

Book Awesome Trip
Design and Development of a Web based Application for
Travelling Management System

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY
DHAKA, BANGLADESH
MAY 2018

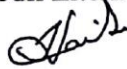
APPROVAL

This project titled “**Book Awesome Trip Design and development of a web based application for travelling management System**”, submitted by Israt Zahan Esha, ID No: 142-15-3604 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 7th May 2018.

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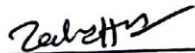
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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ahmed Al Marouf, Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the web based project Books and Trip successfully.

We really grateful and wish our profound our indebtedness to **Ahmed Al Marouf**, Lecturer, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of “Web development and Human Computer Interaction” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain**, and Head, Department of CSE, for his kind help to finish our project and to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

This report presents the development of a live Travel Bangladesh management system as a service. This application is useful for travel agencies for managing customer's bookings through online. Using this system reservation of vehicles, hotel rooms, and customer information can be managed. This application is very useful for any travel agencies. They will get any kinds of information about Bangladesh like as people, culture etc. and get information about traveling like as attractive place in BD, tourist activists of difference places and weather condition according to difference places. Therefore, this project represents a solution to implement booking system from a web through internet. This application developed system follows the core idea of object oriented based. This application has been designed using HTML, CSS and development by using PHP with MySQL Server 5.0, JavaScript, and using apache server for run this application.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The Travel Management System (TMS) is an online, integrated travel booking and management tool. The TMS has many functions to improve the management of Travel policy. Using this application both customer and origination can get there services related information.

1.2 Motivation

I am encouraged and motive to see difference type of travel website like as expedia.com, visit Sweden, TripBD.com, and visit Bangladesh etc. This application maintenance is becoming more expensive. To make it's easy and user friendly with less cost.

1.3 Objectives

The main objectives of Travel Bangladesh are to sell various itineraries and tour package to deal with all types of customer to market the famous tourist destinations and also take care of all requirements

1.4 Expected Outcome

- To increase global visitor markets.
- To offer visitors compelling destinations of distinction.
- To champion a successful tourism industry.
- Financial Controls.
- Policy Adherence.

1.5 Report Layout

Chapter 1: Introduction

In this chapter we have discussed about the motivation, objectives and the expected outcome of the project. Later followed by the report layout.

Chapter 2: Background

We discuss about the background circumstances of our project. We also talk about the related work, comparison to other candidate systems, the scope of the problem and challenges of the project.

Chapter 3: Requirement Specification

This chapter is all about the requirements like business process modeling, the requirement collection and analysis, the use case model of the project and their description, the logical relational database model and the design requirements.

Chapter 4: Design Specification

In this chapter, all the designs of the project. Front-end design, back-end design, interaction design and UX and the implementation requirements.

Chapter 5: Implementation and Testing

This chapter contains the implementation of database, front-end designs, interactions and the test results of the project.

Chapter 6: Conclusion and Future Scope

We discussed about the conclusion and the scope for further developments which pretty much derive about the project.

CHAPTER 2 BACKGROUND

2.1 Related Works

Tourism is one of the fastest growing and single largest industries in the world. Many countries in the world depend upon tourism as a main source of foreign exchange earnings. Bangladesh is of no exception from this. The country is trying from the inception of this industry to attracting more tourists to its destinations and to earn more foreign currency from this sector. The statistics on this sector shows that both the arrivals and earnings from tourism in Bangladesh have increased over the past.

2.2 Comparative Studies

Basically, the common types of tourism are-

Cultural Heritage Tourism: This form of tourism is defined by the National Trust for Historic Preservation as travel “to experience the places and activities that authentically represent the stories and people of the past and present. It includes historic, cultural, and natural resources.

Sustainable Tourism or Ecotourism: Sustainable tourism describes activities that take advantage of natural resources or other natural or cultural attributes while promoting local economic development and avoiding damaging environmental impacts.

Meetings/Conventions: The Global Business Travel Association (GBTA) estimated in 2013 that meetings and trade shows would represent more than 40% of the projected \$273 billion spent that year on business travel in the United States.

Agri-tourism: Agri-tourism involves supplementing income from farming and natural resource activities with tourism-related activities, from harvest festivals to farm vacations.

Existing Travel Management System

- Bangladesh Tourism Board
- TripBD.com

2.3 Scope of the Problem

Here is some problem both local and potential international tourists

- User can't easy access to information related to Bangladesh tourism and its facilities.

- It is not capable to highlight Bangladesh tourism attractions and the necessary related information properly.

2.4 Challenges

I overcome this entire problem given example –

Increase my performance and results: My solutions for business travel agencies help you maximize profits, identify new revenue streams and streamline operations for better results.

Better serve my customers: By improving staff productivity in your business travel agency and increasing efficiency, we'll free up customers time to take care of customers better.

Improve my sales: Business travel agencies we can turn potential bookings into customers and increase sales.

Increase customer loyalty: Highest level of customer services to any business travel agency customers.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business process modeling is a modern process and methodology. Which represented the activity of an enterprise of a system engineering to improve or analysts the current process. In this process one can easily represent their workflow of a system. Data flow diagram is one of the most usable diagram to show the work flow of a system. It's easy and understand to any workflow. We used level 1 data flow diagram for our work.

3.2 Requirement Collection and Analysis

Requirement collection and analysis is one of the primary conditions of application development. For deployment, there are two types of requirements, one is the functional requirement and the other is nonfunctional requirement. Functional requirement is those activities that's the application software can perform. On the other hand, Nonfunctional requirements define the personality of an application, as like the application is how much efficient, performance issue of the application and many more.

3.2.1 Functional Requirement

From the point of view of our system, it should have many functional requirements like, a registration section, a login section where only authenticate person can access, a dashboard for maintaining whole system. Dashboard also contains more other portion like, add doctor, add medical, post news, view them etc. Admin can post suggestion by using this dashboard.

3.2.2 Non-functional Requirement

Non-functional requirements are help to being more efficient; optimize performance, memory consuming, smoother operation, and load on quickly as possible to our application. Application UI should be user friendly and gorgeous for excellent user experience.

3.3 Feasibility Study

The feasibility study of a system is to analyze the proposed system and to decide whether the system under consideration will be workable or not after implementation. It determines the usability of the project after development. It also describes how our application can meet to the user's requirements, what resources are available for our system and many other things. Feasibility study is more important to know about the

current status of competitive market. Different types of feasibility study we performed on my project “Travel agency”.

3.4 Use Case Modeling and Description

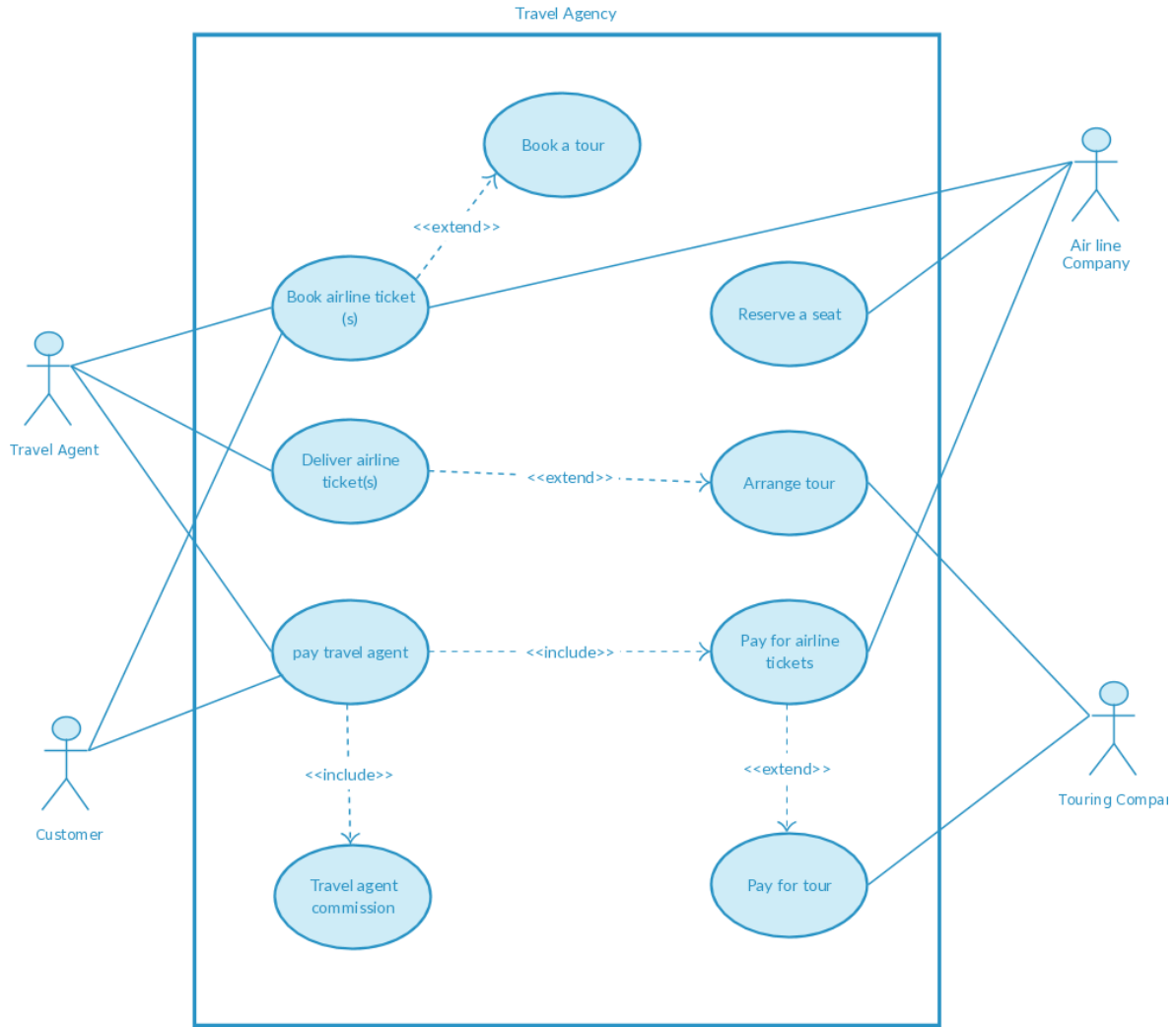


Figure: 3.1 Use case model

Use case model is the basic structure of the web project. This figure define some characters to connectively other related option. Several kind of relationship is interrelated include and exclude lining. There is also defined this kind of relationship in one to and many to one.

3.5 Logical Database Model

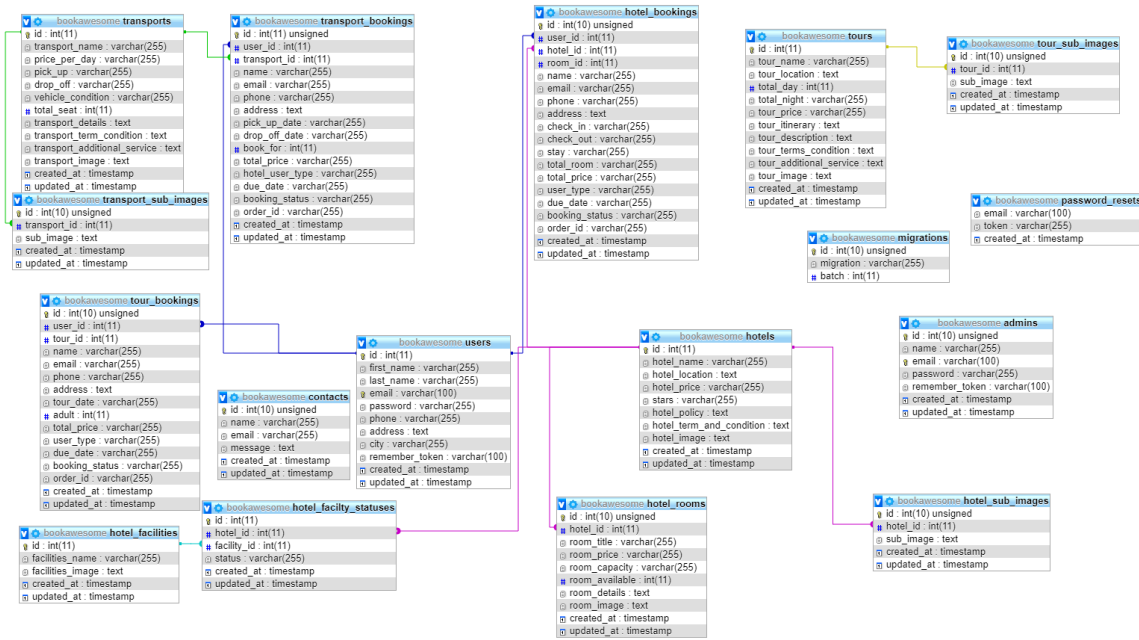


Figure: 3.2 Logical database model

This model is represent all tables and connection between one tables to another table. We know form this diagram is what kind of table are most important or what kind of tables is less important. Logical database model pursuit several kind of relation which is consist on the table to table.

3.6 Design Requirements

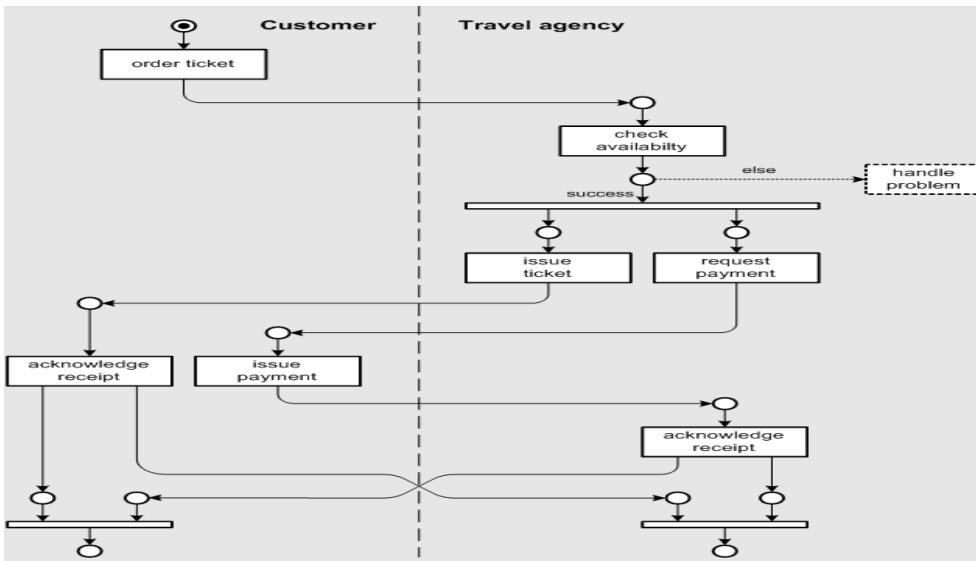


Figure: 3.3 Design requirement diagram

Design requirements always specify the whole design of the project. It's routed all kind of category into different places. Besides it's illustrate working flow activity into the whole design.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Introduction

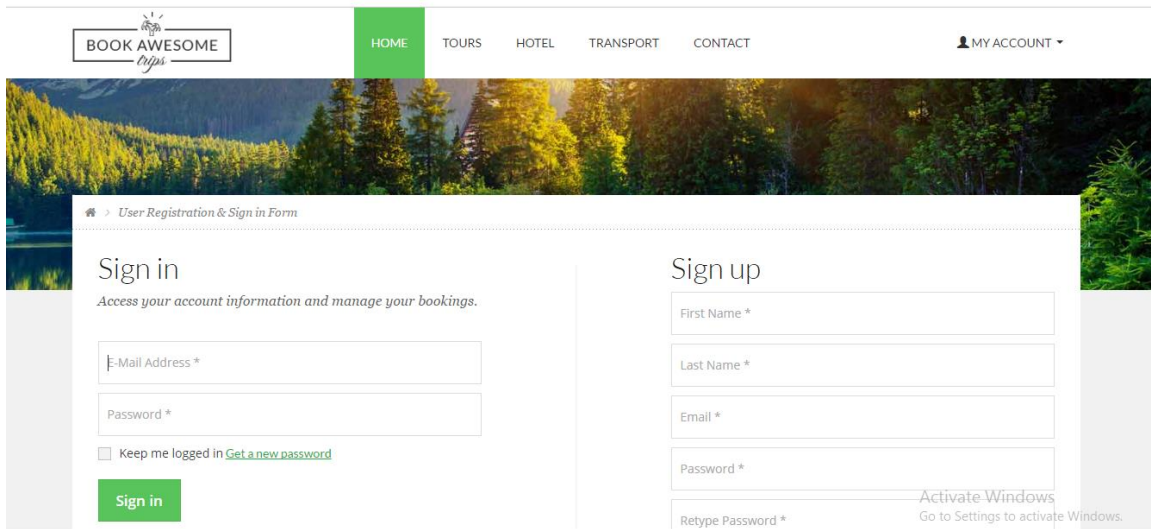
A designer whose client is a corporation will include the logo and other elements of the corporate brand as a way to standardize and unify all communication between company and audience or online.

Design Specification is a statement of how a design is developed. In the section of Design Specification, we try to show the front-end and back-end design of our web application. We also discussed about many tools and platforms, which we use to develop our application.

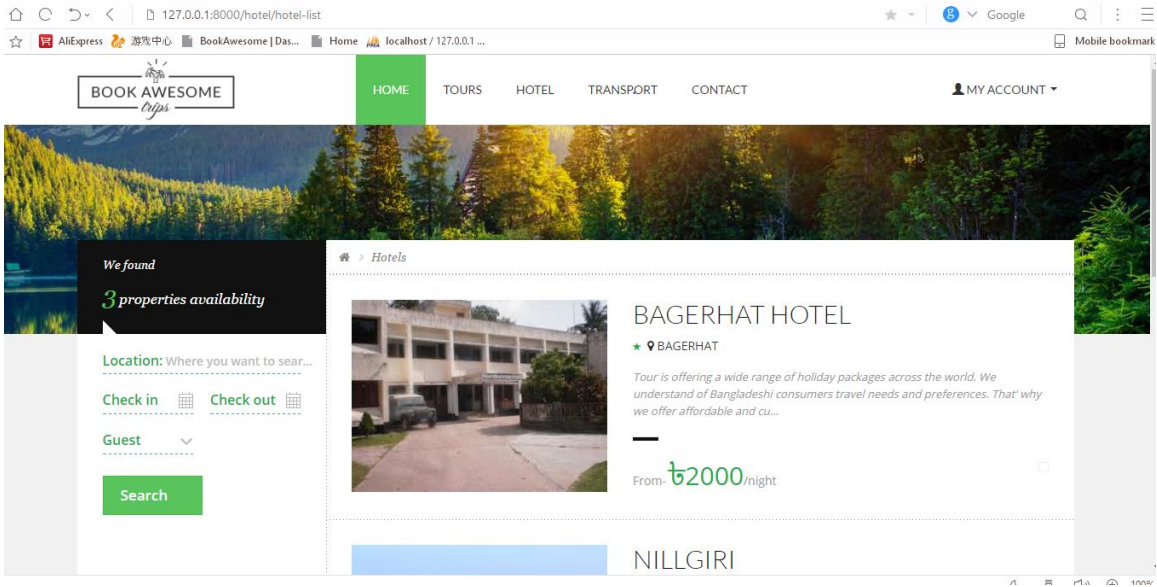
4.2 Front-end Design

Front-end design is the view part of a software. This is the way by which the user interacts with the server. Front-end design is known as a client-side development. It is very important to develop a simple and easily understanding front-end or GUI for the user of the application. So, we tried to keep our design as simple as possible and easily accessible for the user, but the development task wasn't so easy. We attach our application front-end design in bellow:

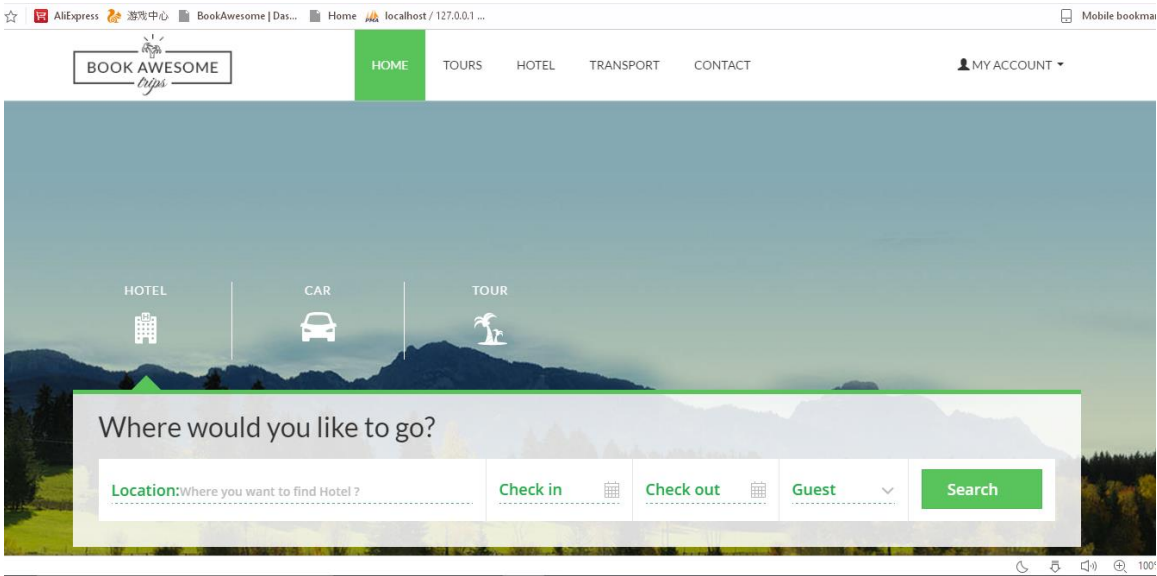
Front-end Design screenshot



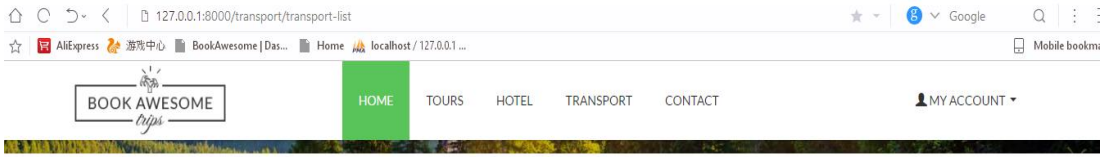
(a)



(b)



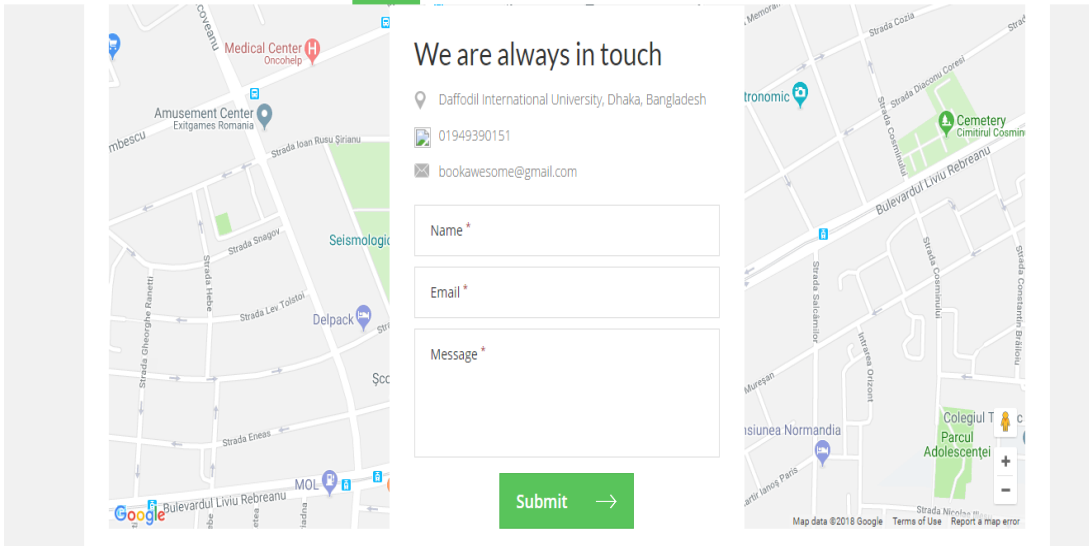
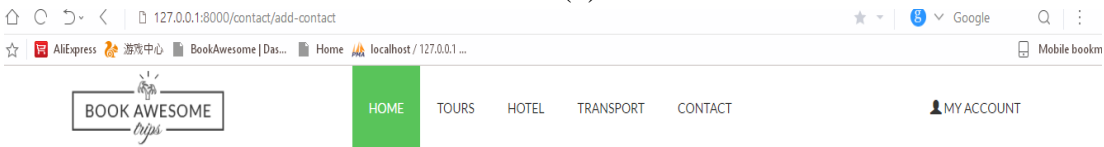
(c)



All Cars | Lower to Upper Upper to Lower

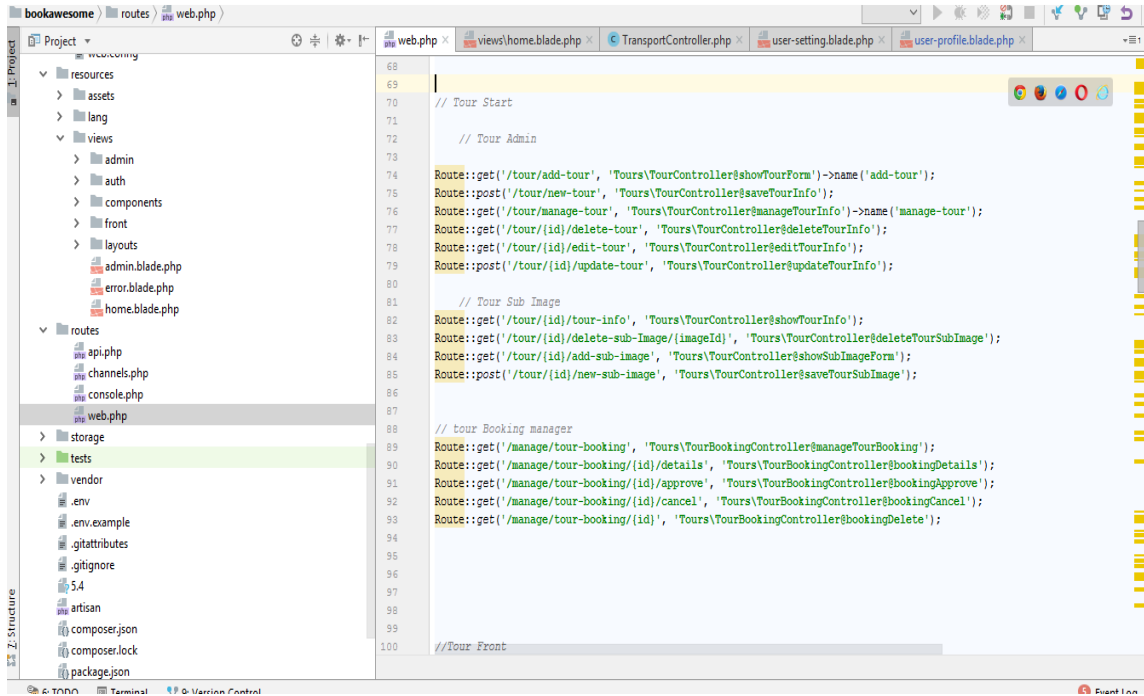


(d)



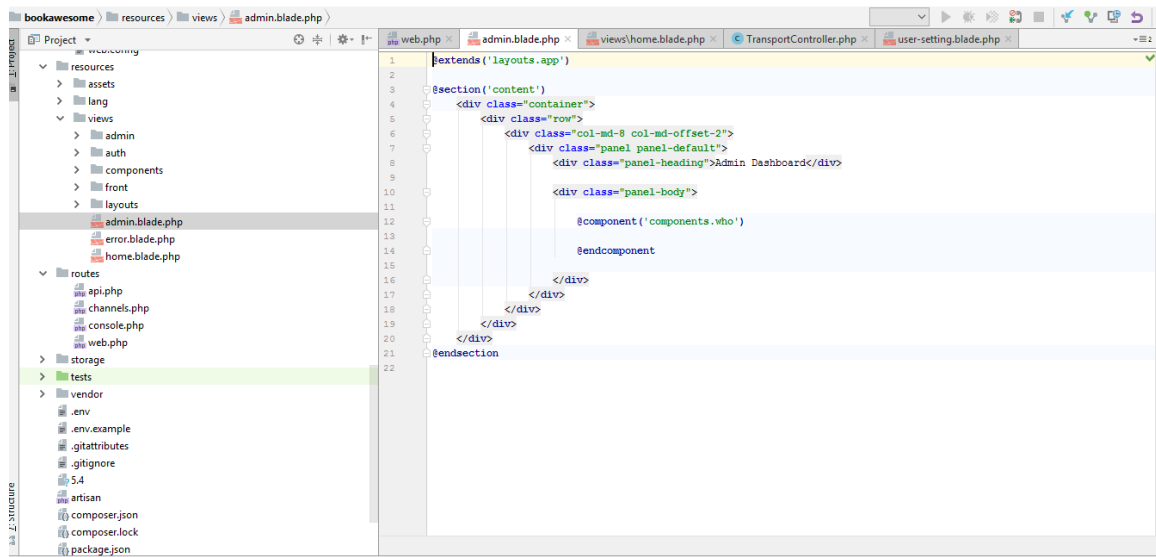
(e)

4.4 Back-end Design



```
68
69
70 // Tour Start
71
72 // Tour Admin
73
74 Route::get('/tour/add-tour', 'Tours\TourController@showTourForm')->name('add-tour');
75 Route::post('/tour/new-tour', 'Tours\TourController@saveTourInfo');
76 Route::get('/tour/manage-tour', 'Tours\TourController@manageTourInfo')->name('manage-tour');
77 Route::get('/tour/{id}/delete-tour', 'Tours\TourController@deleteTourInfo');
78 Route::get('/tour/{id}/edit-tour', 'Tours\TourController@editTourInfo');
79 Route::post('/tour/{id}/update-tour', 'Tours\TourController@updateTourInfo');
80
81 // Tour Sub Image
82 Route::get('/tour/{id}/tour-info', 'Tours\TourController@showTourInfo');
83 Route::get('/tour/{id}/delete-sub-image/{imageId}', 'Tours\TourController@deleteTourSubImage');
84 Route::get('/tour/{id}/add-sub-image', 'Tours\TourController@showSubImageForm');
85 Route::post('/tour/{id}/new-sub-image', 'Tours\TourController@saveTourSubImage');
86
87
88 // tour Booking manager
89 Route::get('/manage/tour-booking', 'Tours\TourBookingController@manageTourBooking');
90 Route::get('/manage/tour-booking/{id}/details', 'Tours\TourBookingController@bookingDetails');
91 Route::get('/manage/tour-booking/{id}/approve', 'Tours\TourBookingController@bookingApprove');
92 Route::get('/manage/tour-booking/{id}/cancel', 'Tours\TourBookingController@bookingCancel');
93 Route::get('/manage/tour-booking/{id}', 'Tours\TourBookingController@bookingDelete');
94
95
96
97
98
99
100 //Tour Front
```

Figure: 4.1 Environment code (a)



```
1 | extends('layouts.app')
2
3 | @section('content')
4 |     <div class="container">
5 |         <div class="row">
6 |             <div class="col-md-8 col-md-offset-2">
7 |                 <div class="panel panel-default">
8 |                     <div class="panel-heading">Admin Dashboard</div>
9 |
10 |                 <div class="panel-body">
11 |
12 |                     @component('components.who')
13 |
14 |                     @endcomponent
15 |
16 |                 </div>
17 |             </div>
18 |         </div>
19 |     </div>
20 | @endsection
21
22
```

Figure: 4.2 Environment code (b)

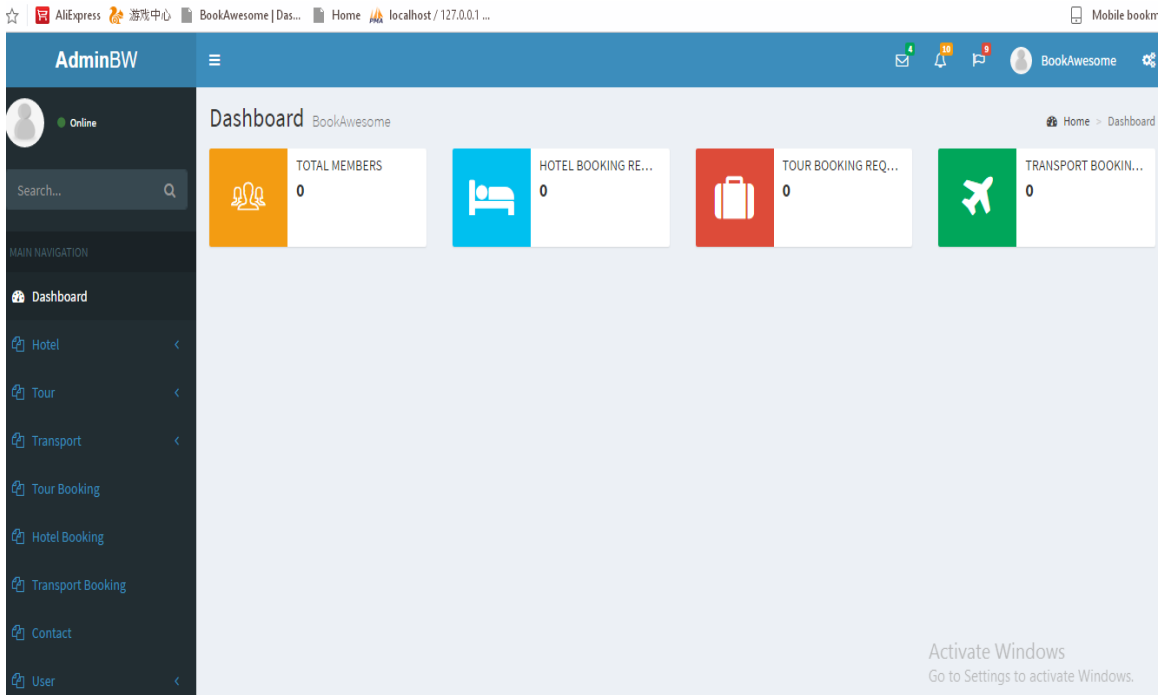


Figure: 4.3 Admin panel Dashboard

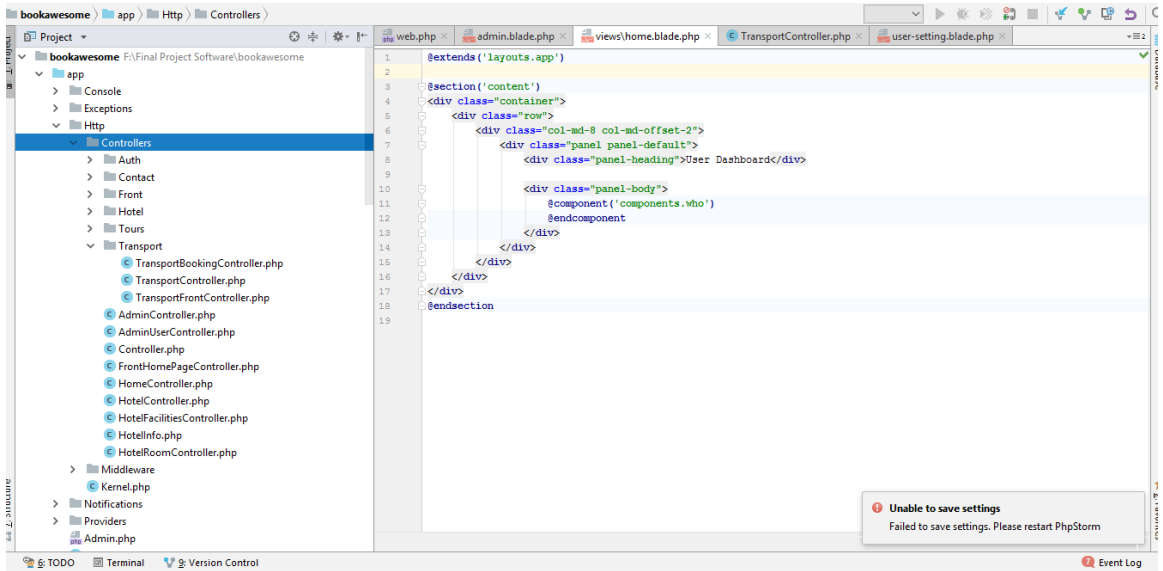


Figure: 4.4 Code platform (a)

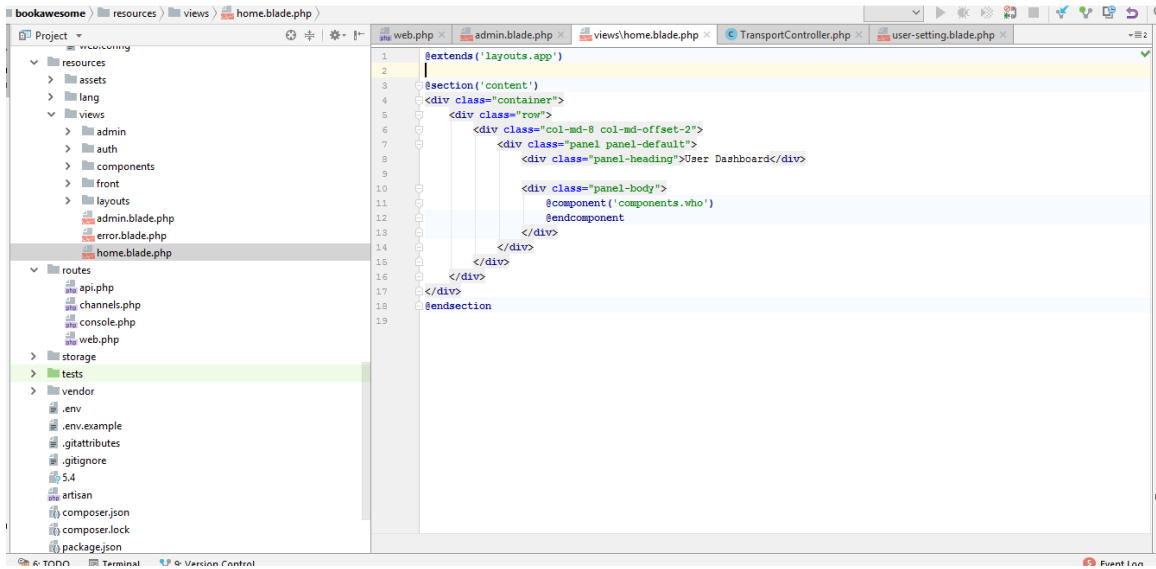


Figure: 4.4 Code platform (b)

4.5 Interaction Design and UX

Interaction design is a discipline that observes the interaction between a system and its user. Process the problem and find out the results, perform actions by the respecting results and solve the problem. On the other hand, user experience focuses on the overall experience between a user and an application. In our application, there are some features that can interact with the user. One of the feature is searching services, which can provide proper information to users. That could be motivating the user to the application. For UX we are tried to give some fantastic experience by our application. We keep our system simple and easier for better experience and performance for the user. We worked so hard to decrease the data loading time on our application and that effort will be continued. Actually, interaction design is the processes which understand the user problem domain.

4.6 Implementation of Requirements

To implement our project, we used different type of tools, components and platforms those help us to developed our project successfully. In Implementation Requirement section we discussed about all those tools and platforms that we use to develop our application. To develop the front-end of the web application we use HTML5, CSS3 and bootstrap as a framework.

- To develop the back-end we use PHP as a scripting language and Laravel as a framework.
- We use XAMPP to build up a local server for our application.
- Preferred Database is MySQL (Engine: InnoDB).

- Hosting platform should be Linux based server.
- Schedule wise backup from server (Both source code and Database).
- Form validation needed using java-script before server site validation.
- CROS-SITE-SCRIPTING needed to verify.
- Unauthorized attach needed to prevent with maximum attach limit.
- Invalid data input should display with error message.
- For specific design JavaScript is needed.
- For visual aspect different types of fonts and icons are collected from google font and font-awesome.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

Database design is the process of producing a detail data model of database. This data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database. A fully attributed data model contains detailed attributes for each entity. A database collects and stores data in such organized way that data requirements are satisfied by the database. The general objective is to make information access easy, quick, inexpensive and flexible for the user. There are also some specific objectives like controller redundancy from failure, privacy, security and performance. A collection of relative records makes up a table. To design and store data to the needed forms database tables are prepared.

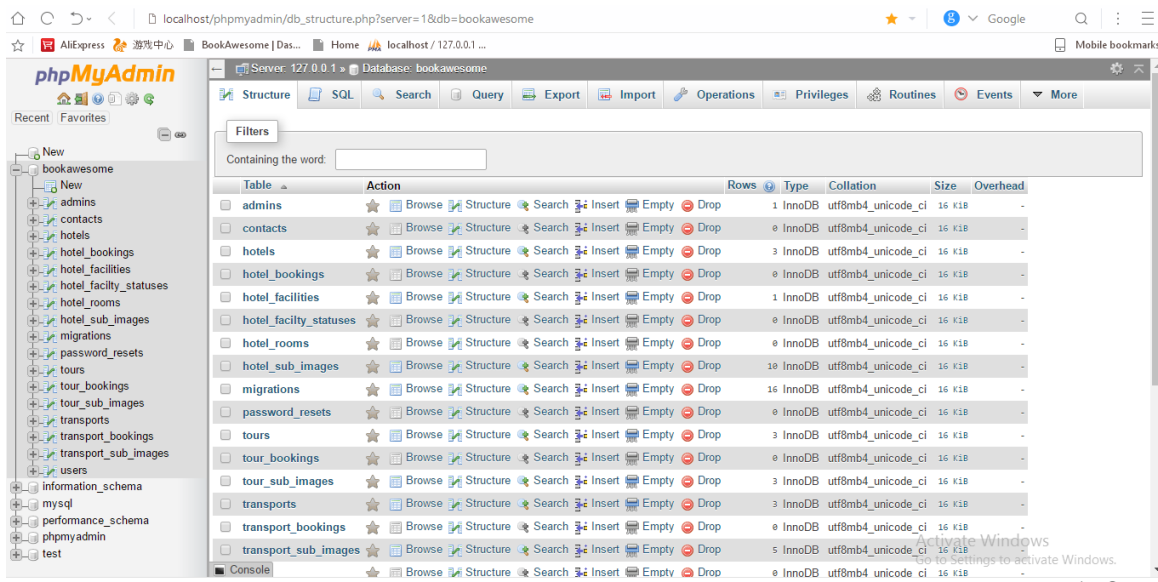


Figure: 5.1 Database tables

5.2 Implementation of Front-end Design

Front-end design is the first impression of a user. We know that people is not easily forget the first impression. So, we have tried our best to make the front-end design simple, attractive and user friendly. But the most challenging portion is, to make our application, device independent, because there are many type of devices like smart mobile, tablets, desktop, 4k desktop etc. another problem is each of them come in

different size. We make our web application responsive so that users visiting from different device will face no difficulties to see our application and have a cool user experience. We make interface relative and standard with the help of HTML, CSS, and JavaScript JQuery technologies.

There are some factors of implementing the front-end design are given below

- There will be three types of users like admin, guest and tourist user.
- Admin and patient must be registered by filling up the required information fields.
- Admin and patient can login using their registered email and password.
- They can reset password by filling up the form of forget password.

5.3 Implementation of Interactions

The architecture of a software system defines that system in terms of components and interactions among those components.

In real world, interaction can have found almost everywhere. Interaction is the key to make a system dynamic and attractive to user. It's very necessary to make a system interactive and we also try to. As mentioned in earlier, we also include some unique feature to interact our system. My application is successfully implemented and the interaction of our application with the users is quite impressive.

Table 5.1: Test case for Design & Development of Tour packages & Transportation.

Test Case	Test Input	Expected Outcome	Obtained Outcome	Result	Tested on
1. Login	Valid email & password	Successfully login	Successfully login	Passed	03-04-2018
2. User / Admin Registration	Filling up the required information fields by providing proper information.	Registration successfully done.	Registration successfully done.	Passed	03-04-2018
3. Insert	Filling up the	Save	Save	Passed	03-04-2018

Services	required information fields by providing proper information.	successfully done.	successfully done.		
4. Post News, Event & Schedule	Filling up the required information fields by providing proper information.	Post successfully done.	Post successfully done.	Passed	03-04-2018
5. View Services	Click on specific service	View successfully	View successfully	Passed	03-04-2018
6. Search Services	Search by location, specialty & any single key word.	Show the search data successfully	Show the search data successfully	Passed	03-04-2018
7. Update Services	Click on update icon which is update, go to the update page & provide update data	Update successfully done	Update successfully done	Passed	03-04-2018
8. Delete Services	Click on delete icon which is delete	Delete successfully done	Delete successfully done	Passed	03-04-2018
9. Logout	Click on logout button	Logout successfully	Logout successfully	Passed	03-04-2018

5.4 Test Results and Reports

Test Report is needed to reflect testing results in a formal way, which gives an opportunity to estimate testing results quickly. It is a document that records data obtained

from an evaluation experiment in an organized manner, describes the environmental or operating conditions, and shows the comparison of test results with test objectives.

Test report is very important and it is needed to know that the system is ready/ not ready for implementation? It is a document that records data obtained from an evaluation experiment. We need to run through many types of testing.

There are many types of testing:

- Functionality
- Regression
- Security
- Performance
- Scalability
- Usability
- System interoperability
- Localization
- Disaster recovery
- Installation/ upgrade

If the system passes through all these types of testing it is finally ready to launch so at the end we can carry out the results as the benefits of usability testing.

- Good Quality of application.
- System is easier to use.
- Application is more readily accepted by users.
- Easy to use for the new users.
- Better UI for interaction.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

The significance of tourism is viewed from many angles like economic, social, cultural, political, etc. Tourism is now the fastest growing and single largest industry in the world. Though the growth of tourism is impressive world-wide, the same in Bangladesh is not so. It is not because of lack of eye-catching tourist's attraction to the destination of Bangladesh, rather it is the result of inadequate promotional measures. Bangladesh failed to market its incredible tourist attractions like world longest unbroken sea beach, covering miles of golden sands, soaring cliffs, surfing waves, rare conch shells, Buddhist Temples, Pagodas and enjoyable sea-food all of which are almost impossible to be found. The effective implementation of all these steps will help Bangladesh tourism industry to experience development and will emerge as a major contributor to the national economy with in a very short period.

6.2 Scope for Further Developments

There are some limitations in my web application. I will try to overcome this limitation as soon as possible. I will make this kind of software turn into android apps so that people use easily this application anywhere else. Besides I ensure extra transportation facilities into my web application for easy traveling anywhere in the country.

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- [6] “Hotel Management Made Easy” Internet: <https://sirvoy.com/> [Last access date: April 4th 2018, 12:00 am]

PLAGIARISM CHECK TEST

The screenshot displays the 'plagiarisme' website interface. On the left is a dark sidebar with navigation options: 'Upload', 'Papers', 'Payments', 'Free', 'Earn money', 'RATE US' (with 5 stars), and 'CONTACT US' (with a speech bubble icon). The top right of the page features a navigation bar with 'FAQ', 'Student', '1\$', and an 'AUTHENTIC TEST' badge. A search bar is located at the top center. The main content area shows a document titled 'Final-Project-Report-Book-Awesome.c' uploaded '2 minutes ago'. A circular progress indicator shows a '26%' similarity score. Below this, three categories are listed: 'Paraphrase' (2%), 'Improper Citations' (0%), and 'Matches' (24). A red banner at the bottom of the document preview indicates a 'HIGHEST PLAGIARISM RISK' with three stars. At the very bottom of the page, a purple bar contains a question: 'Is this an English word and is it correct?' followed by the 'opulation' logo and 'Yes' and 'No' buttons.