or by applying forced peering between each client and a single server in the cluster, although this can compromise system efficiency and load distribution.

A method of using server-side sessions in systems without mass-storage is to reserve a portion of RAM for storage of session data

Client-side sessions use cookies and cryptographic techniques to maintain state without storing as much data on the server. When presenting a dynamic web page, the server sends the current state data to the client (web browser) in the form of a cookie. The client saves the cookie in memory or on disk. With each successive request, the client sends the cookie back to the server, and the server uses the data to "remember" the state of the application for that specific client and generate an appropriate response.

This mechanism may work well in some contexts; however, data stored on the client is vulnerable to tampering by the user or by software that has access to the client computer. To use client-side sessions where confidentiality and integrity are required, the following must be guaranteed:

1. Confidentiality: Nothing apart from the server should be able to interpret session data.

2. Data integrity: Nothing apart from the server should manipulate session data (accidentally or maliciously).

3. Authenticity: Nothing apart from the server should be able to initiate valid sessions.

JAVASCRIPT:

JavaScript is most commonly used as a client side scripting language. This means that JavaScript code is written into an HTML page. When a user requests an HTML page with JavaScript in it, the script is sent to the browser and it's up to the browser to do something with it.

The fact that the script is in the HTML page means that your scripts can be seen and copied by whoever views your page. Nonetheless, to my mind this openness is a great advantage, because the flip side is that you can view, study and use any JavaScript you encounter on the WWW.

JavaScript can be used in other contexts than a Web browser. Netscape created server-side JavaScript as a CGI-language that can do roughly the same as Perl or ASP. There is no reason why JavaScript couldn’t be used to write real, complex programs. However, this site exclusively deals with the use of JavaScript in web browsers.

CHAPTER 2

SYSTEM ANALYSIS AND DESIGN

2.1 Functional requirements

Use case diagram:

Use case diagrams are usually referred to as behavior diagrams used to describe a set of actions (use cases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors).

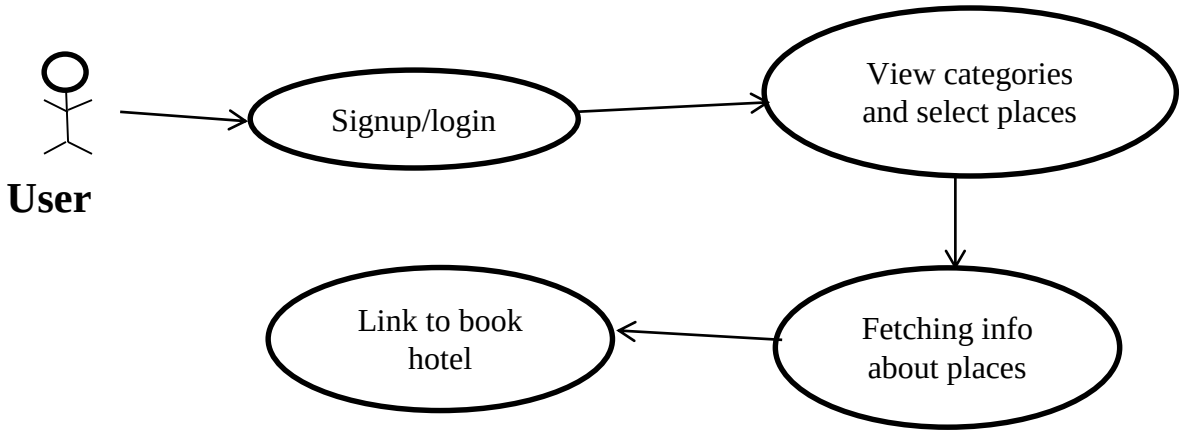


Figure 2.1.1 Use case diagram

The above figure is the use case diagram of our project. As shown in the figure, user can sign up to the website by choosing user registration in the first page and after successful registration they can login to the system and can view the details of the tourist's places and can also book the hotels.

2.2 ER DIAGRAM

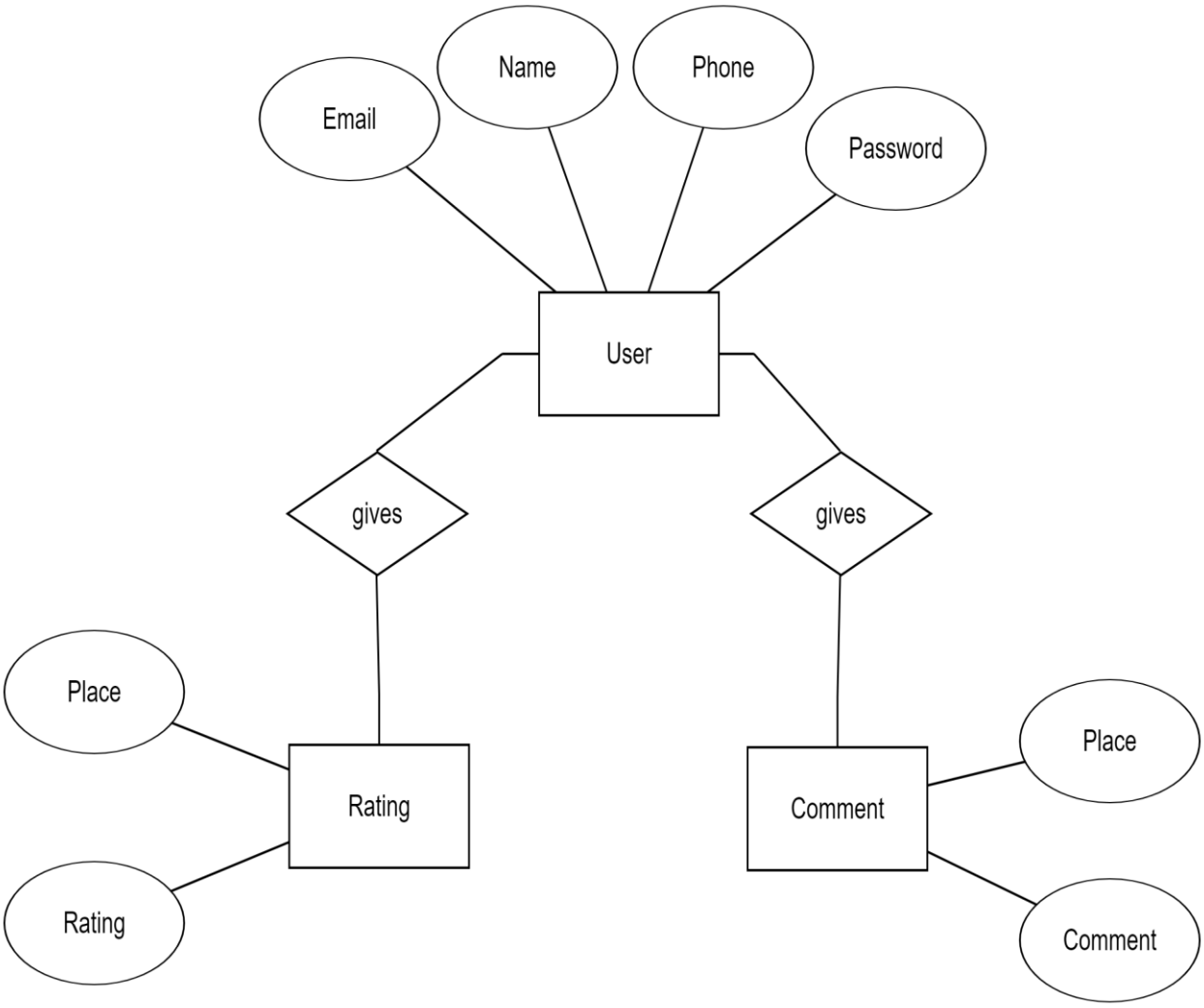
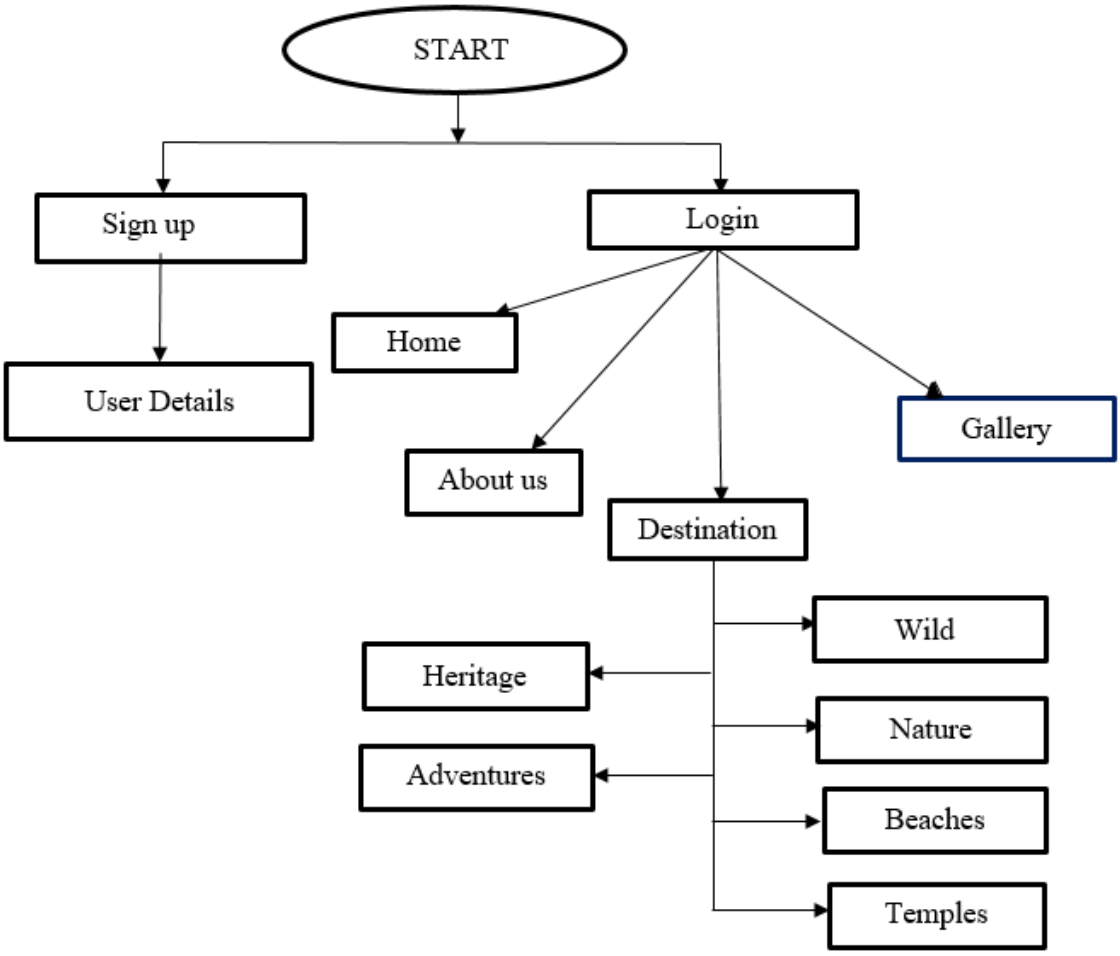


Figure 2.2.1 ER Diagram

The User who wishes to visit this web site, primarily has to register by filling all the mandatory details in the sign up page. Once a specific user is registered, he/she can visit the site by just specifying the e-mail id and password. Further, this takes to the home page which displays all the categories, from which the user can view the information about particular place, that the user wishes to see. The user can comment and even rate the place as well.

2.3 System Architecture

Figure 2.3 illustrates the system architecture of the project, “Namma Karnataka”. Here, there are two sections: Admin login and Sign up .



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CHAPTER 3

IMPLEMENTATION

3.1 Back end Snapshots

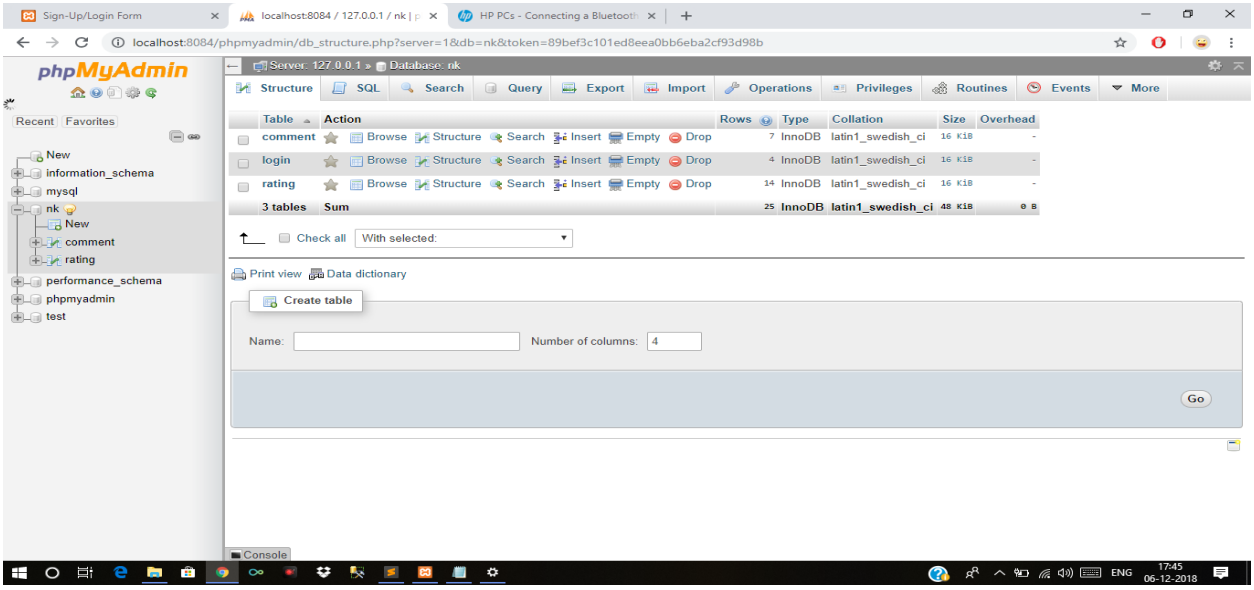

Figure 3.1.1 Table names in backend

Figure 3.1.1 shows Database of our project. It contains tables like login, rating and comment.

3.2 Algorithms

```
<?php

session_start();

$place=$_POST['place'];

$cmt=$_POST['cmnt'];

$cmt=trim($cmt);

$user=$_SESSION['name'];
```

```
$page=$_POST['page'];

if($cmt=="")

{

echo "<script> window.location.href='$page';alert('Please Write comment');</script>";

exit();

}

$con="mysql:host=localhost;dbname=nk";

$pd=new PDO($con,"root","");

$sql="INSERT INTO comment(place,user,cmt) VALUES ('$place','$user','$cmt')";

$res=$pd->query($sql);

echo "<script> window.location.href='$page';alert('Thank You for Your Comment');</script>";

?>
```

The above function is used for the login php page.

```
<?php
$rate=$_POST['star'];
$place=$_POST['place'];
session_start();
$page=$_POST['page'];
if(!$rate)
{
echo "<script> window.location.href='$page';alert('Please select STAR');</script>";
exit();
```

```
}
$con="mysql:host=localhost;dbname=nk";
$pd=new PDO($con,"root","");
$sql="INSERT INTO rating (place,rate) VALUES ('$place','$rate')";
$res=$pd->query($sql);

echo "<script> window.location.href='$page';alert('Thank You for Your Rating');</script>";

?>
```

The above code is used for rating the places.

3.3 APIs used

3.3.1 HTML tags

Table 3.1 HTML tags

<!DOCTYPE>	Defines the document type
<a>	Defines a hyperlink
 	Defines a single break
Button	Defines a clickable button
	Defines a section in a document
<form>	Defines an html form for user input
<head>	Defines an information about the document
<html>	Defines the root of an HTML document
<nav>	Defines navigation links

3.3.2 CSS properties

Table 3.2 CSS properties

Background color	Sets the background color of an element
Padding	A short hand property for setting all of the padding properties in one Declaration
Padding-top	Sets the top padding of an element
Background-repeat	Sets if /how a background image will be repeated
Font-size	Sets the size of a font
Margin-bottom	Sets the bottom margin of an element
Padding-bottom	Sets the bottom padding of an element
Overflow	Sets what to do when an element's content is too big to fit in it's block formatting context

3.3.3 PHP APIs:

PHP APIs that are used in the project are listed below.

Table 3.3 List of PHP APIs

$pd=newPDO("mysql.hostname=localhost;dbname="","");	Used for the connection between php and mySQL
$res=$pd->query(" ");	Query() returns a PDO statement object or FALSE on failure
$id=$_POST['t1']	Used to create a record

3.4 Frameworks used

3.4.1 Sublime Frameworks

Sublime Text is a proprietary cross-platform source code editor with python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugin, typically community built and maintained under free software licenses.

Themes

- Sublime Text contains 23 different visual themes, with the option to download additional themes and configure custom themes via third-party plugins.
- The minimap feature shows a reduced overview of the entire file in the top-right corner of the screen. The portion of the file visible in the main editor pane is highlighted and clicking or dragging in this view scrolls the editor through the file.[6]

Panels, groups and screen modes

- The program offers a number of screen modes including panels that can show up to four files at once as well as full screen and distraction free modes which only show one file without any of the additional menus around it.

CHAPTER 4

RESULTS

4.1 Front-End Design

Some of the snapshots of the project are given below.

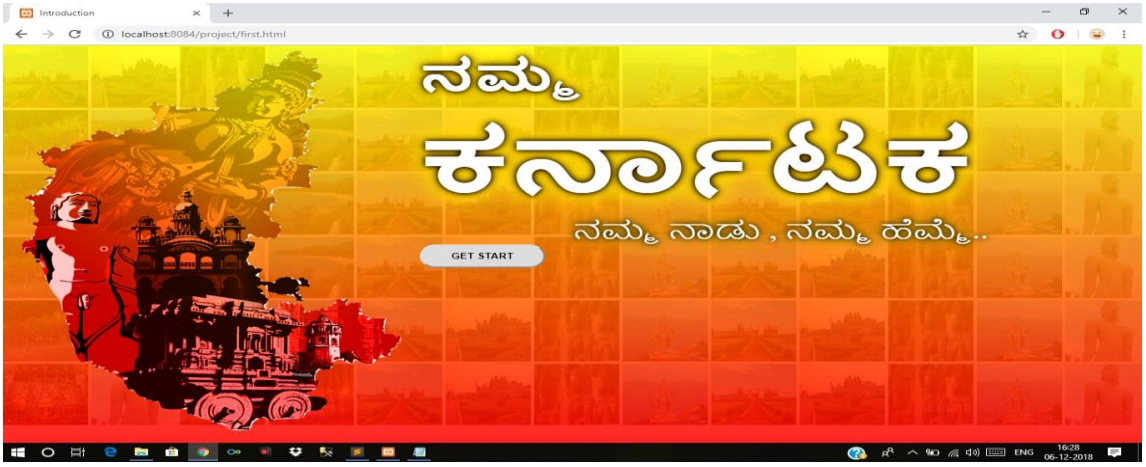

Figure 4.1.1 First page of the website

Figure 4.1.1 shows first page of our website. When we click on GET START button it will navigate us to Signup and Login page.

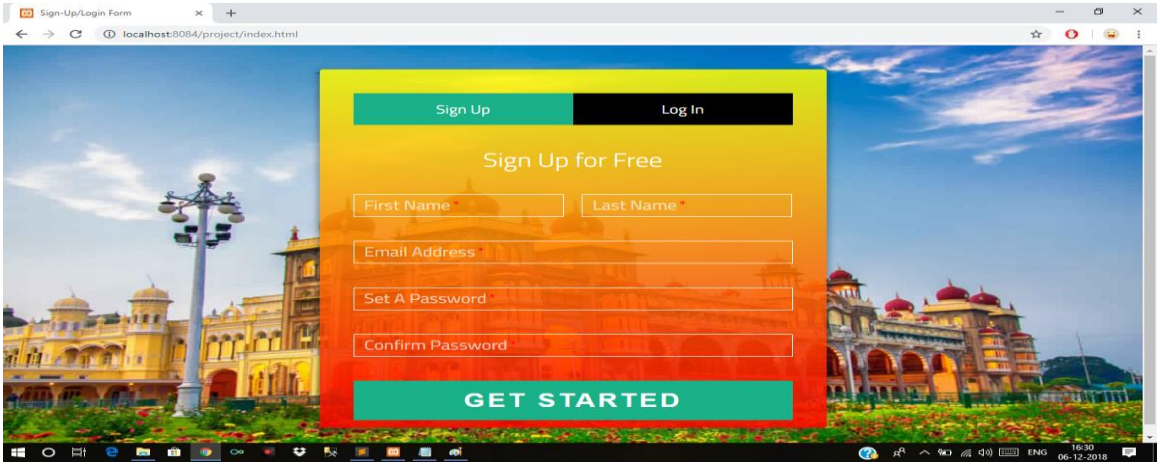

Figure 4.1.2 Sign Up and Log In

Figure 4.1.2 shows signup and login page. User needs to signup and then to login to access our website

Figure 4.1.3 Home page

Figure 4.1.3 shows Home page of our website. User can select gallery, destination or about us options.

Figure 4.1.3 Gallery page

Figure 4.1.4 shows the gallery page of our website. Here we can find photos of many tourist places.

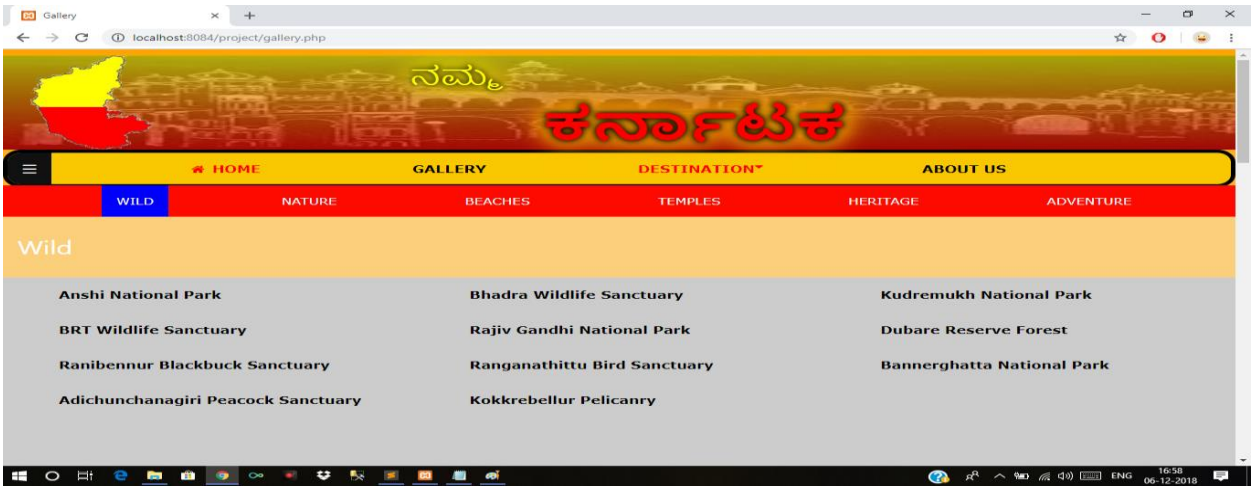

Figure 4.1.4 Destination Dropdown page

Figure 4.1.5 shows the destination dropdown. In this dropdown we have categorize tourist places into wild, nature, beaches and so on.

Figure 4.1.5 About Developers page.

Figure 4.1.6 shows details about the developers and abstract our project.

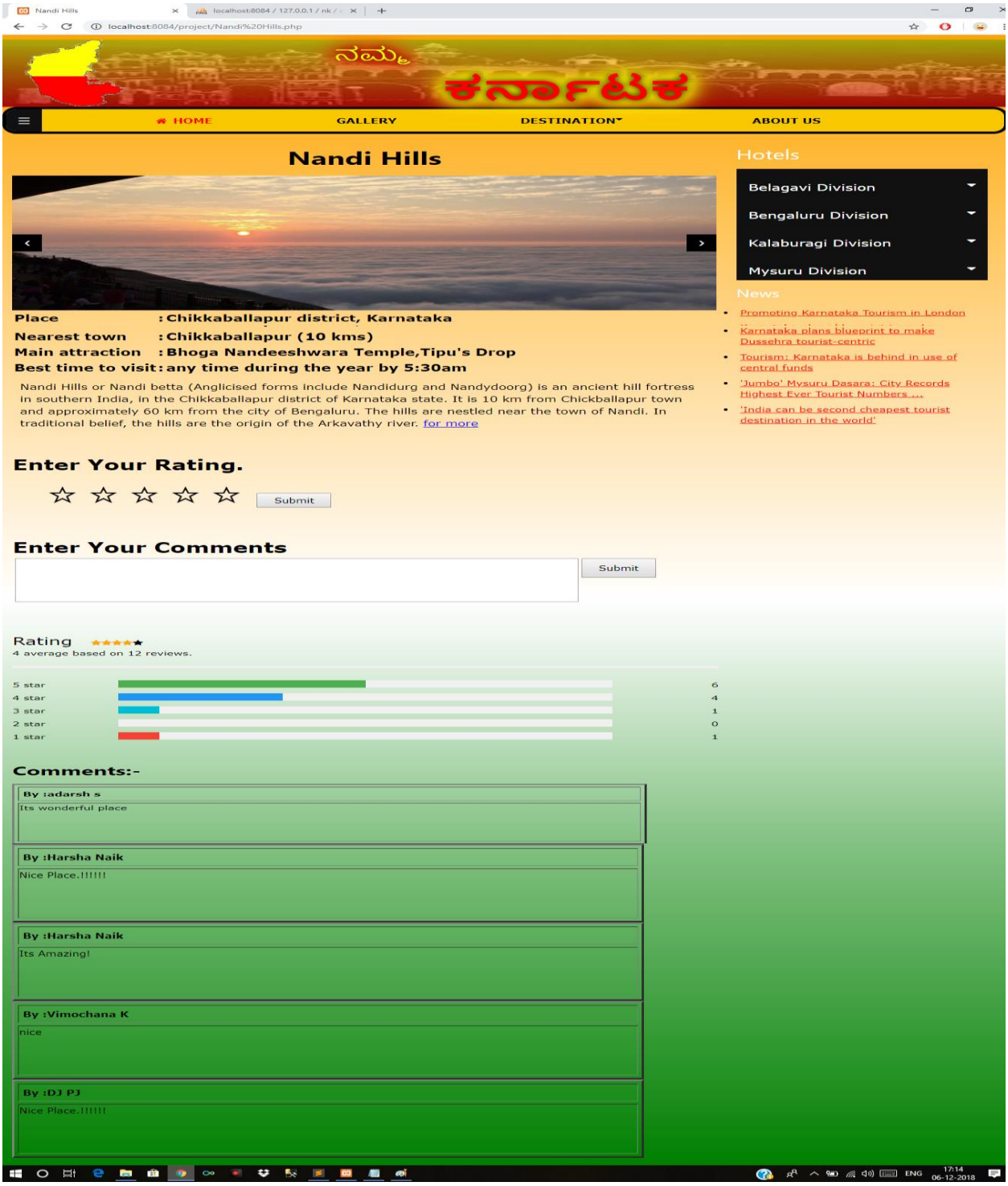

Figure 4.1.6 Nandi hills page

Figure 4.1.7 shows details of Nandi hills. In this page user can view the photos regarding to this place and user can also comment and rate this place according to their experience. Like this we have done the front end design to every place of our website.

4.2 Database Snapshots

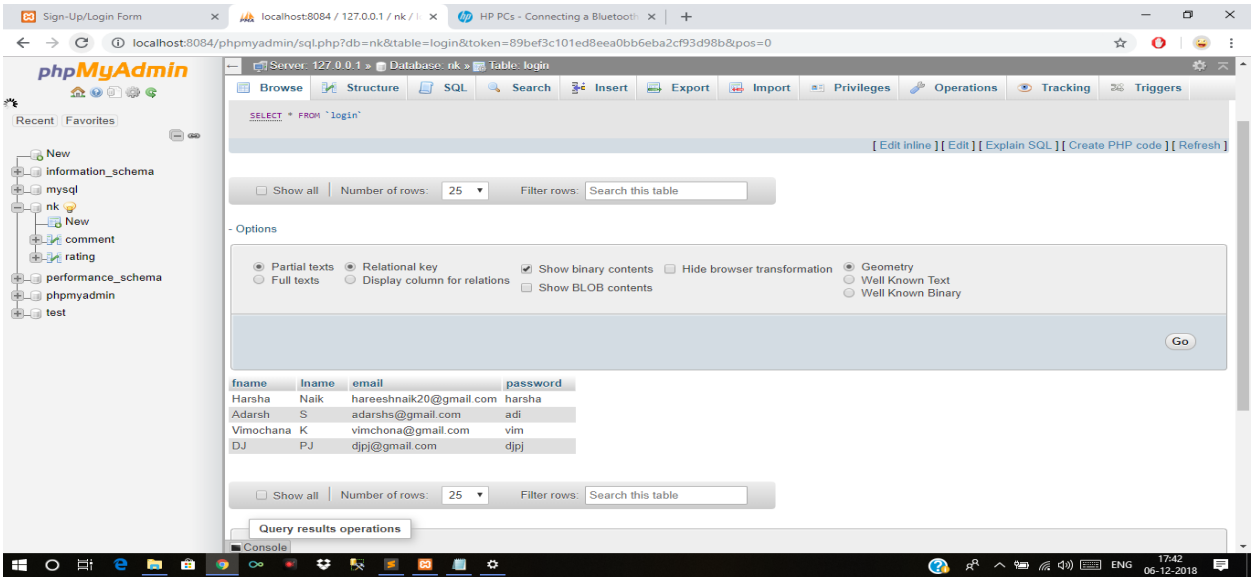

Figure 4.2.1 Database of signup table.

Figure 4.2.1 shows the database of signup table. The user information will be stored in this table.

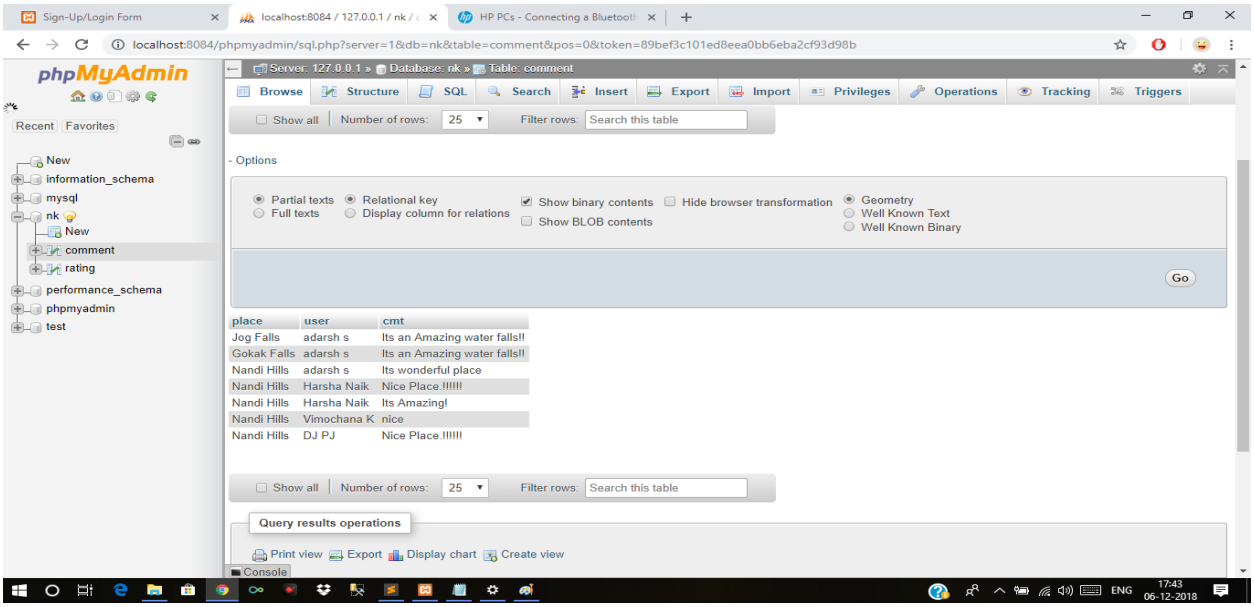

Figure 4.2.2 Database of comment table.

Figure 4.2.2 shows the comments entered by the users.

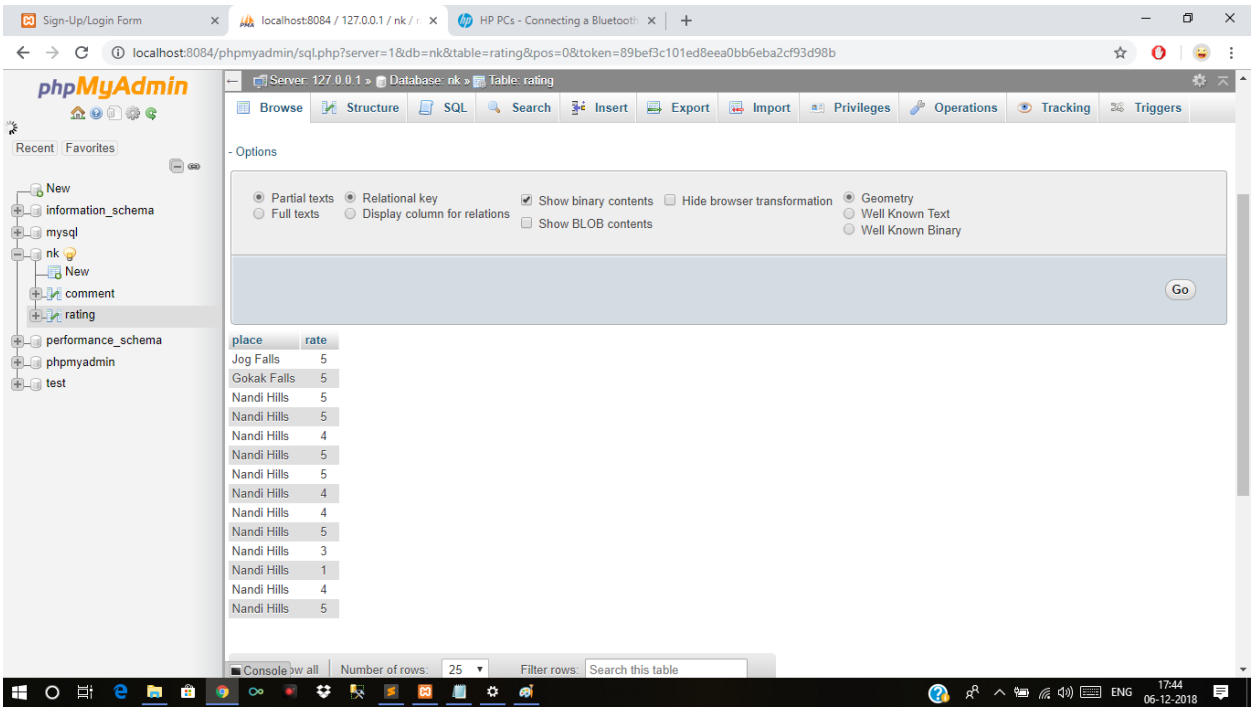

Figure 4.2.3 Database of rating table.

Figure 4.2.3 shows ratings which are given by the users.

CHAPTER 5

CONCLUSION AND FUTURE SCOPE

This site gives overall view of most of the places of Karnataka with the genuine reviews and rating. So, this will be a plus point to others who would want to visit those places. Categories like temples, wild, nature, heritage, adventures makes the user easier to find the places under them. This avoids the ambiguity in the user, to find the places in some other websites. As this website gives the provision to even book hotels, the user will get another advantage.

Furthermore, this website can be implemented by google maps to even show the directions of the places. This can even be continued to a higher level by adding all the tourist places of India as well.

REFERENCES

[1] Fundamentals of Web Development 1st 1E Author(s): Randy Connolly; Ricardo Hoar Edition: 1 Year: 2015 ISBN-13: 9781292057095 ISBN-10: 1292057092.

[2] https://www.w3schools.com/html/

[3] https://www.w3schools.com/js/

[4] https://www.w3schools.com/php/