



**The Faculty of Information and Communication Technology  
Mahidol University**

**ITCS241 Database Management System  
Project 1: Centara Hotel & Resorts**

Instructor:  
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**Business domain:** Hotel and resorts

**Company:** The Centara Hotels & Resorts

## Introduction

A hotel business is a sector of business that focuses on providing travelers and guests with accommodations to stay. It is a place that offers short-term, paid lodging. Providing a wide range of services and amenities, as well as attending to the needs of the targeted clientele, is essential for success in this industry. The hotel business may also include member registration, reservations, recommendations, providing food and drinks, and other services or facilities.

From a single hotel in Bangkok, which was founded in 1983, to 93 properties across Asia and the Middle East today, Centara has achieved significant milestones over the past four decades.

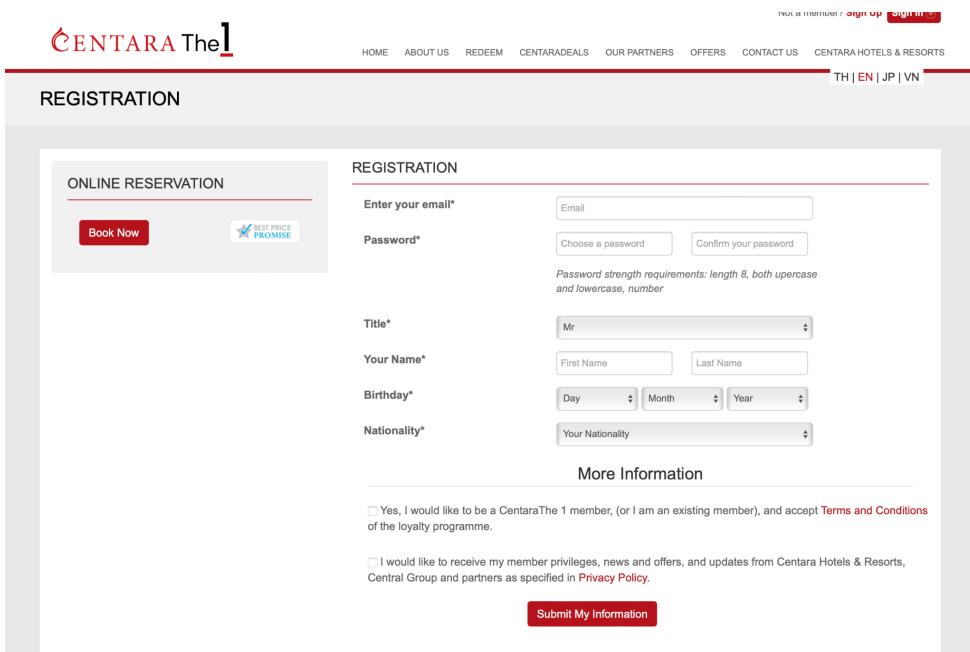
In 1990, Centara Hotels & Resorts became a publicly listed company on the Stock Exchange of Thailand. Subsequently, Centara became the first and only hotel group in Thailand to receive the Royal Warrant of Appointment (Garuda) from His Majesty King Adulyadej Bhumibol in 2014. With 46 deluxe and first-class hotels around Thailand and 24 hotels and resorts in the Maldives, Vietnam, Bali, Sri Lanka, Qatar, Laos, Oman, Turkey, and China, Centara is presently the top hotel chain in the country.

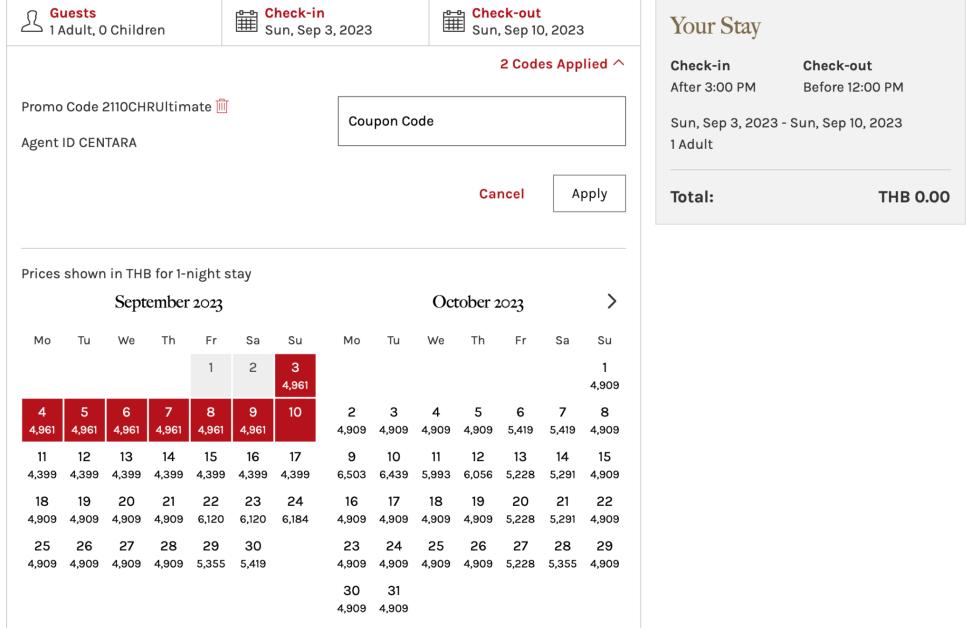
Nowadays, Centara places a high priority on both ongoing professional development and personal growth in order to create a workforce that provides guests with the highest quality service. Centara strives to create lasting memories for visitors of all ages since it is steadfastly committed to providing unforgettable family experiences.

As Centara looks to the future, Centara remains dedicated to growth and success, striving to become one of the world's top 100 hotel operators by 2027, with numerous projects in the pipeline in Thailand, across Asia, the Middle East, and beyond.

## Business processes

Within Centara's business processes and operations, there are various types of activities and responsibilities. Some of them are intended to expand customer channels and improve consumer experience.

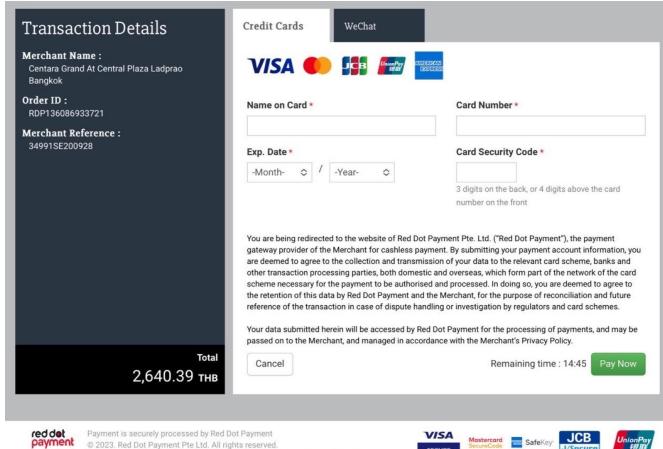
Process:	CentaraThe1 registration
Explanation:	<p>Before a customer can engage in activities such as making a room booking or a payment via Centara's website, a customer needs a CentaraThe1 account. Customers can register for a CentaraThe1 card, earning points for their accommodations and receiving discounts. Additionally, these points can be managed to be redeemed for complimentary stays and a variety of other rewarding benefits.</p> <p>CentaraThe1 requires:</p> <ol style="list-style-type: none"><li>1. An email address (as username), password, title, name and nationality.</li><li>2. Check the registered email and click on the verification link.</li><li>3. The registration is successful, and your CentaraThe1 account is ready, so you can log in to Centara's site.</li></ol> 

Process:	Hotel reservation
Explanation:	<p>When customers enter the hotel, they can reserve a room with hotel staff at the counter. The staff will inform customers about the package or available rooms, each type of room, the total expense, any discounts or promotions, and other services in which they might be interested, such as an airport transfer, a dining room, or an event room. After purchasing, the customer can check into the reserved accommodation.</p>  <p>The screenshot shows a hotel reservation form. At the top, it displays 'Guests' (1 Adult, 0 Children), 'Check-in' (Sun, Sep 3, 2023), and 'Check-out' (Sun, Sep 10, 2023). Below this, there are fields for a 'Promo Code' (2110CHRULtimate) and a 'Coupon Code' (Agent ID CENTARA). Buttons for 'Cancel' and 'Apply' are present. To the right, a summary box titled 'Your Stay' shows the same check-in/out dates, the number of adults (1 Adult), and a total price of THB 0.00. Below the form is a price grid for a 1-night stay. The grid shows rates for September 2023 (Mo-Su) and October 2023 (Mo-Su). Specific dates like September 3rd and October 1st are highlighted in red. The rates range from 4,399 to 4,961 THB.</p>

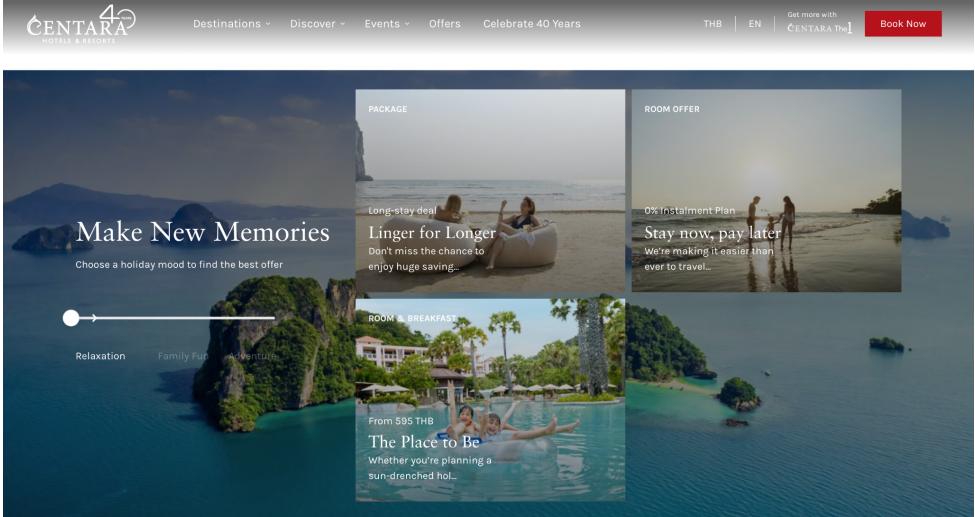
Process:	Hotels & Resorts recommendation
Explanation:	<p>For a customer who is unsure about where to go, Centara's website can suggest all the departments of the hotel and resort, along with its starting prices and review scores from other customers. The customer can easily find a room for their destination and manage their budget using the provided starting price.</p>  <p>The screenshot shows a section of the Centara website titled 'New Journeys Begin Now'. It features four travel destinations with images and details:      <ul style="list-style-type: none"> <li><b>Centara Reserve Samui</b>: From THB 8,245++ /Night. Discover →</li> <li><b>Centara Grand at Central Plaza Ladprao Bangkok</b>: From THB 2,639++ /Night. Discover →</li> <li><b>Centara Grand Hotel Osaka</b>: From THB 6,203++ /Night. Discover →</li> <li><b>Centara &amp; Spa</b>: From THB ... (partially visible)</li> </ul>     Each destination card includes a small image, the starting price per night, and a 'Discover' button.</p>

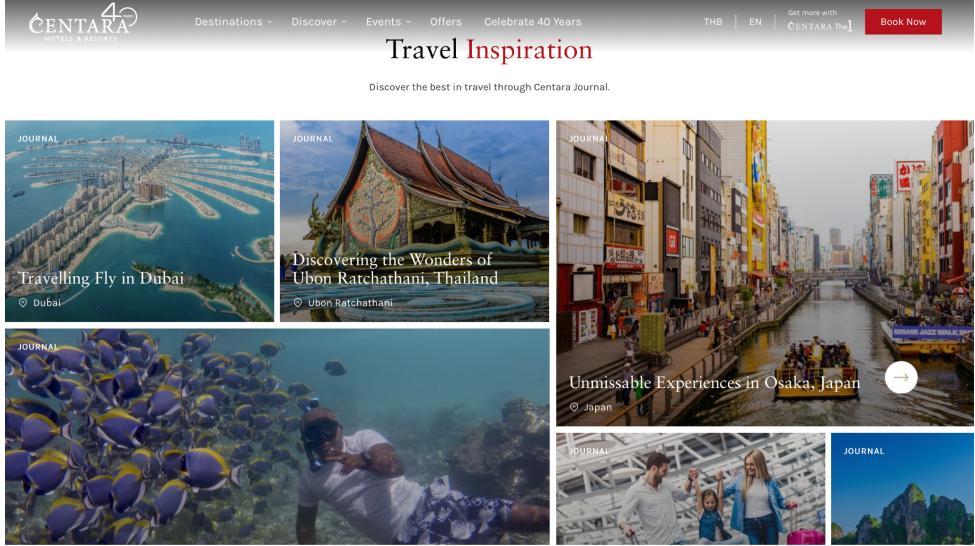
Process:	Spa facilities
Explanation:	<p>If a customer prefers relaxation, such as a spa experience, they can find it at SPA Cenvaree, located at Centara. The customer can select a spa service when booking a room via Centara's site, or they can reserve a spa service when checking in at the hotel. Whether a customer is in search of flower-scented body scrubs, essential oil, traditional Thai spa rituals, muscle-melting body massages oil, or heavenly facials, SPA Cenvaree can cater to all of the customer's needs. Additionally, there are sauna and steam rooms available for further relaxation.</p>
<p style="text-align: center;"><b>Signature Treatments</b></p> <p style="text-align: center;">The heavenly treatments our customers love at SPA Cenvaree</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p><b>7 Miracle Grains Body Exfoliation</b> Duration: 60 min Taking its inspiration from the time-honoured Thai hot pouch healing therapy, this body scrub features 7 types of steamed grains, including wheat germ, barley, cornmeal, oatmeal, millet, red rice, and soy beans. On application, the heat from the pouch loosens tight muscle while revealing a radiant and smooth skin.</p> <p><a href="#">Read more</a></p> </div> <div style="text-align: center;">  <p><b>Hai Muea Village Rituals for Back Relief</b> Duration: 60 min Inspired by household healing traditions, this muscle relief ritual was coined by our master therapists using Deep tissue, Swedish, and stretching massage techniques designed to relax tired muscles in the back, shoulders and neck. The skilful use of herbal back compresses makes this an indulgent treatment.</p> <p><a href="#">Read more</a></p> </div> <div style="text-align: center;">  <p><b>Signature Salt Pot Muscles Melter</b> Duration: 90 min A guest favourite, this therapy is a Thailand-inspired ritual combining deep tissue massage techniques with hot salt pot compresses to release tension in the shoulders and lower back muscles. Each compress contains a blend of coarse salt and medicinal herbs, while the therapeutic oils used for this massage (Pettigrain, Eucalyptus and Lavender) penetrate deeply into muscle tissues.</p> <p><a href="#">Read more</a></p> </div> </div>	
<p style="text-align: center;"><b>Find a Spa</b></p> <p style="text-align: center;">Explore Stunning Locations and Memorable Spa Experiences</p> <div style="text-align: center; margin-top: 10px;"> <span style="background-color: #808080; color: white; padding: 2px 10px; border-radius: 5px; text-decoration: none; font-weight: bold;">Thailand</span> <span style="border: 1px solid #ccc; padding: 2px 10px; border-radius: 5px; text-decoration: none; font-weight: bold;">International</span> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p><b>Bangkok</b> 3 locations</p> </div> <div style="text-align: center;">  <p><b>Chiang Mai</b> 1 location</p> </div> <div style="text-align: center;">  <p><b>Hat Yai</b> 1 location</p> </div> <div style="text-align: center;">  <p><b>Hua Hin</b> 2 locations</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p><b>Koh Chang</b> 1 location</p> </div> <div style="text-align: center;">  <p><b>Krabi</b> 2 locations</p> </div> <div style="text-align: center;">  <p><b>Pattaya</b> 3 locations</p> </div> <div style="text-align: center;">  <p><b>Phuket</b> 3 locations</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p><b>Rayong</b> 1 location</p> </div> <div style="text-align: center;">  <p><b>Samui</b> 2 locations</p> </div> <div style="text-align: center;">  <p><b>Trat</b> 1 location</p> </div> <div style="text-align: center;">  <p><b>Udon Thani</b> 1 location</p> </div> </div>	

Process:	In room dining service
Explanation:	<p>When a customer stays at Centara, the customer has the convenience of ordering his/her choice of Thai or international cuisine, including food and drinks, by simply calling the reception. Centara allows customers to place orders at any time, not just for breakfast but also for lunch and dinner. The customer's order will be directly sent to the customer's room.</p> 

Process:	Making payment
Explanation:	<p>The responsibility for the payment process lies with the customer, who is required to pay for the room booking they have confirmed during the booking process. Within Centara's website, payments can be made using credit/debit cards such as BBL, KBank, Krungsri, KTC, and other available options. The customer needs to enter their name on the card, card number, expiration date, and card security code. Holders of the CentaraThe1 card or those with valid coupons can receive a special discount on their booking. The payment process also supports various currency exchanges for convenience.</p> 

Process:	Restaurant recommendation
Explanation:	<p>After the customer has booked a room, the system will recommend restaurants and bars in various locations, especially in the customer's destination. Customers can freely select the category, cuisine, and price range. Once the customer makes a decision, the system will display pictures, locations, phone numbers, indoor and outdoor seating availability, opening and closing times, and other relevant information for each restaurant that matches their preferences. The system can then make a reservation at the restaurant or bar of their choice.</p>

Process:	Package recommendation
Explanation:	<p>Recommend packages and special offers to customers. These include options such as 0% installment payment plans and exclusive discounts for stays at Centara hotels.</p>  <p>The screenshot shows the Centara Hotels &amp; Resorts website. At the top, there is a navigation bar with links for Destinations, Discover, Events, Offers, and Celebrate 40 Years. Below the navigation, there is a large banner with the text "Make New Memories" and a call to action "Choose a holiday mood to find the best offer". A horizontal slider allows users to choose between "Relaxation", "Family Fun", and "Adventure". To the right of this banner are three promotional boxes: "PACKAGE" (Long-stay deal, Linger for Longer), "ROOM OFFER" (0% Instalment Plan, Stay now, pay later), and "ROOM &amp; BREAKFAST" (From 595 THB, The Place to Be). The background of the page features a scenic image of a tropical island.</p>

Process:	Traveling spot recommendation
Explanation:	<p>Before and after a customer makes a reservation to create interest in their travel plans, the system will recommend a diverse array of tourist attractions in each location. It will also showcase vivid pictures and provide comprehensive information about each place, offering intriguing activities for the customer to explore further by clicking for more details.</p> 

## **Business rules**

**Blue Highlight = Relationship**

**Green = Attribute**

**Red = Entity**

1. Each **branch** can **accommodate** multiple **customers**, whilst each **customer** can be **accommodated** in one **branch**. (1-M)
2. Each **branch** **contains** a unique name, location, and phone number. (1-M)
3. Each **branch** has several phone numbers.
4. A **customer** can **register** one **CentaraThe1 account**. (1-1)
5. A **CentaraThe1 account** **contains** name, age, birth date, citizen ID(for thai) or passport no.(for foreigners), email address, password, and phone number. (1-M)
6. A **CentaraThe1 account** **has** one **CentaraThe1 card**. (1-1)
7. A **CentaraThe1 card** **contains** CentaraThe1 no., card security code (csc), and name.
8. A **CentaraThe1 card** **has** points. (1-M)
9. A **CentaraThe1 account** can **select** many ways to make a **payment**. A way to make a **payment** can be **selected** by a **CentaraThe1 account**. (1-M)
10. The **payment** method **contains** payment ID, amount, customer's name, and paid date.
11. The **card** **contains** the card's verification value (CVV), cardholder's name, and expiration date.
12. Each **room** has a unique **room's number**. (1-1)
13. A **customer** can **use** a **promotion code** to **receive** a **discount** on his/her payment, whilst a **promotion code** can be **used** by a **customer**. (1-1)
14. A **customer** can **select** many **additional services**, whilst an **additional service** can be **selected** by many **customers**. (M-N)
15. A **booking form** **contains** booking no., a destination, a check-in date, a check-out date, the total number of guests, address.
16. A **customer's information** for booking rooms **contains** name, phone number, email address.
17. A **CentaraThe1 card** **has** **points**, and these **points** can be **converted** to **miles**. (M-N)
18. A **CentaraThe1 card** **has** **points**, and these **points** can be **converted** to **rewards**. (M-N)
19. A **CentaraThe1 card** **has** **rewards**, and these **rewards** can be **converted** to **miles**. (M-N)
20. A **CentaraThe1 account** **receives** a **discount**, while a **discount** can be **received** by a **CentaraThe1 account**. (1-1)
21. A **customer** can **reserve** a **room** individually, while a **room** can be reserved by many **customers**. (1-M)
22. There are four types of **beds**: king-size beds, queen-size beds, twin beds, and single beds.
23. A **customer** can **reserve** many **packages**, whilst a **package** can be **selected** by many **customers**. (M-N)
24. **Hotel's package:** long stay.
25. An **airport transfer** has many types of vehicles, such as SUVs, vans, and sedans.
26. An **additional service** **has** **airport transfer**. (1-1)

27. An **airport transfer** contains the customer's name, arrival time, location, phone number and number of customers.
28. A **customer** can **reserve** many **spa services**, while a **spa service** is **reserved** by many **customers**. (M-N)
29. **Spa services** have many **Massage oils** including coconut oil, rose oil, and signature oil. (M-N)
30. A **customer** can **reserve** a **dining room**, whilst a **dining room** can be **reserved** by one **customer**. (1-1)

### Constraints

1. A customer **must** show a receptionist a valid ID to get **20%** off any spa treatment on the day of their birthday.
2. A customer **has to** show the ID card or passport to the hotel receptionist for confirmation, check the correctness of the customer information, and put it in the database system.
3. A general customer **has to** check out on time; otherwise, they will have to pay additional costs.
4. A customer **cannot** use mobile banking to make payments.
5. A customer can get a **20%** discount on any spa treatment on the day of their birthday.
6. A customer can receive **300** Miles&Smiles rewards points for every **5,000** CentaraThe 1 points transferred with Turkish Airlines.

## References

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- [5] “SPA Cenvaree,” [Online]. Available: <https://www.spacenvaree.com/>. [Accessed 23 August 2023].