|  |  |
| --- | --- |
|  | **FPT ACADEMY INTERNATIONAL**  **FPT – APTECH COMPUTER EDUCATION** |

**Centre Name: ACE-HCMC-2-FPT.**

**Address: 590 Cach Mang Thang 8, District 3, Ho Chi Minh City, Viet Nam.**

**Railway Reservation**

**Design Document**

|  |  |  |
| --- | --- | --- |
| **Supervisor:** | Mr. Tran Phuoc Sinh | |
| **Semester:** | 3 | |
| **Batch No:** | T1.1910.M3 | |
| **Group No:** | 4 | |
| **Order:** | **Full name** | **Roll No.** |
| 1. | Truong Ngoc Anh Tuan | Student1222904 |
| 2. | Tran Minh Hoan | Student1225616 |
| 3. | Dao Nguyen Duy Khang | Student1225612 |
| 4. | Luong Xuan Bac | Student1225621 |

January 2021

Table of Contents

[REVIEW 1 5](#_Toc50628012)

[I. Acknowledgement 6](#_Toc50628013)

[II. Problem Definition 7](#_Toc50628014)

[1. Introduction: 7](#_Toc50628015)

[2. Existing System 7](#_Toc50628016)

[III. Requirement Specification 8](#_Toc50628017)

[1. Customer’s Requirement Specifications 8](#_Toc50628018)

[1.1. Website: 8](#_Toc50628019)

[1.2. Users: 8](#_Toc50628020)

[1.3. Registered Users: 9](#_Toc50628021)

[1.4. Admin: 9](#_Toc50628022)

[2. Functional Requirement Specifications. 9](#_Toc50628023)

[2.1. Function of User: 9](#_Toc50628024)

[2.2. Function of Admin: 10](#_Toc50628025)

[3. Non-Functional Requirement Specifications: 10](#_Toc50628026)

[4. System requirement specifications 11](#_Toc50628027)

[4.1. Server requirements: 11](#_Toc50628028)

[4.2. Client Requirement 12](#_Toc50628029)

[4.3. Development Software 12](#_Toc50628030)

[4.4. Technology 12](#_Toc50628031)

[TASK SHEET REVIEW 1 13](#_Toc50628032)

# REVIEW 1

## Acknowledgement

First, we would like to express our gratitude to our dedicated instructor – Mr. Tran Phuoc Sinh. We would have not been able to finish this dissertation without his guidance and encouragement. During the time of the project, he continuously gave us constructive advises and showed his passion in teaching to help us reach the expected result of the projects. Therefore, we truly value his dedication and we learned a lot from him.

Next, we fully appreciate our team members who worked day and night to carry out and complete this project. Although sometimes there were challenges, but by through them, we learned a lot and our team bonds became stronger. The project is the result of our relentless efforts to improve through every step, our strong commitment to the expected outcome and our passionate spirit at one team.

Finally, we would send a huge thanks to Aptech’s eProject team who gave us an excellent chance to apply what we have learnt theoretically into real products and gain experience as well as innovative mindset which is extremely vital for our future career and our end users.

## Problem Definition

Indian Railways is one of the largest rail networks in world.Majority of people used to travel in train which is convenient and affordable means of transport. So keeping this in view, the reservation of railways is a most important task and it must be faster and efficient as the demand (travelers) is very high.

In order to meet this demand, manual reservation is cumbersome and it requires an efficient program to implement the online reservation.

This Application enables us to choose the train even there is no necessary to fill a form at the railway reservation counter ,i.e. we can directly select from the choices provided for us with train numbers and their origin, departure time, destination &amp; arrival time at that station and the class to travel in. Application gives us the final output as train ticket with theamount to be paid.

## Requirement Specification

### Customer’s Requirement Specifications

#### 1.1. Website:

* Home page: contain Menus like home, login, free recipe available, contact us, feedback, adding recipe FAQ’s, Order the books of the recipe, register page.Feed back form (to take the feed back from both registered users and Unregistered Users.).
* Online Order: Here the list of the books must be added with its image and little description. There should be link mentioned for buying the books, once the links gets clicked then the users is supposed to provide the authenticate details like: Name, Email ID, Contact Details, Address (where the book will get delivered), Cost ( should come directly as per the book is selected), Submit. Once the transaction is complete the message must be prompted to the user whether the transaction is completed or not.
* About Us: Describe about the Railway Reservation parlor and the owner.
* Contact Us: Should display the Contact details.

#### 1.2. Users:

* For Register page: The customer can register with the site provided he/she makes the payment . The payment for the members are:
* Monthly – 15 $
* Yearly – 150$

#### 1.3. Registered Users:

* Link will be enabled with all the previous function mentioned.
* Users get registered he/she must be allowed to login with their user name and password.
* Links like most famous flavor available for the registered user.
* Registered Users in the web site are able to see the entire recipe.

#### 1.4. Admin:

Admin will have its own Login Page where the following functions will be taken care of:

* Details of the recipe will be added and updated.
* Checking the List of the registered users and their payment details
* Checking the list of the books being ordered and the updating the status like if the book is send then the order processes, once reached the status will be completed.
* Checking the feedbacks entered by the user.

### Functional Requirement Specifications.

#### 2.1. Function of User:

**2.1.1. Un-Registered Users:**

REQ-01. Register with provided he/she makes the payment.

REQ-02. Railway resertion if he/she pay the charge of the book online through credit card.

REQ-03. Provide their own new recipe.

REQ-04. View about Railway resertion shop.

REQ-05. Send feedback.

**2.1.2. Registered Users:**

REQ-06. All function like Un-Registered users.

REQ-07. Login, logout in the website.

REQ-08. Can view the entire station's, running time railway resertion.

REQ-09. Profile: User can change password, view history railway reservation

#### 2.2. Function of Admin:

REQ-10. Login, logout, change password.

REQ-11. Manage recipe.

REQ-12. View order.

REQ-13. View, change password, delete user.

REQ-14. View, delete feedback

REQ-15. View, Update status of railway ordered.

### Non-Functional Requirement Specifications:

REQ-16. Good User Interface, User Experience.

REQ-17. Clean code, project.

REQ-18. Try hard improve the performance.

REQ-19. Try this website run on all browsers.

REQ-20. Responsive this website on mobile, tablet, desktop.

REQ-21. Try limit bugs on this website.

### System requirement specifications

#### 4.1. Server requirements:

* Hardware:

|  |  |
| --- | --- |
| **Component** | **Requirement** |
| **CPU** | Processor type:  Pentium IV-compatible processor or faster  Processor speed:  Recommended: 2.0 GHz or faster |
| **OS** | Microsoft Windows XP or higher with IIS |
| **Memory (RAM)** | RAM:  Minimum: 512 MB  Recommended: 2 GB or more |
| **Hard Drive** | Free space:  Minimum: 200 MB  Recommended: 50 GB or more  Maximum: Operating system maximum |

* Software:

|  |  |
| --- | --- |
| **Component** | **Requirement** |
| **ASP.NET Core** | Version .NET Core 3.1 |
| **RDBMS** | SQL Server |

#### 4.2. Client Requirement

* Hardware:

|  |  |
| --- | --- |
| **Component** | **Requirement** |
| **CPU** | Processor type:  Pentium III-compatible processor or faster  Processor speed:  Recommended: 1.0 GHz or faster |
| **OS** | All OS(Window ,Linux ,Android ,Mac OS …) |
| **Memory (RAM)** | RAM:  Minimum: 512 MB  Recommended: 1 GB or more  Maximum: Operating system maximum |
| **Hard Drive** | Free space:  Minimum: 10 MB |

* Software:

|  |  |
| --- | --- |
| **Component** | **Requirement** |
| **Web Browser** | IE 4.0 , Firefox 3.0,Chrome or Higher….. |

#### 4.3. Development Software

* SQL Server.
* Microsoft Visual Studio 2019.

#### 4.4. Technology

* ASP.Net core 3.1
* Entity Framework Core 3.1.3

TASK SHEET REVIEW 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Ref. No.:**  **eP/Advertisement** **Portal Management** **System/01** | | **Project Title:** | **Activity Plan** **Prepared** **By:** | **Date of Preparation of Activity Plan:** | | | |
| **St.No.** | **Task** | **Actual Start** **Date** | **Actual** **Days** | **Team** **Mate** **Names** | **Status** |
| 1 | Acknowledgement | *Railway Reservation* | Truong Anh Tuan | 23/01/2021 | 1 | All member | Completed |
| 2 | Problem Definition | 23/01/2021 | 1 | All member | Completed |
| 3 | Requirement Specification | 23/01/2021 | 1 | All member | Completed |
| 4 | Task sheet review | 23/01/2021 | 1 | All member | Completed |

|  |  |
| --- | --- |
| **Date: 24/08/2020** | |
| Signature of Instructor:  **Mr. Tran Phuoc Sinh** | Signature of Team Leader:  **Nguyen Ngoc Anh Tam** |