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ITITIU13170

Thesis outline

I/ Introduction

1/ Situation without management system

* Customer must come to hotel to book room => if huge number of customer come at the same time => have to wait => waste time and money => uncomfortable
* Booking based on pen and paper => not convenient for both the customers and the receptionists
* Management is very difficult *(specially in enormous hotels)*
* Reservation might cause a lot of risk *(invalid information of customers, wrong information of rooms or bookings)*

2/ Difficulties with old management system

* Performance might be very bad
* Could overload or run extremely slow when a huge number of users access at the same time
* Look and feed *(User interface was not designed beautifully)*
* Not pleased to use

3/ Proposed approach

* Many deluxe hotels or five-star hotels in the world *(****Marriott International, Hilton Worldwide or InterContinental Hotels Group)*** already have their own hotel booking systems.
* Friendly user interface
* High performance
* Ability to track the behavior of customers.
* The administrators, the managers or hotel owners could know what customer had done on their websites. *(which pages customers clicked on, how long customers stayed at each page, which rooms, which services that customers had searched, booked, ordered or send the feedbacks)*
* Based on the data collection, the systems will automatically suggest what customers may like, recommend which rooms customers should book.
* The hotel owners can improve their hotel business based on the information collected by their systems.

4/ Goals and Scope

* Includes some inherited features from those five-stars hotel booking systems.
* The main architecture is using MEAN stack technology and J2EE with Spring MVC framework.
* MEAN stack technology => becomes an online single page application with high performance
* Nodejs and express framework => RESTFULL web service + Angular 2 => Dynamically loading
* Spring MVC => becomes a cross-platform system runs well with all operating system.
* Friendly user interfaces => comfortable, easy to use.
* Supports almost features for hotel bookings & reservations management.
* 2 servers are running at the same time => each server doesn’t have to do a lot of job.
* There are many features that my system support for each role *(List functions of each role: guest, customer and admin)*

II/ Software Requirement

1/ System Overview

2/ Feature

3/ Use case:

* Show use case diagram
* Describe use case diagram

4/ User story:

* Write user story

III/ Methodology

1/ System Architecture

2/ Resources (Hardware, Software)

1. **Hardware**

|  |  |
| --- | --- |
| Device | Details |
| Intel Core i5 4200 CPU 2.3Hz | Processor |
| Intel Core i7 3537U CPU 2.0Hz | Processor |
| DDR3 | 8GB RAM |
| Intel Graphics MH4400 | Card |
| Intel High Definition Audio | Audio and Speaker |
| Genius | Mouse |
| HD 15.6 inch | Monitor |

1. **Software**

|  |  |
| --- | --- |
| Device | Details |
| Window 7 professional 64 bits | Operating System |
| Microsoft Office 2013 Professional | Document Application |
| Adobe Dreamweaver CS6 | Design Tools |
| Eclipse Mars, NetBeans | Programmer Tools |
| MySQL, Navicat | Database Tools |
| Google Chrome, Cốc Cốc,  Mozilla Firefox, Internet Explorer | Testing Tools |

3/ All Technology used:

* List technology used:
* Project management: Trello

IV/ Implementation

V/ Experiment and Result

1/ Experiments

2/ Evaluation

3/ System demonstration

VI/ Conclusion

VII/ Extended

1/ Definition

|  |  |
| --- | --- |
| Term | Descriptions |
| Customer | The customer’s interface |
| Manager | The manager’s interface |
| Food | The food menu |
| Drinks | The drinks menu |
| Fill form | Customer will input their information and their type of payment |
| Delivery mode | Customer can choose the food & drinks online, pay the bills online |
| Book mode | Customer can look up for available table and book it, then choose the food & drinks online, pay the bills through the app |
| Money bill | It is a term which is used to point to all the information of the dish that the customer chosen including the price of each food by the current customer account. |
| Set table | In this section, the list of all tables is shown. Then customer will choose the available ones |

2/ Sequence diagram

3/ Test Case

4 User Manual