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Hotel reservation system: Analysis

Bakalaureusetöö

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Abstract

Hotel reservation system is an important part in the life of a modern hotel, because it ensures proper work of the hotel, making it efficient and provides the option to book a room online. It holds information for the workers and administration about the rooms and the hotel overall. This system removes most of the paperwork making it an obligatory asset to have for every modern hotel. Analyzes and improves the current reservation system. The aim of this work is to provide in-depth analysis about the system. Search of theory, regarding hotels, reservations, online reservations and online reservation systems. Attempt to improve the current situation in hotel reservation business. Also to create a small prototype, showing how the system will work from the user side.

Annotatsioon

Hotelli broneerimis süsteem on iga kaasaegse hotelli oluline osa, see tagab nõuetekohase ja tõhusa töö hotellis ning annab võimaluse broneerida tuba võrgus. Ta hoiab töötajate ja juhatuse jaoks vajalikku informatsiooni tubadest ja hotellist üldiselt ning vabastab paberitööst, olles kohustuslik vara iga kaasaegse hotelli jaoks. Analüseerib ja parandab broneerimise süsteemi. Käesoleva töö eesmärgiks on pakkuda põhjalikku analüüsi antud süsteemi kohta. Hotellide, broneerimiste ning veebipõhiste broneerimiste kohta teooria uurimine. Väikese prototüübi loomine süsteemi toimimise kasutaja vaatenurgast demonstreerimaks.

1. General concepts.

1.1 Hotels

A hotel is an establishment that provides lodging paid on a short-term basis. [1] A hotel usually offers guests a full range of accommodations and services, which may include reservations, suites, public dining and banquet facilities, lounge and entertainment areas, room service, cable television, personal computers, business services, meeting rooms, specialty shops, personal services, valet, laundry, hair care, swimming pool and other recreational activities, gaming/casino operations, ground transportation to and from an airport, and concierge services. The size of the property can range from 20 to more than 2,000 rooms. Hotels are found in city centre, suburban, and airport locations. Guest stays can be overnight or long-term, as much as several weeks in length. Properties sometimes specialize in catering to particular markets, such as conventions or gambling. [2]

1.2 Hotel classification systems

Hotels are generally classified by their style and location. Each classification is geared to a specific clientele. Several companies classify hotels according to amenities and services by using a star system. The more stars, the more luxurious the hotel. For the most part, classifications can vary within each type of hotel style. However, it is rare for budget hotels to attain extremely high ratings, because they do not have the amenities necessary for higher classifications. [3]

The grouping together of hotels providing a given range of services and facilities is an inexact science. The distinction between availability and quality is often blurred. [4] Hotel operations vary in size, function, and cost. Most hotels and major hospitality companies that operate hotels have set widely accepted industry standards to classify hotel types. [1]

1.3 Online hotel reservations

Online hotel reservation is becoming a very popular method for booking hotel rooms. Travellers can book hotel rooms from home using online security to protect their privacy and financial information and using several online travel agents to compare prices and facilities at different hotels. The benefit of using global distribution channels is that they provide a single database from which all reservation sources draw immediate room availability and room rates. [5]

Earlier travellers contacted hotels directly or used a travel agency to make a room reservation. Nowadays, a traveller can make reservation on hotel websites that give them pictures and virtual tours to make their choices. Room tariffs are shown on the websites along with deals and discounts. Non-franchise hotels require a "booking engine" application to be attached to their website to permit persons to make online reservations. Travel agents too have access to these websites and may even confirm room reservations directly. There are also websites that specialize in searches for the best deals. Hotels have the challenge of maintaining accurate room inventories and rates. [5]

Large hotel chains typically have direct connection to the airline global distribution systems (GDS) (Sabre, Galileo, Amadeus and Worldspan) that in turn provides hotel information directly to the hundreds of travel agents who subscribe to these systems. Individual hotels and small hotel chains may not afford the cost of subscription to the GDSs and rely on other companies to provide the connection. [5]

Several large online travel sites are in effect travel agencies. Hotels send their information "downstream" to travel agent websites and give commission to those travel agents who made reservations from travellers who connected to their website. [5]

Hotels use several of the distribution channels to ensure full occupancy. In such cases, individual agreements and tariff structures are negotiated with each distribution channel.

Nowadays, it has become imperative for hotels to integrate with all supply channels so that their guests are able to make accurate online bookings. [5]

1.4 Central reservation system

A central reservation system (CRS) is a computerised system used to store and retrieve information and conduct transactions related to travel. Originally designed and operated by airlines, they were later extended to travel agents and hotels. [5]

Most hotel chains have their own central reservation system to coordinate reservations globally. This is convenient to a traveller who has a 'one stop shop' for reservations of hotels in the chain anywhere in the world. Most franchisees that adopt the name of a branded chain have the benefit of filling their rooms from these reservation systems. The chain may tie up with referral hotels in destinations where they do not have their own hotel. The attempt by the hotel chain is to be represented in the most popular destination so as to capture the tourist market. [5]

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1.5 Reservation

The main function of the reservation process is to match room requests with room availability. Below is the detailed process of reservation:

- a) Conduct the reservation inquiry
- b) Determine room and rate availability
- c) Create the reservation record
- d) Confirm the reservation record
- e) Maintain the reservation record
- f) Produce reservation reports [6]

1.5.1 Types of Reservations

Guaranteed reservation insures that the hotel will hold a room for the guest until a specific time following the guest's scheduled arrival date [i.e. Check-out time or start of the hotel's day shift or any time the lodging property chooses]. On return, the guest shall guarantee his/her reservation of room unless reservation is properly cancelled. In order to guarantee a reservation, guests might opt for one of the following methods:

- a) Prepayment guaranteed reservation
- b) Credit card guaranteed reservation
- c) Advance deposit or partial payment
- d) Travel agent guaranteed reservation
- e) Voucher or Miscellaneous Charge Order
- f) Corporate guaranteed reservation [7]

Non-guaranteed Reservation: Insures that the hotel agrees to hold a room for the guest until a stated reservation cancellation hour on the day of arrival. [7]

1.5.2 Reservation Inquiry

Guests can communicate their reservation inquiries in person, over the telephone, via mail, through facsimile, telex, e-mail... Moreover, reservation inquiries can be made through a Central Reservation System. [7]

While getting a reservation inquiry, the reservation system shall obtain the following guest-related information: [7]

- a) Guest's name, address and telephone number
- b) Company or travel agency name
- c) Date of arrival and departure
- d) Type and number of rooms requested
- e) Desired room rate
- f) Number of people in the group, if applicable
- g) Method of payment and/or guarantee
- h) Any other special requests [7]

Most of the above mentioned information is used to create a reservation record. [7]

1.6 Registration

Upon arrival, a guest must check in or register in the hotel. Where the reservation system has their personal details and should already have been electronically transferred to help speed up the registration process and eliminate unnecessary re-keying of data. Guests without reservations can fill in a paper registration form and this information can then be entered quickly into the computer system. [8]

Most systems allow reservations to be retrieved using either the guest's name or the reservation confirmation number. Once the reservation is displayed on the screen, a room can be allocated from the list of vacant rooms displayed by the system. This is then marked as being occupied to prevent it being allocated in error to another incoming guest. Similarly, group registration is greatly simplified using a computerized system. Rooms can be pre-allocated on the basis of a rooming list sent in advance by the organizers. Although traditionally check-in has happened at the reception desk, the growth in the use of technology-based systems has resulted in new and innovative ways of registering the guest. [8]

For example, many hotels now use laptop or hand-held computers to facilitate the check-in process, either at an office-style desk at which the guest can sit in comfort in upmarket hotels, or by taking the computer to the guest to allow registration in queues at high volume hotels. These devices allow hotel staff to wirelessly connect to the hotel reservation system, retrieve the guest's reservation, capture a signature digitally on screen, swipe the guest's credit card and even generate an electronic key, all at a location remote from the front desk. [8]

2. Overview of the entire system.

A hotel reservation system is a computerized system that stores and distributes information of a hotel. It holds information about the rooms, their status, history and the process of paying and booking the rooms. Most common roles include a guest and an administrator.

2.1 Statements that describe the system.

User creates an account.

User creates a reservation.

User pays for the reservation.

Worker checks the reservations.

Worker checks room status.

Worker updates the room status.

Administrator manages the reservations.

2.2 Goals of the information system.

Allow users to book a hotel room from home.

Allow users to make a payment from home..

Help workers to be more efficient.

Allow gathering room history.
Simplify hotel room reservation.
Reduce the paperwork.
Make the system more convenient and simple.

2.3 Requirements of information.

Room
Room status
Rate

2.4 Actors.

Guest
Worker
Administrator

2.5 Main objects.

Person
Payment
Reservation

2.6 Main processes.

Reserving the room
Paying for the reservation

Updating room status

Person registration

2.7 Goals of the system.

Goal: To make the hotel room reservation process easier and more convenient.

Advantage: Costumers can book a hotel room from whichever place, any time they like.

Measure: Creation of an easy to use system that an average person could understand and use.

Goal: Reduce the needed time to create a reservation.

Advantage: Reserving a room is a lot easier and simpler on the internet, since you can do it any time.

Measure: Make the system work online without problems.

Goal: Give administrator and workers the possibility to observe how busy the hotel will be.

Advantage: During certain times the hotel can be busier, so the administrator can analyze the data and predict the amount of visitors and their necessities.

Measure: Add a page where workers could check room history.

Goal: To make paying for the reservation easier and faster.

Advantage: Makes paying convenient.

Measure: Make it available on the site.

Goal: Allow to gather a database on the users.

Advantage: If a person needs to book a room on the same system, then he can use his existing account and the hotel can advertise their special offers and send e-mails.

Measure: Create a database with all the users and their information.

Goal: Keep the status of the rooms up to date.

Advantage: As new costumers come the workers need to know which room is clean and available for use.

Measure: Make it simple enough to use the system.

Goal: Make the check-in process easier and faster.

Advantage: Younger and computer savvy people will enjoy the benefits this function brings.

Measure: Implement QR code into the system.

3. System requirements.

Suitability:

Hotel reservation system should be suitable for administrators, people who manage the system, workers and, obviously, guests, who use this. For administrators and workers it shouldn't be difficult to create, view, update and delete information. For guests it needs to be obvious enough in usage, so that they don't get scared away by hard and impossible to understand controls and design.

Reliability:

System should be able to continue functioning even in the event of a partial failure, even if it means that the overall performance is negatively affected. Faults should be automatically detected and reported if they go outside the expected result. Technical support for this reason must be available to react any moment, so that the system could function. System should have more than one server, in case 1 of them crashes and a few have multiple copies of data in case the system falls, so that the same information can be accessed from a different place. Backward recovery and forward recovery should be available.

Learnability:

An average user should be able to learn how to use the system in a short time frame, so that he won't give on the system and go to another one. System should be attractive for the users, so that they would spend more time on the website in search of information or any other need they might have. Longer time spent on a website increases the chances of a reservation. Being memorable is important for future prospects or when a user is picking between systems.

Maintainability:

System has to be easily maintained and updated. For those goals the best option would be a special administrative page, with preprogramed functions, which in the long run will prove useful for the business a whole, since it will save a lot of time. The administrative page is easy to understand, learn and use.

Performance:

Each search should be done in less than 1 second and average page load shouldn't be over 0.5 seconds. Waiting too long can frustrate the user, so he might leave for another system. Software should have enough hardware resources to be able to withstand peak traffic hours and survive in case of a partial system failure.

Interoperability:

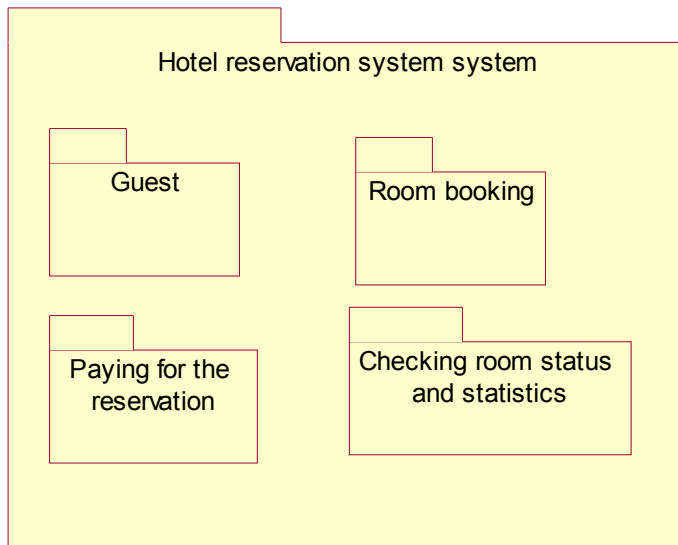
A hotel reservation system is a complicated system that not only the hotel itself uses, so its interoperability must be very high. In modern practice, every major hotel is connected to the global reservation systems ran by world top companies. They exchange information and so on. Another aspect is having all the smaller companies that are on the hotel territory connected to it. For example, the hotel restaurant and shops would need information about the amount of people, their age and duration of their stay.

4. Functional View of the hotel reservation system.

In this part main functions and use case diagrams of the system are presented.

4.1 System main functions.

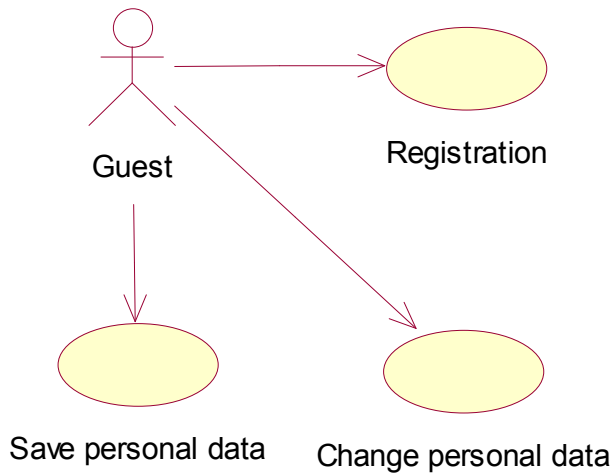
Main functions of the system are presented in the following packet diagram.



Picture 1 Hotel reservation system main functions.

4.2 Use case models.

Guest



Picture 2 Guest use case diagram.

Name: Registration

Actors: Guest

Intention: Guest wants to register on the system. For that the person has to go to the registration page, enter his personal data: name, second name, e-mail, home address, phone number. Then he has to click on the “Register” button and make sure everything was successful.

Actor's action	System answer
1. Guest goes to the main page and chooses „Register“.	2. Site shows the registration page.
3. Guest enters his data.	4. System checks that the e-mail is unique and password is strong enough.
5. Guest chooses „Register“	6. System saves the data and creates an account.

Alternatives:

Step 4 – If the entered e-mail already exists, then the system will show “Please, choose a unique e-mail” and system won’t allow the user to register.

If the entered password is weak, then the system will show “Please, choose a harder password” and system won’t allow the user to register.

Prerequisites:

User has to have internet access.

Name: Change personal data

Actors: Guest

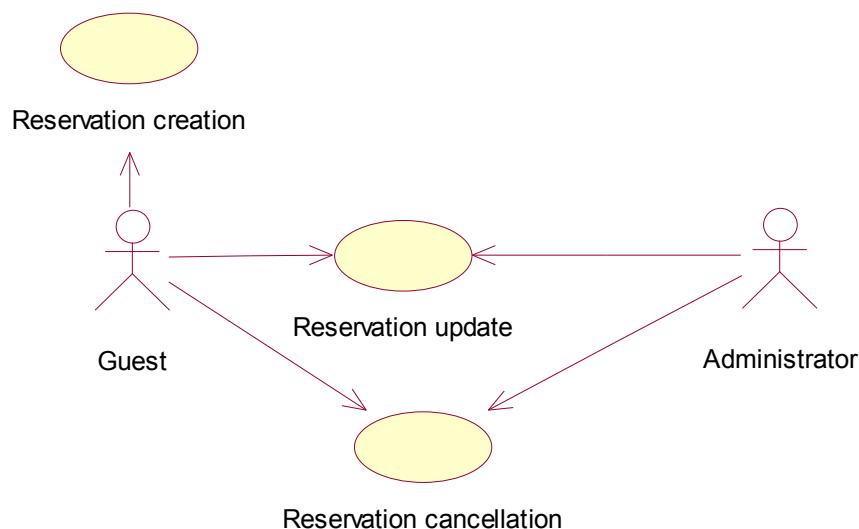
Description: When a guest wants to change his personal data he has to log in on the site, go to special form and edit his data. After updating the data the user must save the changes.

Name: Saving personal data

Actors: Guest

Description: When a guest finishes changing his personal data he needs to save it.

Room booking



Picture 3 Room booking use case diagram.

Name: Reservation creation

Actors: Guest

Intention: To create a reservation a guest must choose the check-in and check-out dates, room type and how many children and adults will be visiting.

Actor's action	System answer
1. Guest goes to the reservation page and chooses „Book a room“.	2. Site shows the reservation page.
3. Guest enters room type, days, number of adults and children.	4. System checks that the data that the user has entered is valid. System shows the prices, days when room of a certain type is free.
5. Guest finishes entering the data and chooses „Finish reservation“	6. System saves the data and creates a reservation.

Alternatives:

Step 4 – If a room type is not available, then the system will show an error to the guest, informing him that the selected days couldn't be reserved.

Prerequisites:

User has to have an account and be logged in.

Name: Reservation update

Actors: Guest, Administrator

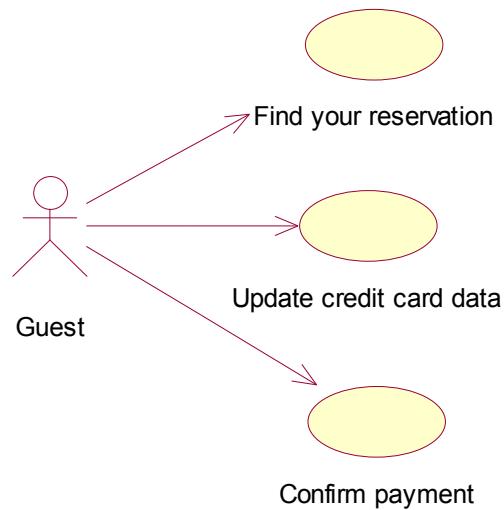
Description: To update the reservation and change room type, number of people or reservation duration a guest has to go to the reservation and then “Update”. After changes are done administrator must confirm the change.

Name: Reservation cancellation

Actors: Guest, Administrator

Description: Guest can cancel the reservation. For that to happen, an administrator must manually check and confirm the cancellation.

Paying for the reservation



Picture 4 Paying for reservations use case diagram.

Name: Find your reservation

Actors: Guest

Description: Guest goes to his page and searches for the needed reservation.

Name: Update credit card data

Actors: Guest

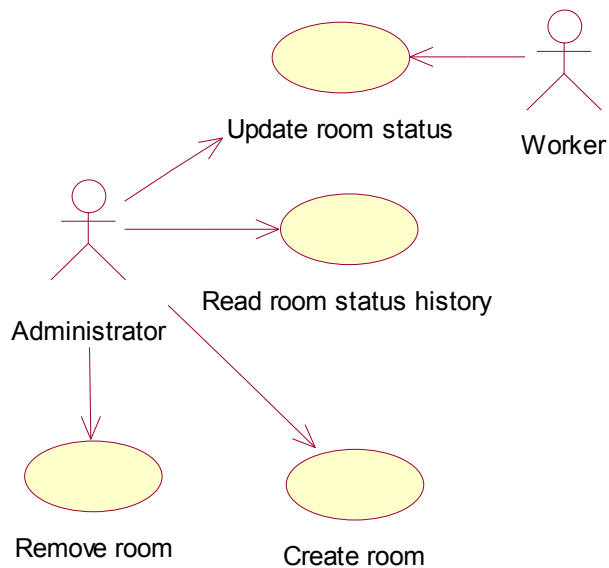
Description: Guest enters the payment method and payment information.

Name: Confirm payment

Actors: Guest

Description: When a guest wants to confirm his payment he finds the reservation and clicks the confirmation button.

Checking room status and statistics



Picture 5 Checking room status and statistics use case diagram.

Name: Update room status

Actors: Worker, Administrator

Description: Room status gets updated based on the current information.

Name: Read room status history

Actors: Administrator

Description: Administrator chooses what kind of statistics he wants and sorts it. The system then shows him the requested information.

Name: Create room

Actors: Administrator

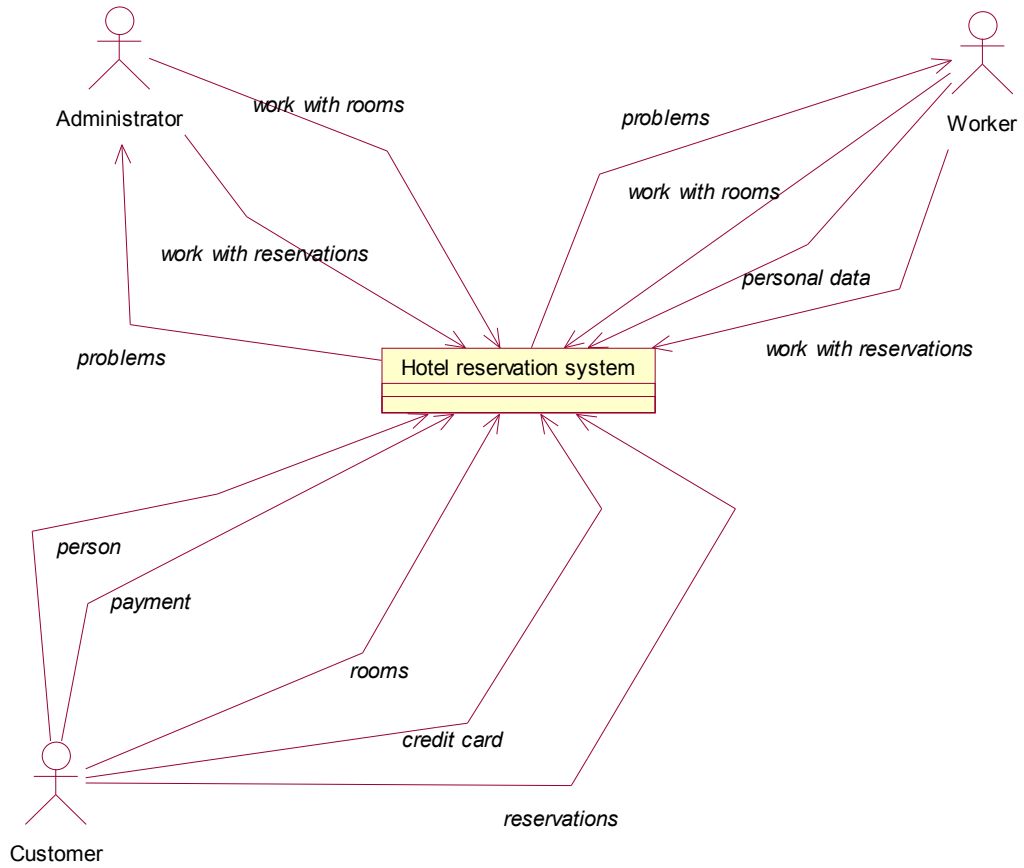
Description: Creates a room with the necessary data.

Name: Remove room

Actors: Administrator

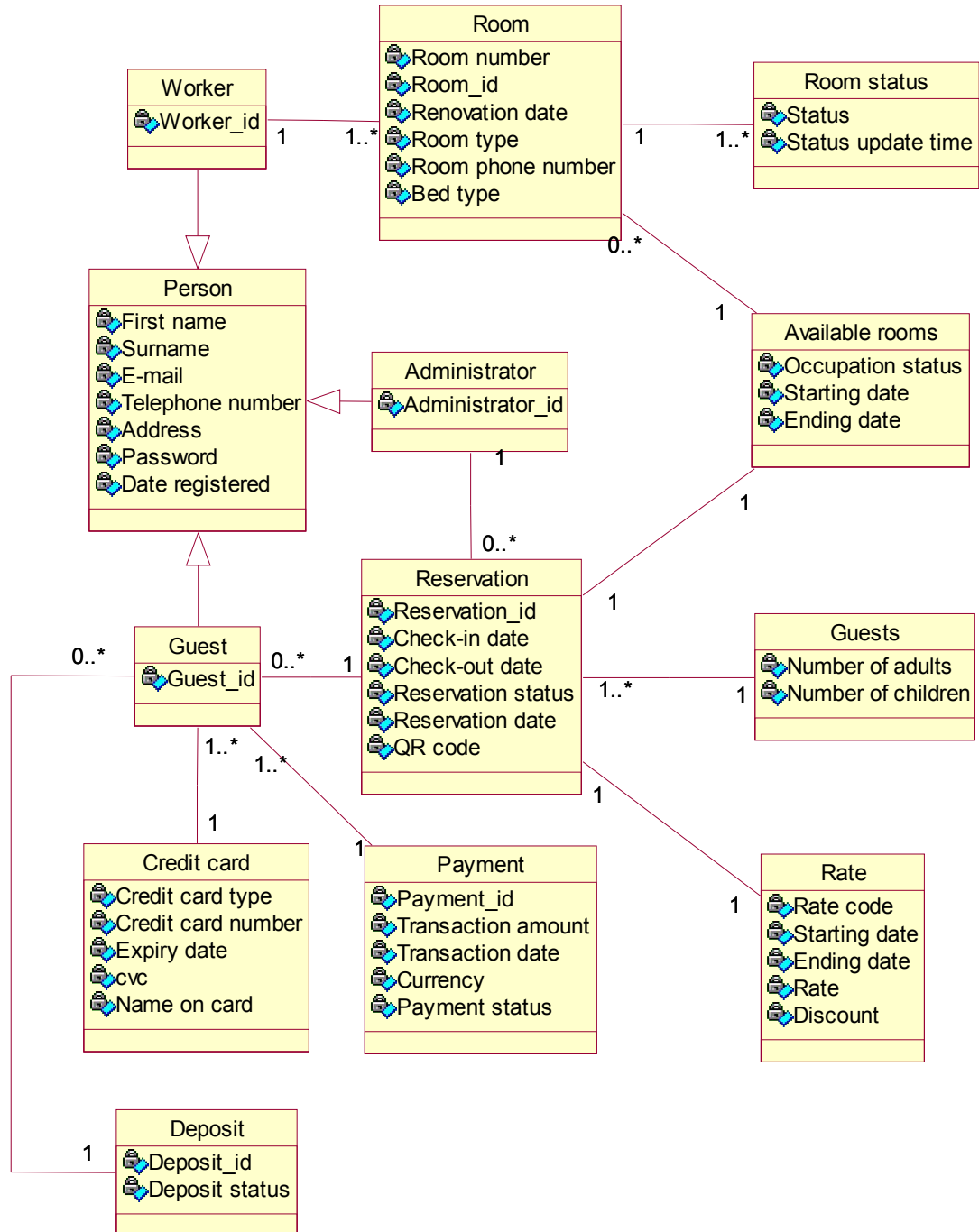
Description: Removes the room completely from the database.

5. Context diagram



Picture 6 System context diagram.

6. Data model



Picture 7 Hotel reservation system data model.

6.1 Attributes of objects and semantics

Name of the entity type	Definition
Guest	Shows, which data needs to be held for the guest.
Guest_id (PK)	Unique identifier.
PERSON	Shows, which data needs to be held for the person.
First name	Person's first name
Surname	Person's surname
E-mail	Person's e-mail
Telephone number	Person's telephone number
Address	Person's home address
Password	Person's password
Date registered	Person's date of registration
ADMINISTRATOR	Shows, which data needs to be held for the administrator.
Administrator_id (PK)	Unique identifier.
RESERVATION	Shows, which data needs to be held for the reservation.
Reservation_id (PK)	Unique identifier.
Check-in date	Date when the guest wants to move in.
Check-out date	Date when the guest wants to move out.
Reservation status	Current status of the reservation
Reservation date	Date when the reservation was made
QR code	Generated QR code

WORKER	Shows, which data needs to be held for the worker.
Worker_id (PK)	Unique identifier.
ROOM	Shows, which data needs to be held for the room.
Room_id (PK)	Unique identifier.
Room number	Shows the room number.
Renovation date	Shows when was the last time the room was renovated.
Room type	Shows what type of a room it is.
Room phone number	Phone number of the room
Bed type	What kind of bed the room has
ROOM STATUS	Shows, which data needs to be held for the room status.
Status	Shows status: if the room is clean and available to take guests or not.
Status update time	Shows date and time, when the status was updated.
CREDIT CARD	Shows, which data needs to be held for the credit card.
Credit card type	Guest credit card type.
Credit card number	Guest credit card number.
Expiry date	Month, when the card expires
cvc	Last 3 digits on the back of the credit card
Name on card	Card owner's name
PAYMENT	Shows, which data needs to be held for the credit card.
Payment_id (PK)	Unique identifier.
Transaction amount	Shows how much each reservation costs.
Payment status	Shows if the guest has paid or not

Currency	Currency in which the client paid
Transaction date	Date of the payment
RATE	Shows, which data needs to be held for the sales period.
Rate_id (PK)	Unique identifier.
Rate	Normal price
Starting date	Starting day of the discounts.
Ending date	Ending day of the discounts.
Discount	Shows how much the discount is.
AVAILABLE ROOMS	Shows which data is needed to be available to get data about available rooms.
Occupation status	Shows if the room is occupied by the guests or not.
Starting date	Starting date of the status
Ending date	Ending date of the status
GUESTS	Shows which data is needed to be held for guest type.
Number of adults	Shows if the guest is an adult (12+ years old).
Number of children	Shows if the guest is a child (0-12 years old).
DEPOSIT	Shows the deposit information
Deposit_id(PK)	Unique identifier.
Deposit status	Shows if the deposit is paid or not

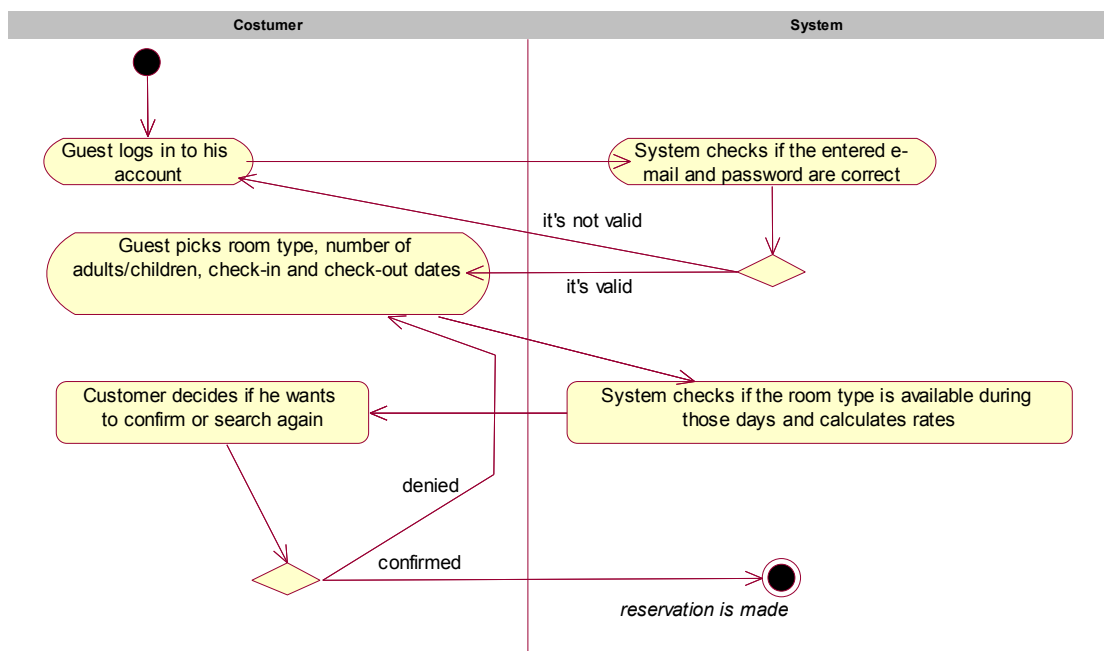
6.2 CRUD matrix

Object Entity types	Guest	Worker	Reservation	Administrator	Payment	Credit card	Room	Room status	Available rooms	Guests	Sales	Deposit
Registration	C	C		C								
Change personal data	RU	R U		RU D								
Reservation creation	C	C	C	C					R	R	R	C
Reservation update	RU	R U	U	RU					R	R	R	U
Reservation cancellation	U	U	U	UD								
Find your reservation	R	R		R	R				R	R	R	
Update credit card data	CR U					R						
Confirm payment	RU				C	R						U
Update room status		R U		RU			RU	RU				
Read room status history		R		R			R	R	R			
Create room				CR U					C			
Remove room				D					D			
Saving personal data	RU	R U		RU								

7. Hotel reservation system term view.

7.1 Hotel reservation system action diagram

In the following activity diagram a standard registration process is presented.



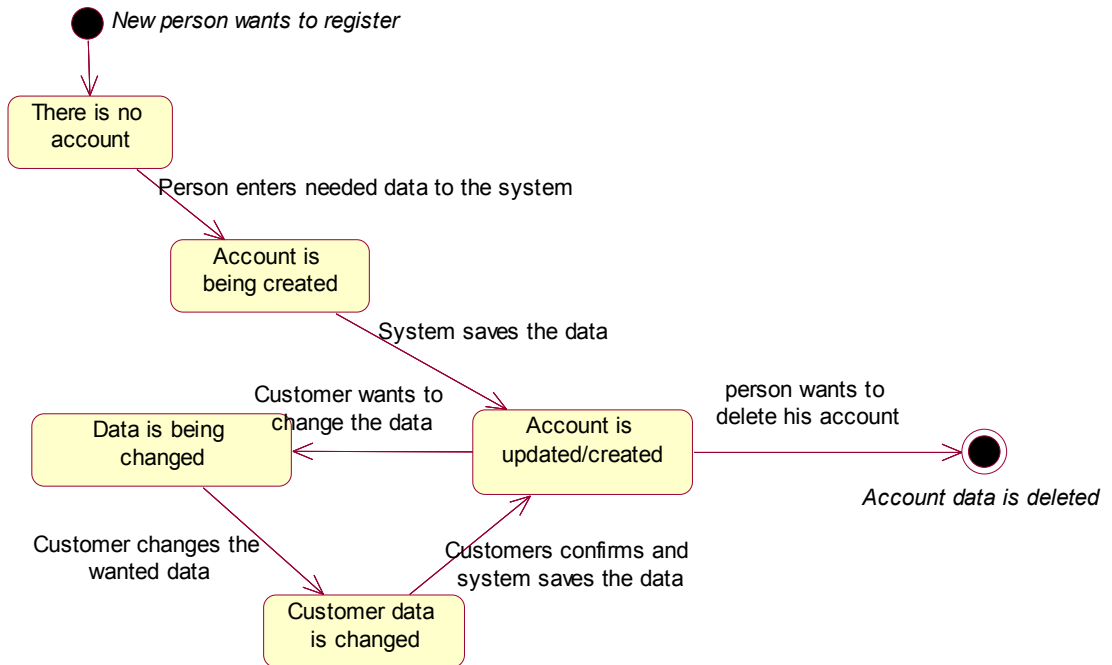
Picture 8 Hotel reservation system account registration activity diagram.

7.2 The events of use cases, a table of correspondence

Event	Event based use case name
A person wants to register	Registration Change personal data Saving personal data
A guest wants to create a reservation	Reservation creation Reservation update

A guest wants to pay for the reservation	Find your reservation Update credit card data Confirm payment
Administrator wants to update rooms	Create room Remove room
Worker wants to change room status	Update room status

7.3 Hotel reservation system state diagram.



Picture 9 Guest account state diagram.

8. Process optimisation

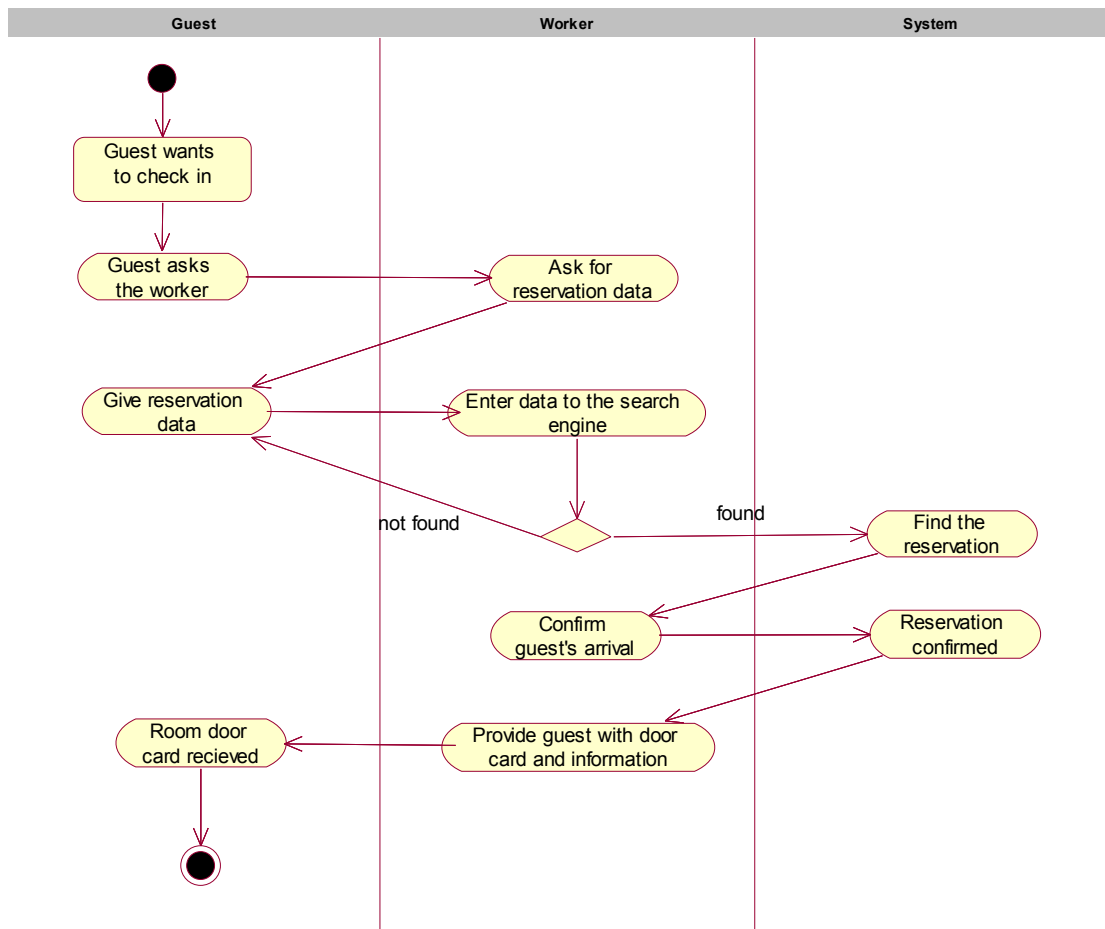
8.1 Related process

After carefully analysing the hotel reservation system the conclusion was that it's a mature system and doesn't need many improvements. However, checking in into the hotel, using your reservation can be a hassle. It's an important part of the hotel reservation system, because it's works directly with the guest and affects his opinion about the hotel service.

8.2 Analysis of existing process and their weaknesses

Currently, in hotels you need to use the reception desk to check-in and get your hotel number. That can have good and bad parts. For example, a bus with tourists arrives to a hotel at night and only one receptionist is working. He has to do everything manually and it can take an extremely long time. Guests are tired, but they have to fill out some forms or just wait in line for over an hour to get their rooms sorted, while with a QR code it's possible to receive your room card in a bit over a minute.

8.3 Description of current business processes AS IS



Picture 10. AS IS Activity diagram

For a guest to check in he has to wait for the receptionist to be available, then the worker asks for reservation information. Often that information can be printed out on paper or just documents are used to prove a reservation. Receptionist has to provide guest forms to be filled and/or just make the client wait, sometimes longer than it should be, because he has to find the reservation. Check room availability, if it's clean and ready to be used, confirm and check every little detail possible. It can take a very long time and if there are a lot of guests waiting for service it can get extremely frustrating for the guest. Other problem, are days when you don't want to deal with people. For example, you are very tired and just want to get to your room and relax after a long flight/trip/train ride. Guest and receptionist can be both in a bad mood and then problems can occur.

8.4 SWOT analysis

		Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the system)	<p><i>Strengths</i></p> <ul style="list-style-type: none"> • User-friendly interface • Uniqueness 	<p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Support during the starting period of the system • Relatively large investment 	
External origin (attributes of the environment)	<p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Added automatisation • Aim for the younger and computer savvy people • It would be more useful during busy seasons • Coverage from local media 	<p><i>Threats</i></p> <ul style="list-style-type: none"> • Might be difficult for inexperienced computer users • Other hotels implementing similar systems 	

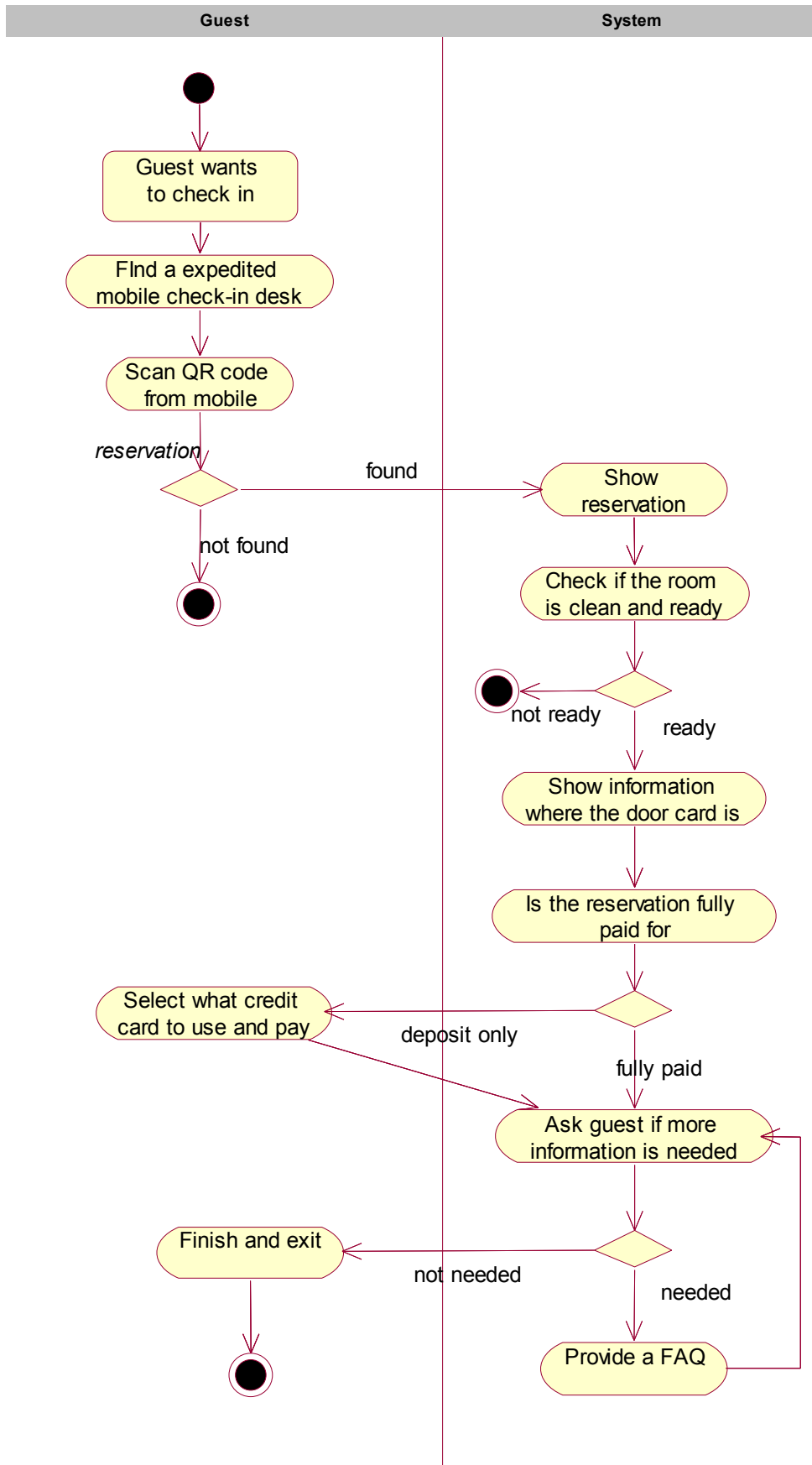
8.5 Solutions description

As we can see the main problem would be the fact that guests have to deal with customer support. We need to remove the receptionist factor and everything related, while using our booking system to its maximum potential and while improving speed and customer service. Receptionist needs to step in only in case there is a problem.

For that we need some kind of confirmation system and a place to check-in. QR code would be a perfect solution. You can make a reservation on your computer or a phone and a QR code would just be sent to your mobile phone or used on phone application if you check the needed options. You can pay for the reservation on your phone or computer fully or just make a deposit when making a reservation. You could pay on that check-in desk with your credit card. Credit card information is already in the system, so when you check-in you just pay fully and it would take the minimum amount of effort.

8.6 Description of new business process TO BE

In the improved process you need to find an expedited mobile check-in desk, where you take out your mobile phone and find your reservation QR code. You scan it and computer provides you with all the needed information about your booking: room number, where to get your door key, if the reservation is paid, or you do it while checking in. After you checked-in computer can show you a basic FAQ about hotel rules, when the lunches are, what time to check-out and so on.



Picture 11. TO BE Activity diagram

8.7 Realization process

This system is used by guests, administrators and workers. To implement it changes must be done to the interface and database itself and more functionality added.

A QR code must be added to the database, where the system stores the computer generated code. A function must be written that generates a unique QR code and stores it into the database. Then system searches for reservation ID, for example, and guest sees his info.

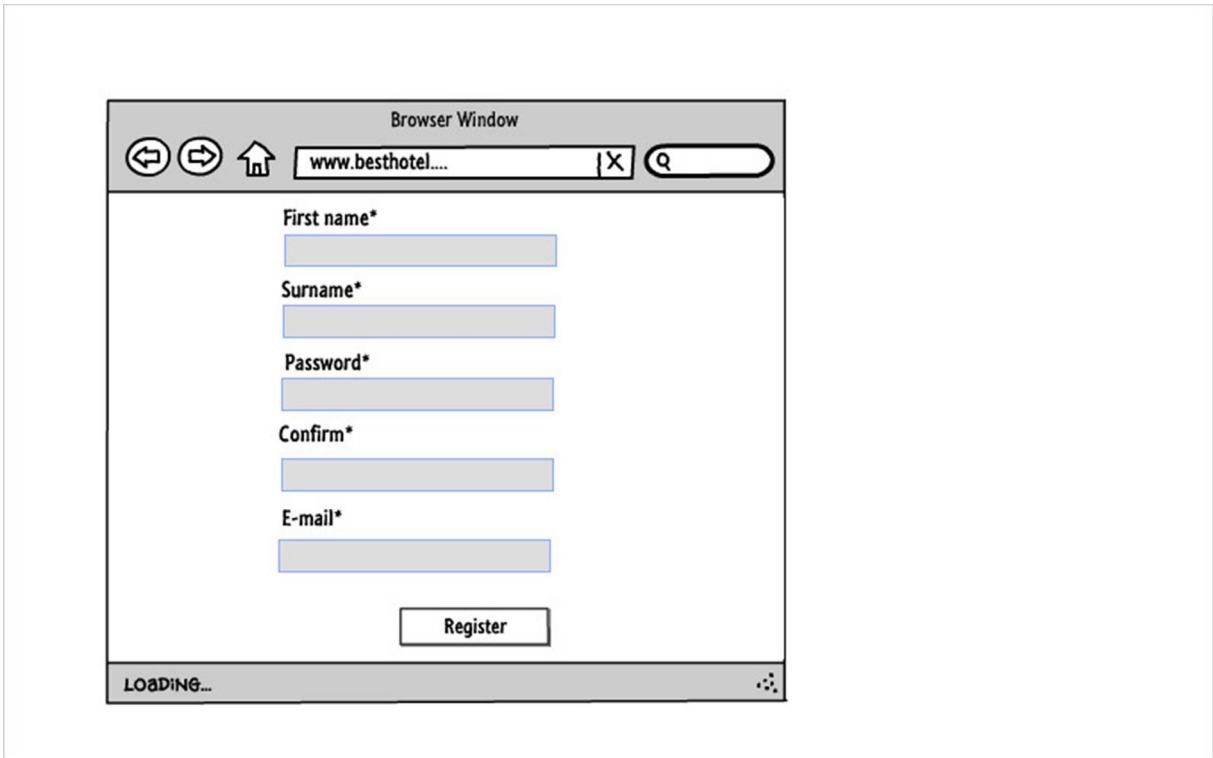
To implement this, a hotel will need monitors and computers for the automated QR check-in desk itself. It can be just a regular PC, but a better and fancier solution would be a touch screen.

9. Prototype

A prototype was created to show the main goals of the hotel reservation system.

9.1 Registration page

This page is used for account registrations.

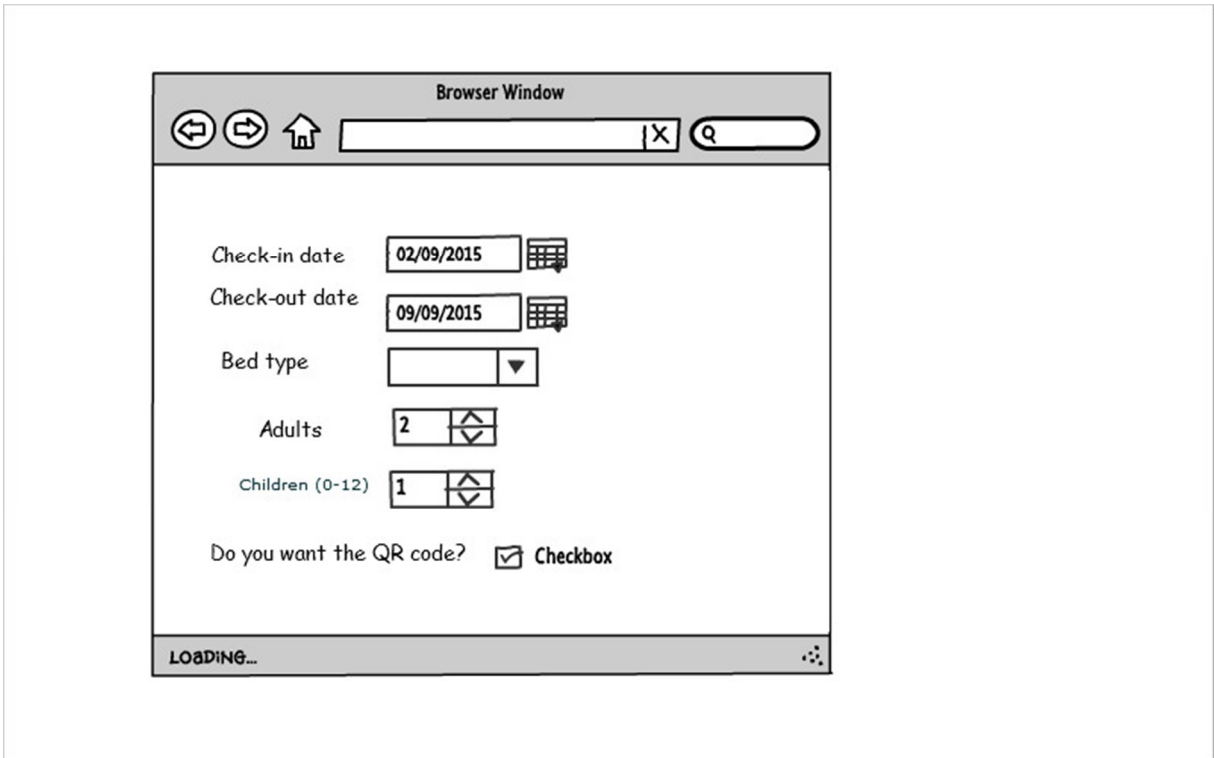


Picture 12 Registration page prototype.

The page has only the most basic needs. The information will be saved in the database.

9.2 Reservation page

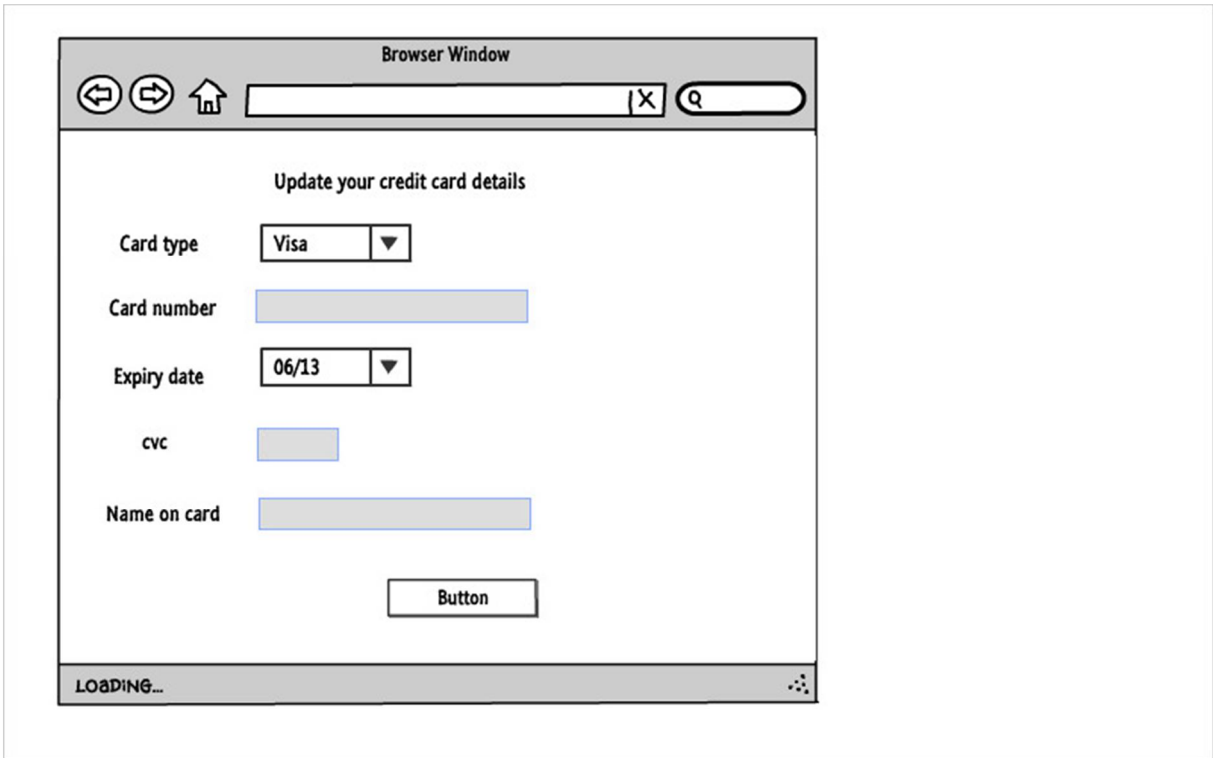
This page is used by guests to search for the room reservations they need.



Picture 13 Reservation page prototype.

9.3 Update credit card details page

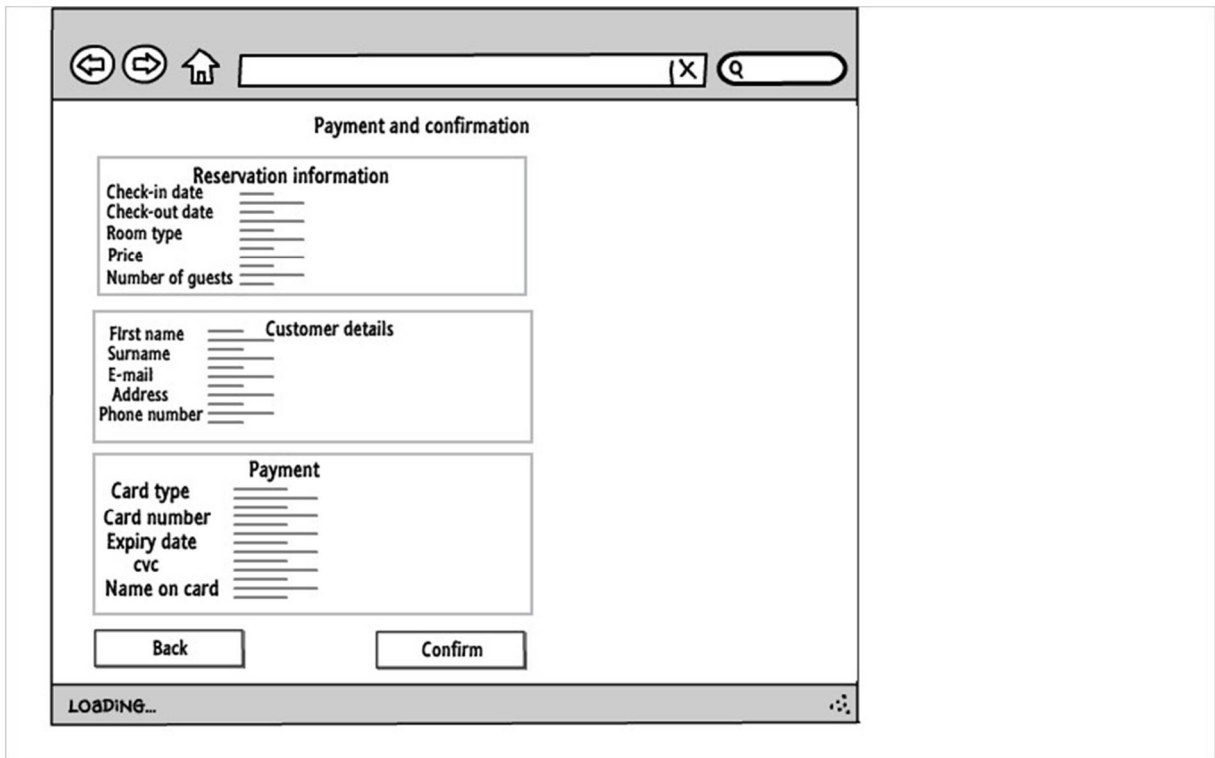
This page is used to update your credit card details for your future payment.



Picture 14 Update credit card details page prototype.

9.4 Payment and confirmation page

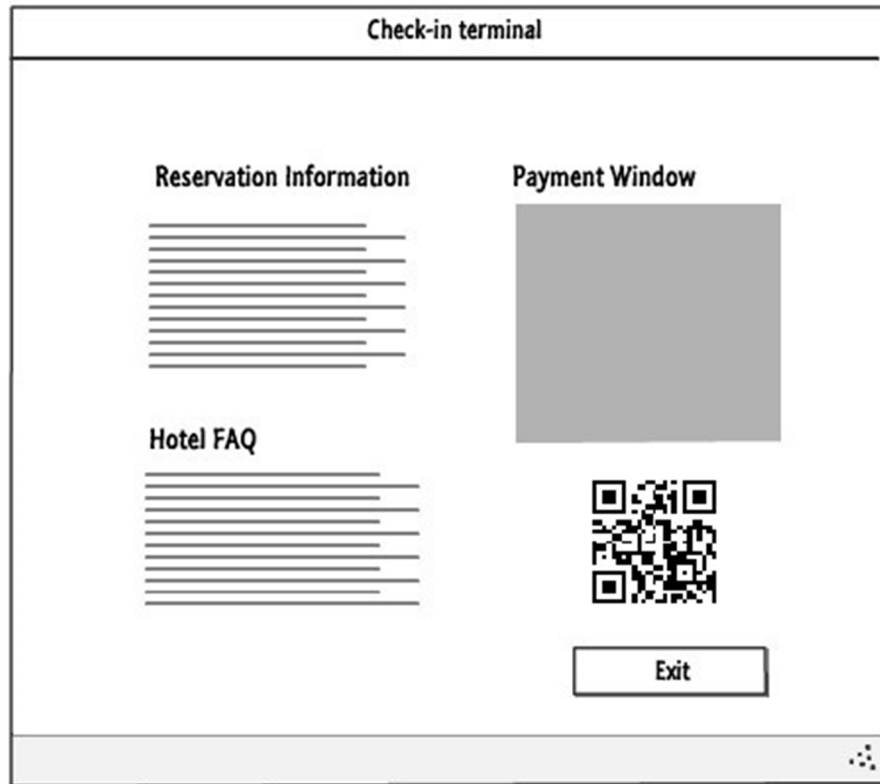
This page is used to show all the information regarding the reservation and payment, so that the guest could look through the information and confirm or go back and edit information that he filled it incorrectly.



Picture 15 Payment and confirmation page prototype.

9.5 Check-in terminal page

This is a prototype for the check-in window. Here you can see the reservation information, including your room number and instructions about where to get the door card. You can make payments, if it's already fully paid for, check, that the information is correct. In the bottom of the screen it has a FAQ with useful information, for example, about restaurants and cleaning.



Picture 16 Check-in terminal page

10. Summary

The goal of this work was to analyse the hotel reservation system by gathering data and making a prototype based on my research and system analysis.

Firstly, a lot of theory was gathered on hotels, how they work, what they offer and especially the about the centralized reservation system.

The analysis was based on the research and personal experience of the author. General overview of the entire system was created. Functional view and data models were created based on that overview.

AS-IS and TO-BE diagrams were created for the check-in process. TO-BE process should be a step forward for the reservation systems.

Using use case diagrams and activity models the site prototype for the hotel reservation system was created, to show how, generally, it would look like for the user.

Reservation systems are an important part of modern hotels, which provide great help to the people, who use them.

10. Kokkuvõte

Töö eesmärgiks on hotellide broneerimise süsteemi analüüs kogutud andmete ning autori uurimise põhjal loodud prototüübi abil.

Kõigepealt olid kogutud teoreetilised andmed hotellide tegevuse, nende poolt pakutavate teenuste ning tsentraliseeritud broneerimise süsteemide kohta.

Analüüs tugines autori uurimise ja isikliku kogemuse põhjal. Oli loodud üldine ülevaade süsteemist. Ülevaate põhjal loodi funktsionaalne vaade ning andmete mudelid.

AS-IS ja TO-BE diagrammid olid loodud protsessi jaoks. TO-BE protsess on samm edasi reserveerimine süsteeme jaoks.

Süsteemi toimimise kasutaja vaatenurgast demonstreerimaks oli loodud hotelli broneerimise süsteemi prototüüp kasutades juhtumi diagramme ning tegevuste mudeleid.

Broneerimise süsteemid on kasutajatele äärmiselt abipakkuv kaasaegse hotellinduse oluline osa.

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