

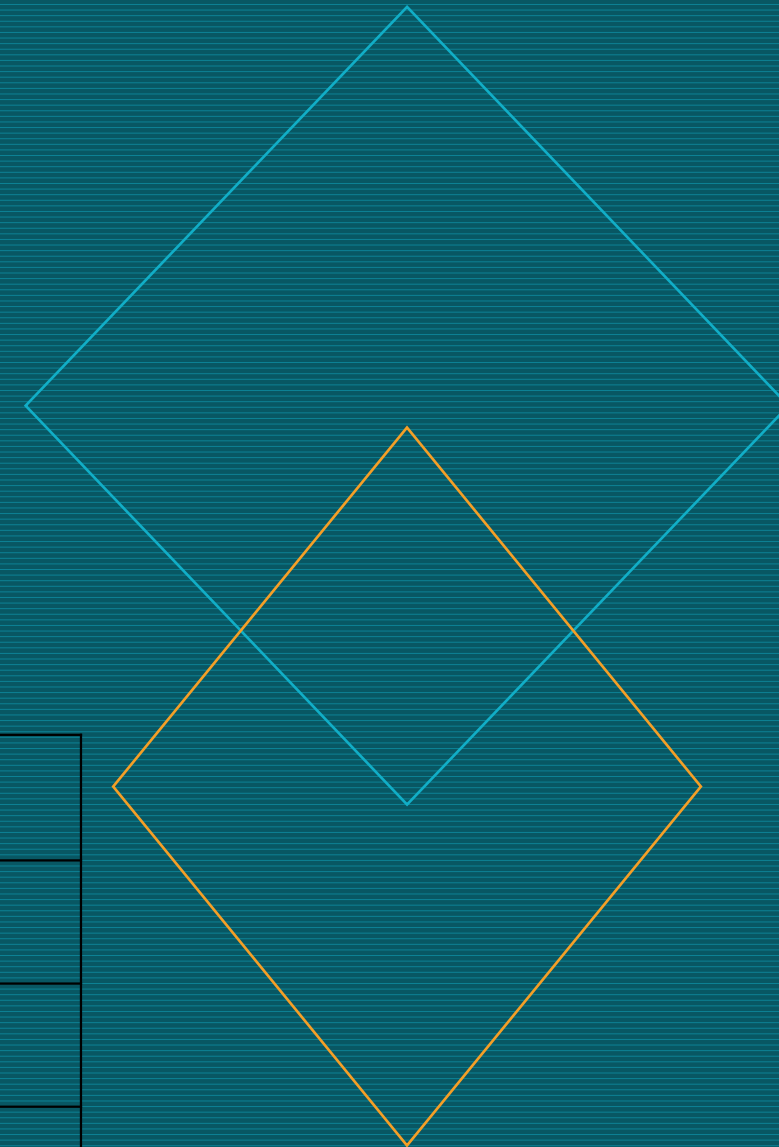
American International University Bangladesh

**PROJECT : Hotel-Restaurant booking &
Comparison System**

**Course : Software
Engineering
Section : L
Group No : 6**

Group Members :

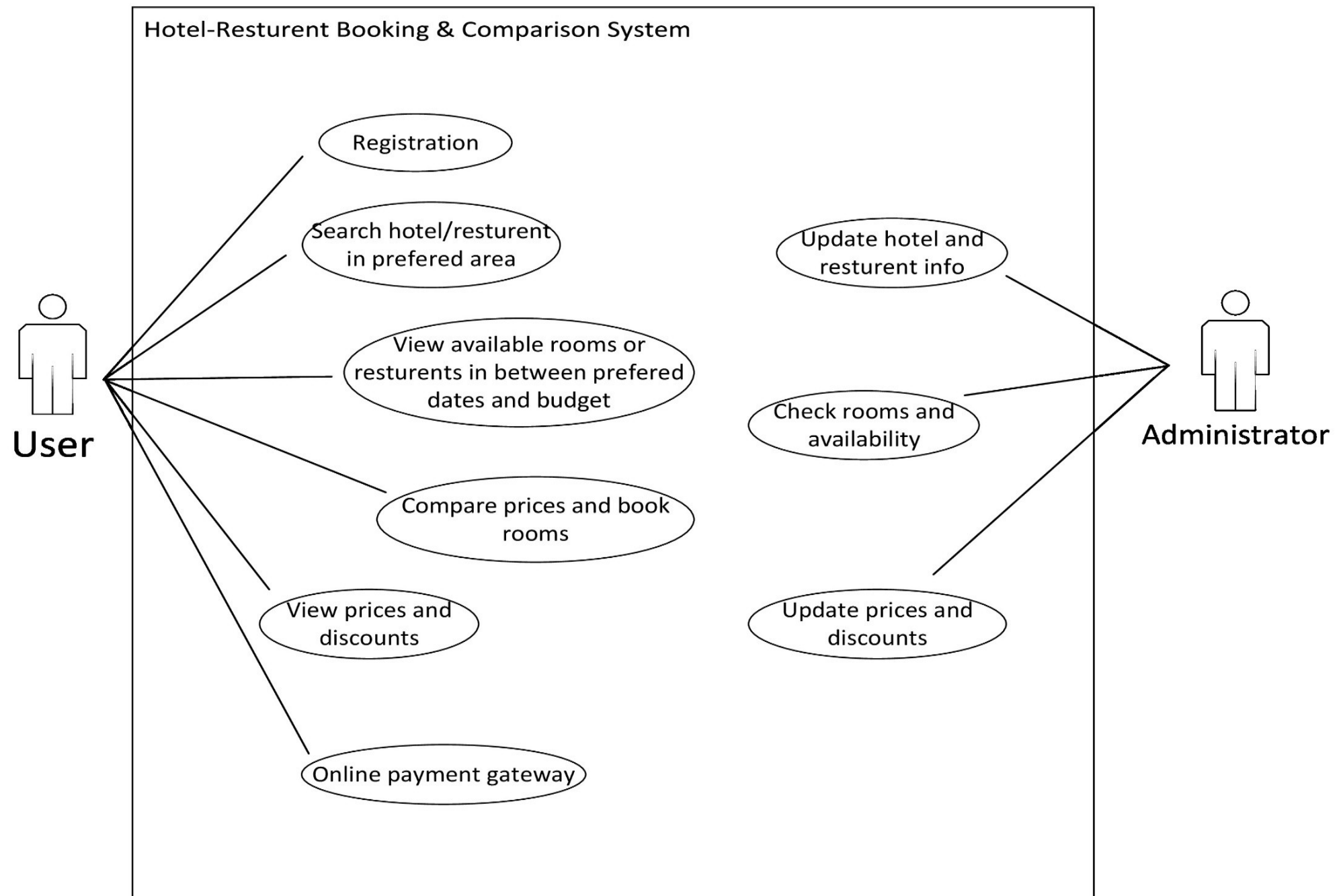
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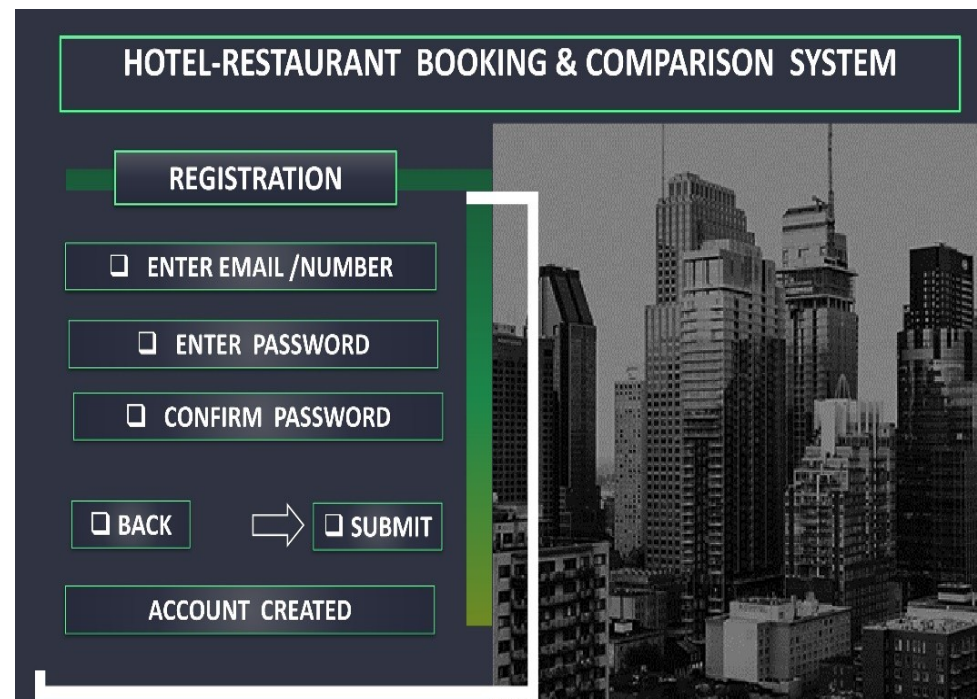
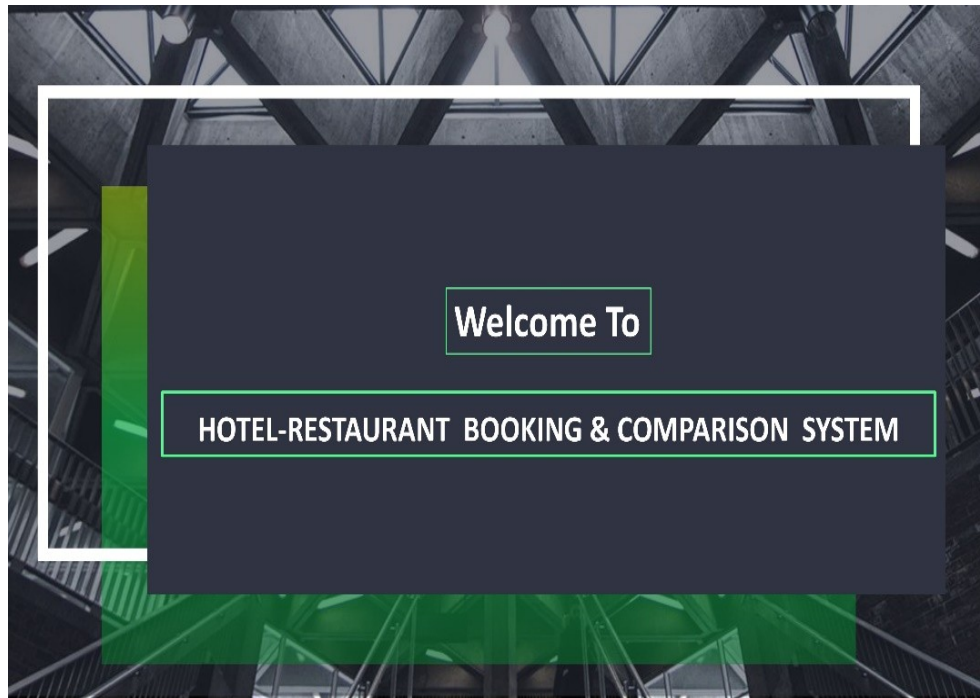
PROJECT IDEA

The main idea behind our project is to provide information to all the travelers who love to travel and the hotel owners who want to expand their business through online. Our motive is to make the travel easy and comfortable. By our project user can confirm all of his/her to-do's before going on a tour. User can book hotel according to his/her criteria and budget. Our system will provide all the detailed information about a hotel and an user can find his favorite hotel within his budget. And he/she can find resurgent according to his taste. Using this system hotel management or restaurant can also update their facilities. Anybody can use this system to know about a hotel and restaurant and can find all the helps to make a trip there.

Use case diagram



User Interface(UI)




User Interface(UI)


☐ CHOOSE CURRENT LOCATION

☐ CHOOSE PREFERED LOCATION

SEARCH FOR

 ☐ HOTEL ☐ RESTURENT

☒ ENTER THE DATE OF CHECK IN



| AVAILABLE HOTELS ACCORDING TO YOUR SEARCH | | |
|--|---|---|
| BASIC(< 3000 tk) | MIDIUM(< 8000 tk) | PRIMIUM(>8000) |
| HOTEL DIAMOND PARK-★★★★ 50 REVIEWS 2 GUEST – 2800 TK/NIGHT (REGULER) 10 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | JATRA ROOMS CTG-★★★★★ 100 REVIEWS 2 GUEST – 7000 TK/NIGHT (DISCOUNT AVE.) 12 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | THE PENINSULA CHITTAGONG-★★★★★ 200 REVIEWS 2 GUEST – 10000 TK/NIGHT (REGULER) 10 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM |
| ROYAL LIVING HOTEL & SUITES -★★★★ 25 REVIEWS 2 GUEST – 2000 TK/NIGHT (WITH 1 SNACKS) 8 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | WELL PARK RESIDENCE-★★★ 110 REVIEWS 2 GUEST – 6500 TK/NIGHT (WITH BREAKFAST) 10 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | RADISSON BLU CHITTAGONG-★★★★★ 180 REVIEWS 2 GUEST – 10000 TK/NIGHT (WITH 1 SNACKS) 10 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM |
| HOTEL REGAL PALACE-NEW NO REVIEWS 2 GUEST – 1500 TK/NIGHT (REGULER) 4 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | NABA INN GUEST HOUSE-★★★ 50 REVIEWS 2 GUEST – 5000 TK/NIGHT (REGULER) 2 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM | THE AVENUE HOTEL & SUITES-★★★★ 200 REVIEWS 2 GUEST – 9000 TK/NIGHT (DISCOUNT AVE.) 10 ROOMS AVAILABLE SHOW DETAILS BOOK ROOM |
| BACK | | Show more |

HOTEL DIAMOND PARK

ROOMS - 1 +

DATE OF CHECK-IN : 24 / JUNE / 2021

GUESTS - 2 +


DATE OF CHECK-OUT : 26 / JUNE / 2021

TOTAL AMOUNT OF RENT = 2 x 2800 TK/NIGHT
VAT INCLUDED
NO DISCOUNT AVAILABLE
ROOM SERVICE INCLUDED
FOOD SERVICE EXCLUDED
TOTAL AMOUNT TO BE PAID = 5600 TK

NOTE: 50 % OF THE TOTAL AMOUNT MUST BE PAID THROUGH ONLINE PAYMENT AT THE TIME OF CONFIRMING BOOKING.

[EXIT](#)  [CONFIRM BOOKING](#)

MAKE PAYMENT

 [PAY FULL AMOUNT](#) [PAY 50 % OF THE AMOUNT](#)

[BKASH](#)
[NAGAD](#)
[ROCKET](#)

User Story Card

User Story Template

| | | |
|---|--------------------|----------------------|
| Title: Registration | Priority: 1 | Estimate:5.00 |
| <p>As a user I can register for the application by entering my information.</p> <p>I want to complete the registration process.</p> <p>so that I can confirm my registration.</p> | | |
| <p>Acceptance criteria</p> <p>Given anybody can register.</p> <p>When the user provides a valid email and unique password.</p> <p>Then if there is no duplicate of email in the database, the user will be able to complete his/her registration.</p> | | |

User Story Template

| | | |
|--|--------------------|----------------------|
| Title: compare | Priority: 3 | Estimate:8.00 |
| <p>As a user I can compare between two or more hotels and restaurants.</p> <p>I want to find the best deal between many hotels & restaurants.</p> <p>so that I can complete my full tour within my budget.</p> | | |
| <p>Acceptance criteria</p> <p>Given verified location</p> <p>When the user wants to compare between hotels/restaurants</p> <p>Then if the location has more than one hotel or restaurant, the user will be able to compare</p> | | |

User Story Card

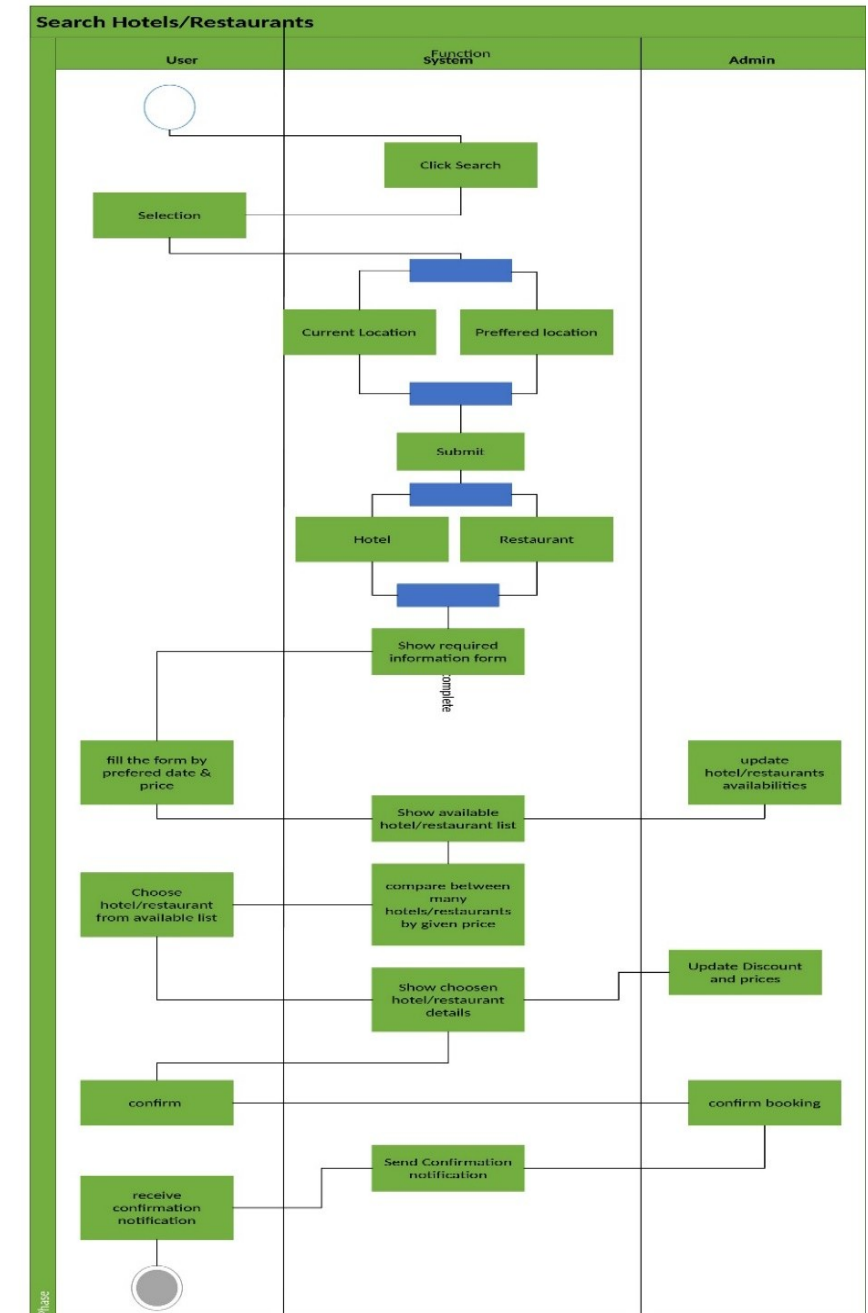
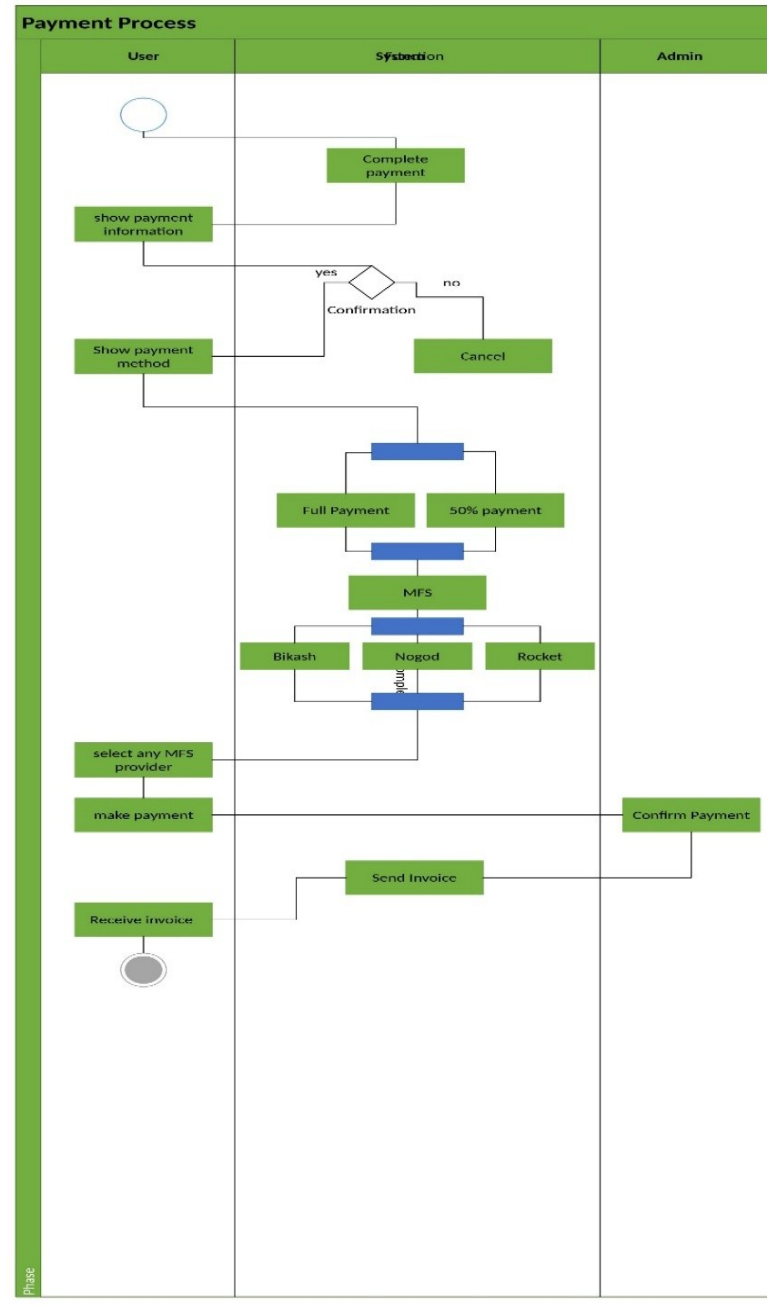
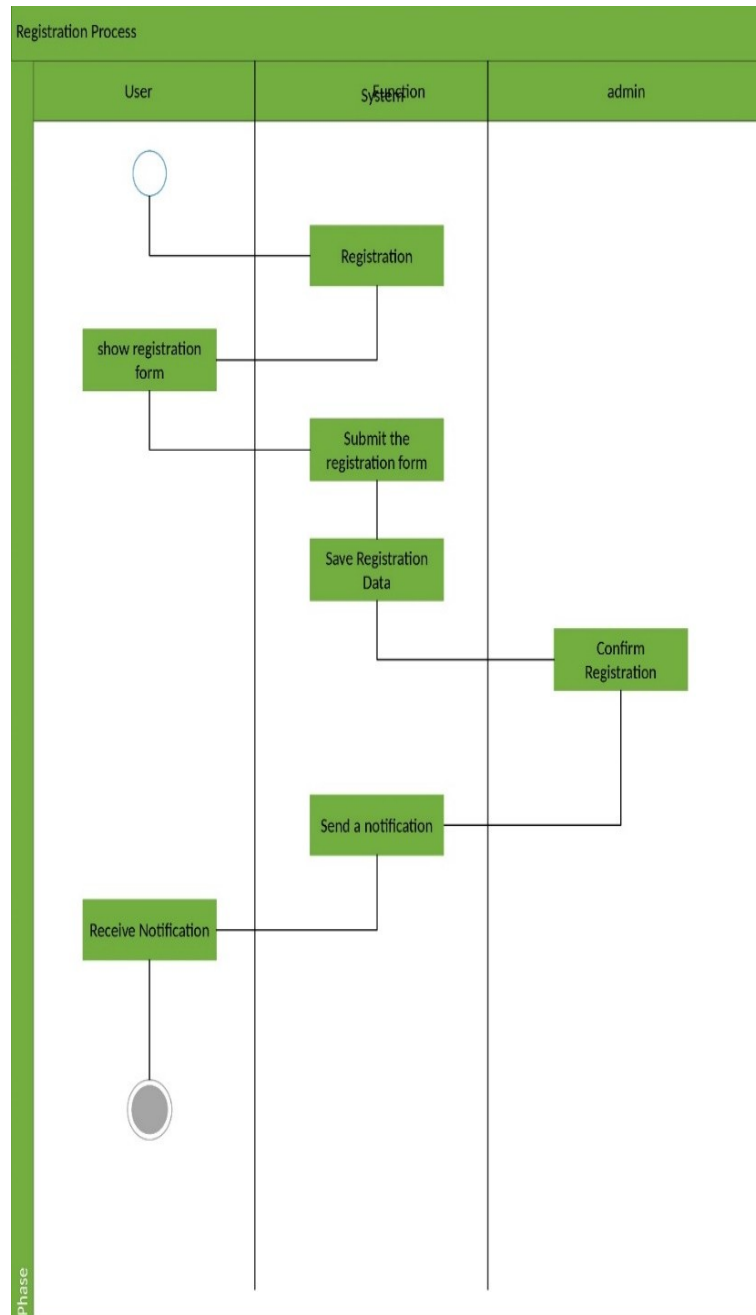
User Story Template

| | | |
|---|-------------|---------------|
| Title: compare | Priority: 3 | Estimate:8.00 |
| <p>As a user I can compare between two or more hotels and restaurants.</p> <p>I want to find the best deal between many hotels & restaurants.</p> <p>so that I can complete my full tour within my budget.</p> | | |
| <p>Acceptance criteria</p> <p>Given verified location</p> <p>When the user wants to compare between hotels/restaurants</p> <p>Then if the location has more than one hotel or restaurant,the user will be able to compare</p> | | |

User Story Template

| | | |
|---|-------------|---------------|
| Title: Price | Priority: 4 | Estimate:4.00 |
| <p>As a user I can know about the prices of different hotels & restaurants.</p> <p>I want to get a hotel according to my budget.</p> <p>so that I can complete my tour peacefully.</p> | | |
| <p>Acceptance criteria</p> <p>Given discounts and offers</p> <p>When the user provides his/her budget and wants to know about discounts</p> <p>Then according to the users budget if any offer or discount available then the user can see the discounts and the offers</p> | | |

Activity diagram



JIRA

Jira Software

Your work ▾

Projects ▾

Filters ▾

Dashboards ▾

People ▾

Apps ▾

Create

Q Search

SE_Group -6_section-L

Open team

Heyyyyy, what does your team do again?

Add people



Members

4 members



Sadir Ahmed Zidan
Project Manager



Asma Sadia Anika



Mahin zaman arnob



Md. Sahilur Rahman

Worked on



HBCS-2 Use Case Diagram

Hotel/Resturent Booking and Comparison System · You and Asma Sadia Anika have both worked on this



HBCS-4 User Story Card

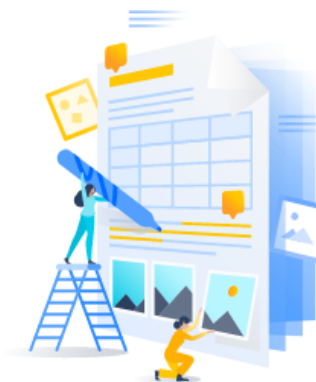
Hotel/Resturent Booking and Comparison System · You and Mahin zaman arnob have both worked on...



HBCS-5 Activity Diagram

Hotel/Resturent Booking and Comparison System · You and Md. Sahilur Rahman have both worked on...

Links



Share the knowledge!

Add links to let everyone know where your team works.

JIRA

| Type | Key | Summary | Assignee | Reporter | P | Status |
|-------------------------------------|--------|-----------------------------------|---|---|---|---|
| <input checked="" type="checkbox"/> | HBCS-5 | Activity Diagram |  Md. Sahilur Rahman |  Sadir Ahmed Zidan |  |  |
| <input checked="" type="checkbox"/> | HBCS-4 | User Story Card |  Mahin zaman arnob |  Sadir Ahmed Zidan |  |  |
| <input checked="" type="checkbox"/> | HBCS-3 | User Interface |  Sadir Ahmed Zidan |  Sadir Ahmed Zidan |  |  |
| <input checked="" type="checkbox"/> | HBCS-2 | Use Case Diagram |  Asma Sadia Anika |  Sadir Ahmed Zidan |  |  |
| <input checked="" type="checkbox"/> | HBCS-1 | Presentation Slide Of the Project |  Sadir Ahmed Zidan |  Sadir Ahmed Zidan |  |  |

GitHub

```
Command Prompt
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER>cd desktop
C:\Users\USER\Desktop>cd C:\Users\USER\Desktop\Git hub
C:\Users\USER\Desktop\Git hub>git config --global user.name "Zidan010"
C:\Users\USER\Desktop\Git hub>git config --global user.email "sazidan559@gmail.com"
C:\Users\USER\Desktop\Git hub>git config --global --list
user.name=Zidan010
user.email=sazidan559@gmail.com
C:\Users\USER\Desktop\Git hub>git clone https://github.com/Zidan010/Zidan.git
Cloning into 'Zidan'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
C:\Users\USER\Desktop\Git hub>cd Zidan
C:\Users\USER\Desktop\Git hub\Zidan>git init
Reinitialized existing Git repository in C:/Users/USER/Desktop/Git hub/Zidan/.git/
C:\Users\USER\Desktop\Git hub\Zidan>git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
C:\Users\USER\Desktop\Git hub\Zidan>git add -A
C:\Users\USER\Desktop\Git hub\Zidan>git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Test_Zidan.txt
C:\Users\USER\Desktop\Git hub\Zidan>git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   Test_Zidan.txt
```

Class Diagram

System

- CustomerInfo: Customer = null
- Hotelownerinfo: HotelOwner = null
- hotelList: booking = null
- CreateEntry: Entry = null
- Hotelname : string = null

- setCustomerInfo()
- verifyCustomerInfo()
- + addCustomerInfoToDatabase()
- setHotelownerinfo()
- verifyHotelownerinfo()
- + addHotelListToDatabase()
- Checkhotelroomsavailability()
- + getpayment()
- updateHotelList()
- updatecustomerbooking()
- updateHotelBookingHistory()
- + getHotelBookingList() : Booking
- + publishEntry()
- + addEntryInfoToDatabase()
- + getHotelComperison(bk_1:Booking,bk_2:booking)
- + getTopBookedHotelList(): Booking
- + ShowOverviewInfo()
- + SearchHotel(): Booking
- + sentbookingRequestToHotelOwner()

Customer

- + customer_name: String = null
- + customer_Pass: string = null
- + customer_mail: string = null
- + customer_Address: string = null
- customer_userId: string = null

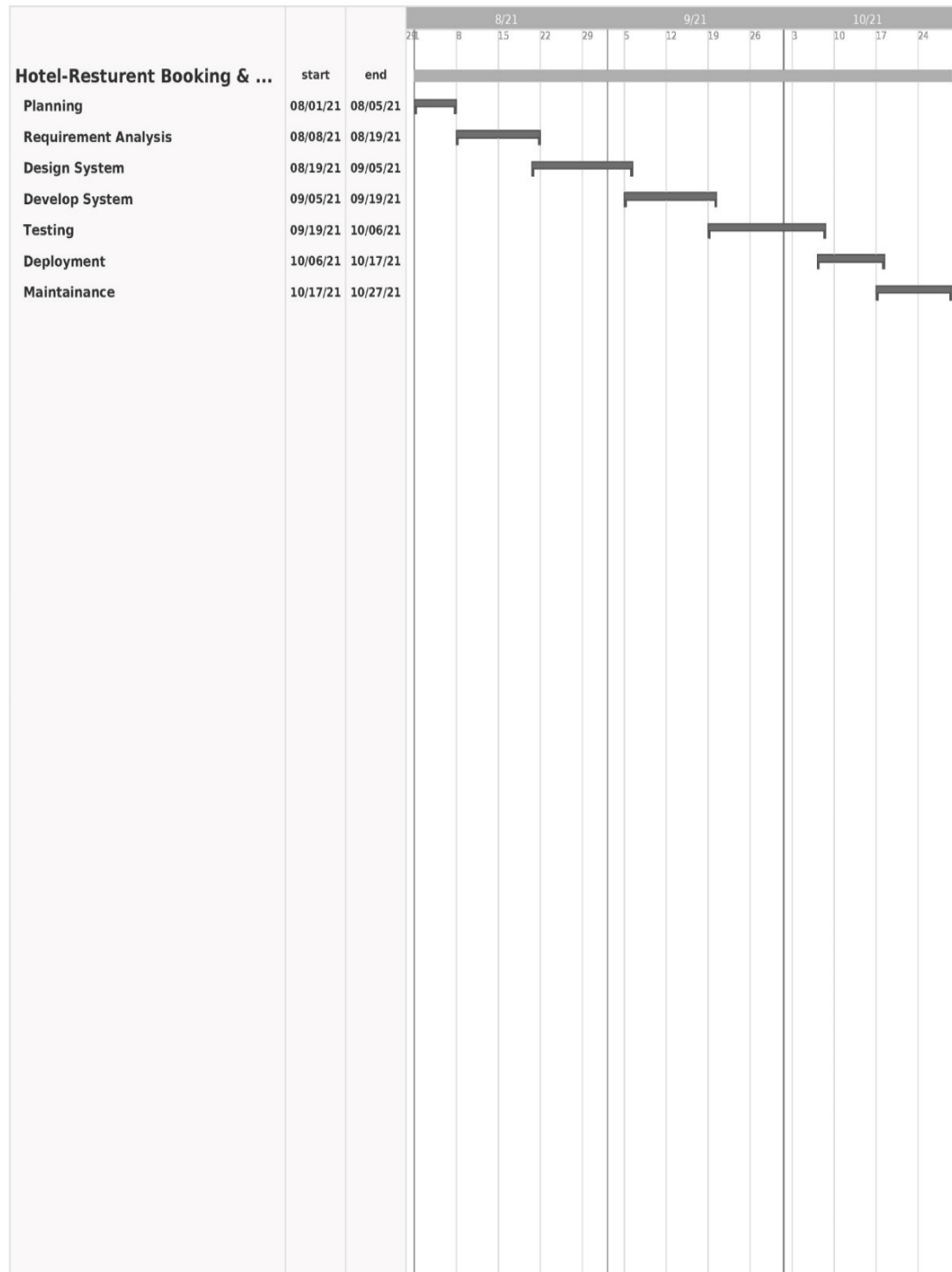
- fillupForm()
- + getRegistrationInfo(): Customer
- + makepayment()
- + submitRequestedBooking(): Booking
- + getbookingInfo()
- + getbookingPayInfo()
- setSearchHotelname()
- + getSearchHotelname(): string
- + getSearchHotelList(p_list Hotels)

Restaurant/HotelOwner

- OwnerName: string = null
- OwnerMail: string = null
- OwnerAddress: string = null
- Ownerphonenum: string = null (max 11 digit)
- hotelName: string = null
- hotelAddress: string = null
- hotelranking: string = null
- bookingInfo: Booking = null
- topBookedhotelRooms: Booking = null
- requestedBooking: Booking = null

- fillupForm()
- + getOwnerRegistrationInfo(): HotelOwner
- submitHotelBookingInfo()
- + getHotelName()
- + getHotelAddress()
- + getHotelCatagory()
- + getTopBookedHotels (Booking : Booking)
- + getTopBookedHotelrooms()
- + createNewEntry() : Entry
- + givepromotionalfee()
- addHotels()
- + getHotelList() : Booking
- + setrequestedBooking()(br_list:Booking)

Timeline Chart



Budgeting

Hotel-Resurent Booking & Comparison System

Project Estimation

Type: Organic
Coefficient=2.4
Source line of code(SLOC)=22000 SLOC
Project Complexity(P)=1.05
SLOC dependent coefficient(T)=0.38

Person month needed for project(PM): $\text{Coefficient} * (\text{SLOC}/1000)^P$
 $= 2.4 * (22000/1000)^{1.05}$
 $= 62 \text{ months}$

Development time(DM) : $2.50 * (\text{PM})^T$
 $= 2.50 * (62)^{0.38}$
 $= 12 \text{ months}$
 $= 1920 \text{ working hours}$

Required number of people (ST): PM/DM
 $= 62/12$
 $= 6$

Project Budget

Salary of Developer:

Per hour working salary = 600 tk
Total salary for developers= $600\text{tk} * 1920\text{hrs} = 1152000 \text{ tk}$

Requirement Analysis:

Total time for analysis=3weeks=15 working days=15*8=120 hours
Per hour analysts salary=500
Total salary= $500 * 120 = 60000 \text{ tk}$

Salary of project tester:

Testing time estimated = 3 months=22*8*3 =528 hours
Tester salary per hour = 500 tk
Total salary = $500 * 528 = 264000 \text{ tk}$

Project Management:

Total working time= 8 months=8*22*8=1408
Per hour salary of management=500 tk
Total salary=300*1408=422400 tk

Maintainance:

After deployment maintainance time=4 weeks=20*5=100 hours
Cost per hour=1000
Total cost=1000*100=100000 tk

Office Expenses:

Rent=12*30000=360000tk
Training expense = 50000tk
Transportation cost=24000tk
Hardware and stuffs=100000tk
Miscellaneous =12*1500=18000tk

Total Estimated Expense:

$(1152000 \text{ tk} + 60000 \text{ tk} + 264000 \text{ tk} + 422400 \text{ tk} + 100000 \text{ tk} + 360000\text{tk} + 50000\text{tk} + 24000\text{tk} + 100000\text{tk} + 18000\text{tk}) = 2550400 \text{ tk}$

Total after 20% profit:

20% of 2550400=510080 tk
Total Project Budget=3060480 tk



Thank You