

Restaurant Automation

Requirements Analysis

Intermediate Software Design

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Introduction

Our group chose “Restaurant Automation” for our semester project. For this deliverable, we will be covering fully dressed use cases, use case diagrams, and conceptual class diagrams for each of the 20 functional requirements that we developed in our initial requirements presentation. We will conclude with supplementary specifications about our non-functional requirements. Everything in this report is helping us build towards our final software system down.

Fully Dressed Use Cases

In this section we will go into detail about fully dressed use cases for each functional requirement. Some use cases have been combined due to their similarities. The use cases are numbered and grouped as follows:

- 1, 2, & 3 - Training Requirements
- 4, 5, & 6 - Scheduling Requirements
- 7, 8, 9, & 10 - Reservation Requirements
- 11, 12, 13, & 14 - Food Ordering Requirements
- 15, 16, 17, 18, 19, & 20 - Employee Payment Requirements

Use Case 1 - Training: System shall provide employers the ability to curate and post training modules

Primary Actor:

Employers

Stakeholders and interests:

Employers: Post the training modules for the employees

Preconditions:

- System allows the employer to post training module videos for employees

Success guarantee:

- The employer can post training modules to the system for the employees

Main success scenario:

1. The employer logs into the system
2. The employer uploads videos for the post training modules.
3. System updates draft training module once upload finishes.
4. Employer selects “Save and Submit” to update training module

Extensions:

3a. If the video does not work, the user can make a complaint to the system administrator that the video cannot be played.

Special requirements:

- Changes to the training modules should be made available immediately once posted.

Technology and data variation List:

- There is a database where the users can upload the post training modules. The user can manage and access the modules to add/remove/edit videos.

Frequency of Occurrence:

Whenever the employers want to curate and post training modules.

Use Case 2 - Training: System shall allow employees to complete training modules

Primary Actor: Employees

Stakeholders and interests:

Employer: wants to ensure that the employees can complete the training modules

Employee: wants to be able to complete the training modules

Preconditions:

- Employee has not completed the training modules
- System has not recognized that the employee has completed the training modules

Success guarantee:

- Employee will be able to finish the modules entirely
- System will update employee's progress accordingly

Main success scenario:

1. Employee needs to work on completing the modules.
2. Employee logs into the system, authentication occurs.
3. Employee opens up the training modules menu, selects current training module.
4. Employee goes through all the training modules, one by one.
5. Employee completes all training modules.
6. System recognizes that the employee has completed all modules.

Extensions:

7a: System does not recognize that the employee has completed all modules.

1. System does not know what constitutes as complete for modules.
2. Employees cannot work until training is complete.
3. Restaurant does not have enough employees to work.

Special requirements:

- System should be able to recognize which employees are doing well/not well in modules.
- System should be able to determine which modules need to be redone depending on understanding of the material.
- System should be able to execute with high loads and many employees going under training at once, i.g., be scalable.

Technology and data variation List:

System should be able to give a progress report of how many training modules are left/done, which ones need to be repeated.

Frequency of Occurrence:

Anytime there are new employees that need to undergo training.

Use Case 3 - Training: System shall allow employers to monitor employee progress through the modules

Primary Actor:

Employer

Stakeholders and interests:

Employer: wants to ensure employees are properly trained and/or have certification

Employee: wants to inform employer about status of their training so they can complete onboarding or continued education

Preconditions:

- Employee has not completed training
- Training modules are properly set up

Success guarantee:

- Employee's training progress information is current.

Main success scenario:

1. Manager needs to check training progress for employees assigned with training.
2. Manager opens up the application and authenticates into the system.
3. Manager opens up the training menu, system presents initial menu screen.
4. Manager selects the training monitoring option.
5. System finds training information for employees that have or just completed training and presents it to the screen.
6. Manager is able to visualize all employees progress based on what the system calculated in a list

Extensions:

6a. Employee completes training

1. System will display an acknowledge option in the employee's listing to allow the employer to acknowledge that their training is completed.

Special requirements:

- System must enumerate training data in less than 3 seconds for a restaurant that has at least 50 employees training.

Technology and data variation List:

6a. Listing can be sorted by name, hiring date, completion percentage, last activity. Both ascending and descending.

Frequency of Occurrence:

Somewhat frequent, assuming workplace continuously gets new hires

Use Case 4 - Scheduling: Shall allow managers to set shift availability for employees

Primary Actor: Managers

Stakeholders and interests:

Managers: need to be able to set shift availability for employees to allow the creation of schedules that will work for all employees

Employee: is only available to work at certain times

Preconditions:

- Employee just started working or needs to change their availability

Success guarantee:

- Manager is able to easily change shift availability
- Shift availability is saved for each employee

Main success scenario:

1. Employee needs to set up a new shift availability
2. Employee talks to manager about setting up new shift availability
3. Manager opens application to change employee availability
4. Manager changes availability
5. Availability is saved

Extensions:

5a: availability is not saved

1. Schedule is created using wrong availabilities
2. Employee is unable to work some of their shifts
3. Restaurant does not have enough employees

Special requirements:

- System should be scalable in the future, multiple restaurants should be able to utilize same system without overloading it
- System should have an intuitive user interface... any information in the system should be accessible in at most two clicks/ taps
- System should be built in such a way to allow easy future additions in case the system must grow later on

Technology and data variation List:

- Availability can be specified by hour ranges and specific days for availability

Frequency of Occurrence:

When an employee starts working at a restaurant or their availability changes

Use Case 5 - Scheduling: System shall allow managers to control priority of who gets first pick of hours

Primary Actor:

Manager

Stakeholders and interests:

Manager: wants the option to prioritize skillful workers depending on business need

Employee: directly affects their hours

Preconditions:

- Manager is authenticated

Success guarantee:

- New scheduling will follow priority change, and events will be recorded.

Main success scenario:

1. Manager selects the scheduling option from the main menu screen.
2. System displays scheduling menu depicting list of options related to scheduling
3. Manager selects priority menu
4. System will enumerate current priority listings in the screen
5. Manager will be able to add and remove employees from a priority group.

Extensions:

5a. Manager does not have permissions to change priority of a certain employee

1. System will not allow changes to be made for that employee.

3a. Manager does not have permission access priority menu

1. System will not transition to the priority list if clicked on.

Special requirements:

- Changes to priority does not affect the current schedule made prior to change.
- System will gray out employees that a manager does not have access to change.

Technology and data variation List:

5a. Priority groups can be based on seniority (hiring date) or employees can be grouped in a number where employees with a higher number gets priority over the lower.

Frequency of Occurrence:

On-demand; there is no clear frequency since this depends on the workplace.

Use Case 6 - Scheduling: System shall allow employees to schedule working hours, pick up and trade shifts

Primary Actor:

Employee: needs access to schedule working hours, pick up, and trade shifts

Employer: needs to make sure that employees have access to the system which will allow them to schedule working hours, pick up, and trade shifts

Stakeholders and interests:

Employee: Needs to make sure that the working hours can be set properly

Employer: Needs to make sure that timing is correct

Preconditions:

- Employee looks at the working hours, pick ups, and trade shifts at any given moment

Success guarantee:

- Employee can access working hours, pick ups, and trade shifts
- Employer can decide what to do with the employee request

Main success scenario:

1. Employees logs into system wanting to schedule working hour, pick up, and trade shifts.
2. Employee selects which option they want
3. Employee completes the form to match their request
4. The request is processed into the database
5. The employer reviews the request and makes the decision.

Extensions:

5a. Employer request is reviewed

1. The employee is sent a notification immediately based on what the employer has selected

Special requirements:

- System should follow the ACID requirement of when the employer is using the system and when the employee is using the system
- The website should allow requests at any time and if the website goes down because too many requests are being thrown, it should cache the form information but remain as a DRAFT.

Technology and data variation List:

- Employee will need to enter data into the web application
- Employer needs to review the data from the web application

Frequency of Occurrence:

- When an employee wants to make edits to their scheduling

- When an employer wants to review the schedules of their employee

Use Case 7: System shall allow customers to make online reservations for tables

Primary Actor:

Customer

Stakeholders and interests:

Customer: wants to arrive to restaurant and not have to worry about not getting a table

Restaurant owner: wants their customers to be happy and not waiting around frustrated

Preconditions:

- Customer wants to make a reservation at a restaurant
- Customer is at the restaurant by the reservation time

Success guarantee:

- Table is ready for customers at the time of reservation
- Customers don't have to spend time waiting for a table if they have made a reservation

Main success scenario:

1. Person decides they want to eat at a restaurant and is worried about getting a table
2. Person uses our application to make a reservation for a specific time, date, and party size
3. Person arrives at restaurant at time of reservation
4. Person is immediately taken to their table without having to wait

Extensions:

2a - customer doesn't make reservation and restaurant is filled

1. Person arrives at restaurant at time of reservation
2. Person has to wait or can't eat at the restaurant

3a - customer arrives early

1. Customer arrives before time of reservation
2. Customer has to wait before their table is ready
3. Customer is taken to their table at the time of reservation

3b - customer arrives late

1. Customer arrives at restaurant after reservation time
 - a. The table has been saved
 - i. Customer is taken to their table
 - b. The table has been given to someone else
 - i. Customer has to wait or is not able to eat at this restaurant

Special requirements:

- System should be scalable in the future, multiple restaurants should be able to utilize same system without overloading it

- System should have an intuitive user interface... any information in the system should be accessible in at most two clicks/ taps
- System should be portable... any platform should be able to run the software and communicate with users on different platforms

Technology and data variation List:

2a. customer may need to enter the amount of time they intend to spend at the restaurant or pick a time slot for their reservation

Frequency of Occurrence: Whenever someone wants to eat at a restaurant during a popular time or with a large group of people.

Use Case 8: System shall provide employees with an interface to edit reservation limitations

Primary Actor:

Employer

Stakeholders and interests:

Employer: needs to follow capacity limits, wants to promote fair-use of reservations vs. walk-ins
Staff:

Preconditions:

- Seat configuration has been properly configured

Success guarantee:

- System will limit reservations in external providers.

Main success scenario:

1. Employers needs to limit seating reservations
2. Employee logs into system
3. System verifies authentication, records login.
4. Employee selects the seating option
5. System switches to the seating menu and presents multiple options related to seating.
6. Employee selects reservation limits option, system switches to reservation limits screen
7. Employee allocates the amount of reservations-to-walkins for the business need
8. Employee clicks on save and apply after finishing changes
9. System updates limits locally and applies information to external providers that handle reservations

Extensions:

8a. Employee changes mind and does not want to change information

1. Employee hits cancel.
2. System leaves reservation limits screen without making changes

Special requirements:

- System should present a seat visualization of the current distribution limit while changing.

Technology and data variation List:

7a. Allocations can be represented numerically or by a percent.

Frequency of Occurrence:

On-demand; depends on business need

Use Case 9: System shall provide employees with a map of all tables, including those open, currently in use, and reserved

Primary Actor:

Employee

Stakeholders and interests:

Customer: wants to dine in the restaurant

Employees: Can view the map of all the tables which are open, in use, and/or reserved

Employers: Can set which tables are to be set to be open, in use, and/or reserved.

Preconditions:

- Restaurant is open and orders can be placed

Success guarantee:

- As soon as a customer uses a table, the table's usage is updated so all employees can view which tables are open, reserved, or in use

Main success scenario:

1. Customer comes in and asks for a table
2. The employee uses the system to find the next open table
3. The system shows the employee open, currently in use, and reserved tables
4. The employee picks the table he wants to seat the party
5. The employee seats the customers.

Extensions:

4a. If there are no tables available, the system will not let the employee assign a table. The employee must directly inform the customer of this inconvenience.

5a. If the customer changes the tables without telling the employee that they did that, the employer should make the change on the system or tell the customers that they cannot sit there.

Special requirements:

3a. System should continuously update table availability every 10 seconds

Technology and data variation List:

4a. Employees can pick a table through the table visualization, a list, or manual entry.

Frequency of Occurrence:

Frequent, whenever a customer walks into the restaurant

Use Case 10: System shall not let people reserve tables within 15 minutes of restaurant closing

Primary Actor:

Employer

Stakeholders and interests:

Employer: Needs to make sure that the system is set to disable reserving tables within 15 minutes of the closing

Customer: Needs to be notified that they cannot place an order 15 minutes before closing and their order will be refunded.

Preconditions:

- Employer has set up the correct parameters in the application to make sure there is a 15 minute cap.
- The customer wants to place an order.

Success guarantee:

- Customer cannot make order 15 minutes before closing of restaurant

Main success scenario:

1. Customer starts to place order 14 minutes before restaurant closes
2. The application notifies the customer that their order cannot be placed and that they have not been charged.

Extensions:

2b. If customer's order is not possible to do within 15 minutes of the closing time, the customer is notified the order cannot be placed and a refund will be issued.

Special requirements:

N/A

Technology and data variation List:

N/A

Frequency of Occurrence:

- Millions of times based on the number of times customers use the application

Use Case 11: System shall allow online customers to view all menu items, add items to an order, and checkout with that order

Primary Actor:

Customer

Stakeholders and interests:

Customer: trying to order food from a restaurant

Restaurant: wants customers to buy their food and be able to do so easily

Preconditions:

- Person wants to order food before they get to restaurant to avoid waiting

Success guarantee:

- Person is able to send order without any trouble
- Restaurant receives order
- Restaurant prepares food on time

Main success scenario:

1. Person opens application to place an order
2. They see the menu
3. They pick out items from this menu and add them to their order
4. Person checks out and pays
5. Order is sent to Restaurant
6. Restaurant prepares food on time
7. Customer receives food

Extensions:

5a: order is not sent to restaurant

1. Restaurant does not prepare food on time
2. Customer arrives to restaurant to pick up food and it is not ready
 - a. Restaurant cooks the food for the person
 - b. Restaurant refunds the order

6a: food is not ready on time

1. Restaurant does not prepare food on time
2. Customer arrives at the restaurant
3. Customer becomes frustrated with restaurant and has to wait for food
4. Customer receives food

Special requirements:

- System should process a payment and place an order in less than 3 seconds, for up to 50 simultaneous orders

Technology and data variation List:

- Customers many need to pay with different currencies

Frequency of Occurrence:

Whenever a customer wants to order food (hundreds of times per day depending on the size of the restaurant)

Use Cases 12 & 13:

System shall accept food orders natively and through outside applications (Grubhub, Doordash, etc). System shall coordinate to employees new online orders placed.

Primary Actor: Customer

Stakeholders and interests:

Customer: wants convenient way to order and get food

Restaurant (break down further?): wants to fulfill order and satisfy customer

Preconditions:

- Restaurant is actively receiving mobile orders

Success guarantee:

- Food is made. Receipt is generated. Customer receives food. Tax is calculated correctly. Accounting is updated.

Main success scenario:

1. Customer places order through an external provider (i.e., website, Grubhub, Uber Eats, etc...).
2. External provider authorizes the sale, processes information, and sends the ticket to restaurant.
3. Restaurant system receives the ticket and notifies staff that a new order has been placed.
4. Kitchen cooks food and marks the order as “completed”
5. Order status on external providers is updated. Customer is aware his food is ready
6. Food can be picked up

Extensions:

1a. Restaurant disables mobile ordering

1. System sends notice to external providers to stop all orders from their system.
2. System stops accepting external tickets

4a. Food can't be made due to some fatal reason

1. Restaurant marks ticket as canceled; order can't be fulfilled
2. System will transfer information over to external provider to notify customer

Special requirements:**Technology and data variation List:**

- System will notify restaurant within 10 seconds after receiving ticket from external provider

Frequency of Occurrence:

Hundreds of times per day depending on restaurant size

Use Case 14: System will provide order updates, either directly to the customer or to the platform ordered through

Primary Actor:

Customer

Stakeholders and interests:

Customer: Interested in knowing where their food is at

Employees: Will interact with the system to trigger updates to customers

Preconditions:

- Users must have submitted an online order (for updates to be delivered to an outside platform) or an order in person/ through our website (for updates to be delivered directly to the user).
- Users must register their phone number with our application.
- Kitchen must have a way to indicate order updates

Success guarantee:

- Platform ordered through is providing users with updates on their order. If ordered through our platform, users are provided updates on their order, to include when the order has been received, when it has been prepared, and is ready for pickup.

Main success scenario:

1. User places an order in one of three ways
 - a. The order is placed over the phone/ in person
 - b. The order is placed online through our system
 - c. The order is placed through another food ordering application
2. User provides number for text updates if ordering over phone or in person
3. Employee enters into system
4. In scenario a, an employee enters the order into our system
5. In scenario b and c, the order is automatically registered with the system, and employees are notified of the new order
6. Employees would then indicate to our system once they have received the order. Our system would send a notification to the customer of this or a notification to the external application of the status (preparing the order).
7. Once employees have finished preparing the order, they would indicate to our system that they have finished preparing it. Our system would send a notification to the customer of this or a notification to the external application of the status (ready for pickup).

Extensions:

3/5/6. If the employee forgets to enter the order or an update into the system.

1. User will not be able to receive mobile updates

2. Next time the system is interacted with, it will prompt the employee to enter a status on the previous order, or to dismiss without entering

Other. If the user hasn't provided a number for updates

1. If ordered online through our system, after order is submitted, will prompt users to enter information for updates.
2. If ordered through an outside source, our system does not handle updates to the user
3. If ordered over the phone or in person, the system will prompt the employee to enter customer information once order completed
 - a. Employee will ask customer for info for updates
 - b. Will enter info given if provided
 - c. If not, will dismiss prompt from our system

Other. If another status needs to be entered and sent to the customer

1. The employee can request a custom message from the system
2. If our system is sending updates, will send the requested update to the customer
3. If not, will forward to other application

Special requirements:

- External providers needs to have reliable mechanisms to update the order

Technology and data variation List:

7a. Pickups can be done by the customer that ordered or some middle-man if the customer uses a delivery service

Frequency of Occurrence:

- Infrequently at initial implementation, growing more frequent as more users provide information

Use Case 15: Shall handle calculation of employee pay

Primary Actor:

Employee

Stakeholders and interests:

Employee: wants to get paid for their hours, needs accurate tax information

Employer: needs to pay employees due to regulation, needs correct payroll information

Preconditions:

- Employee has correct pay information
- Employer has properly setup tax configuration for their locality
- Employer has properly set up a bank to disburse the funds from

Success guarantee:

- Funds are dispersed to proper entities, record is produced, amounts are correct

Main success scenario:

1. Employee properly enters hours to time clock system
2. System will calculate employee check depending on employer pay schedule
3. System will calculate tax depending on locality configuration
4. System will calculate tax depending on the country the system was configured in.
5. System will generate records for accounting purposes and attempt to make withdrawal from the employer's bank account.
6. System will generate paystub for the employee to view for their own records
7. System will attempt to make deposit to employee's preferred method of payment

Extensions:

7a. Employee allows for direct deposit

1. System will attempt to perform ACH transfer into employee's account
2. If system is unable to disperse funds, will notify payroll system that funds failed to disperse

7b. Employee wants physical check and employer allows

1. System will generate check
 - a. If payroll is handled through some other office, the system will send a check to the head office for them to generate.
 - b. If payroll is generated locally, system will include a check in the paystub for the employee to deposit

Special requirements:

- Pay information must be transmitted securely if transmitted to another office.

Technology and data variation List:

3a, 4a. Tax amount can be calculated by a fixed-rate or percentage.

7b. Employer is able to disperse funds through different providers, (e.g., direct deposit, cash, check, money card, etc...)

Frequency of Occurrence:

Occasionally, depending on pay schedule.

Use Case 16: Shall allow employees to clock in and clock out when they arrive/ leave

Primary Actor: Employee

Stakeholders and interests:

Employee: Wants to get paid for the exact amount of time they worked

Restaurant owner / manager: Doesn't want to pay employees for more time than they worked

Preconditions:

- Employee shows up to work and properly clocks in and out for their shift.

Success guarantee:

- The exact amount of time that the employee worked is recorded. The date is recorded.

Main success scenario:

1. This is done for each employee's shift:
 - a. Employee arrives to work
 - b. Employee clocks in for their shift using our application
 - c. Employee works their shift
 - d. Employee clocks out using our application when their shift is over
2. The employee is paid the correct amount for the exact amount of time they worked

Extensions:

1a. Employee forgets to clock in

1. Employee works their shift and the time they started working wasn't recorded
2. Employee goes to clock out and realizes they forgot to clock in
 - a. Employee isn't paid for this shift
 - b. Employee talks to manager to get shift manually entered into the system
 - i. Employee is paid for this shift

1d. Employee forgets to clock out

1. Employee works their shift
2. Employee leaves job without clocking out
3. When manager is paying employees, they notice a shift that was too long
 - a. The manager deletes the shift recorded and the employee is not paid
 - b. The manager talks to the employee to determine the amount of time worked
 - i. Employee is paid for their shift

Special requirements:

- System should be scalable in the future, multiple restaurants should be able to utilize same system without overloading it
- System should be portable... any platform should be able to run the software and communicate with users on different platforms

Technology and Data Variation List:

N/A

Frequency of Occurrence:

Each time an employee has a shift (many times per day, depending on the size of the restaurant)

Use Case 17: Shall deduct taxes from employee paychecks before disbursing them to employee bank accounts

Primary Actor:

Employer

Stakeholders and interests:

Employer: Needs to make sure the right taxes were deducted from their paycheck

Employer: Needs to make sure the right tax amount was set to be taken out of each employee's paycheck

Bank: Needs to make sure the employer has enough funds to pay the paycheck before the first paycheck is sent.

Preconditions:

- Employers have enough funds to send employees the correct amount of money to their bank account.
- Employee has input the correct bank information for their account.

Success guarantee:

- As soon as the employee looks at their paycheck, they can see that they were given the right amount after the tax deduction.

Main success scenario:

1. The employer sets the tax amount on the system
2. The employer makes the request for paychecks to be sent
3. The banks make sure there are enough funds in the bank
4. The bank sends the tax deducted amount to the employee

Extensions:

4a. If the bank account does not have enough funds, the management team gets notified immediately that there are not enough funds.

Special requirements:

Technology and data variation List:

- The system should identify and verify that the right amount of taxes were deducted for each of the users.
- The system should send the right information to the bank as it is automated.

Frequency of Occurrence:

Bi weekly when the paychecks are to be sent to the employee.

Use Case 18: System shall prevent employees from editing payroll information, and update managers if attempted

Primary Actor:

Employer

Stakeholders and interests:

Employer: Needs to make sure that the employee cannot edit payroll information and the right permissions are set to prevent unwanted access.

Employee: Notify that attempting to change payroll information is against terms of use and provide warning.

Preconditions:

- The system is working functionally and is not hacked.

Success guarantee:

- Employee cannot change payroll information
- Employer is notified if something goes wrong

Main success scenario:

1. Employee signs into application and attempts to change his payroll information
2. A warning is produced to the employee
3. The employer is sent an email that employee X has attempted to change his payroll information

Extensions:

1a. Notification being sent

1. Before the notification is sent, the employee can write a note in the notes section of why they tried to attempt the change the value

Special requirements:

- Email is sent within 10 seconds of the attempt

Technology and data variation List:

N/A

Frequency of Occurrence:

Whenever the data is changed

Use Case 19: System shall follow required payment regulations, including proper encryption methods, protection standards, etc. (i.e. PCI-DSS)

Primary Actor:

Restaurant

Stakeholders and interests:

Restaurant: main method of income; wants to be paid for their goods and services

Customer: doesn't want financial information stolen

Credit card company

Payment processor

Preconditions:

- Credit card is valid and is within credit card network
- Restaurant is not performing manual entry.

Success guarantee:

- Funds are dispersed from payment method, information is stored securely according to regulation, payment is recorded.

Main success scenario:

1. Customer is about to pay for some good or service
2. Customer provides credit card as payment
3. Staff member puts the credit card in the reader slot.
4. System captures information from the reader and sends it over to our service.
5. All processing, raw storage, and transmission is stored within our service; employer's system does not do any processing.
6. Service indicates success and sends a success response to the restaurant's system.
7. Restaurant's system reports a success message, generates a receipt of sale.

Extensions:

4a. Our service is down and payment can't be processed

1. System will fail return failure message to staff member
2. Funds will not be withdrawn from payment method

Special requirements:

- Transmission of payment data must be encrypted.
- Restaurant's system cannot store or view any protected payment data in records.

Technology and data variation List:

3a. System should be able to read from tap-to-pay, magnetic strip, and chip readers.

Frequency of Occurrence:

Very frequent; on every in-person order

Use Case 20: System shall keep track of all employee-related costs and online-order generated profit for easy access by management

Primary Actor:

Employer

Stakeholders and interests:

Employer: Needs to make sure that all employee related costs and online orders profit can be accessed and managed by management

Preconditions:

- Employers are tracking the employee related costs and profits.
- Data is being inputted so it can be managed by management

Success guarantee:

- Management can access and view the data that employers and employees are inputting for employee related costs and online order generated profits.

Main success scenario:

1. Employer inputs the employee related costs and profits
2. Management access the data that the employer put in to verify the profits
3. Data is kept indefinitely so it can be accessed for any employee even if they leave

Extensions:

N/A

Special requirements:

- Data must be stored reliability and can be accessed at any time
- Data should be backed up frequently

Technology and data variation List:

2a. Data can be accessed through multiple forms and can also be downloaded to the local computer.

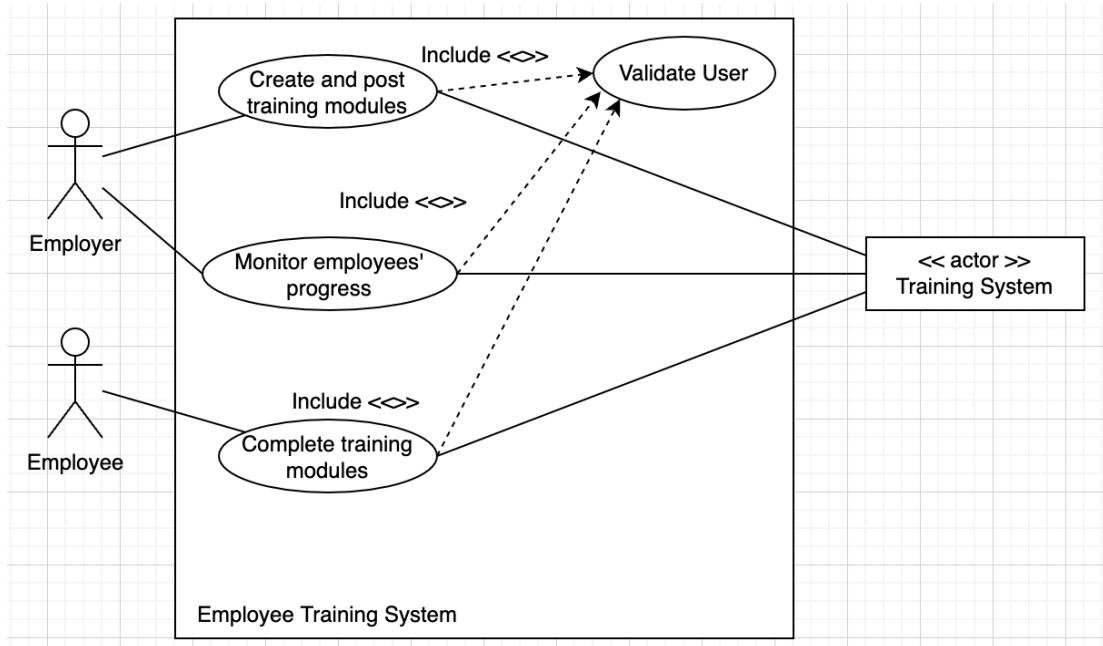
Frequency of Occurrence:

- Whenever the employer wants to view the employee related costs and online order generated on the web application

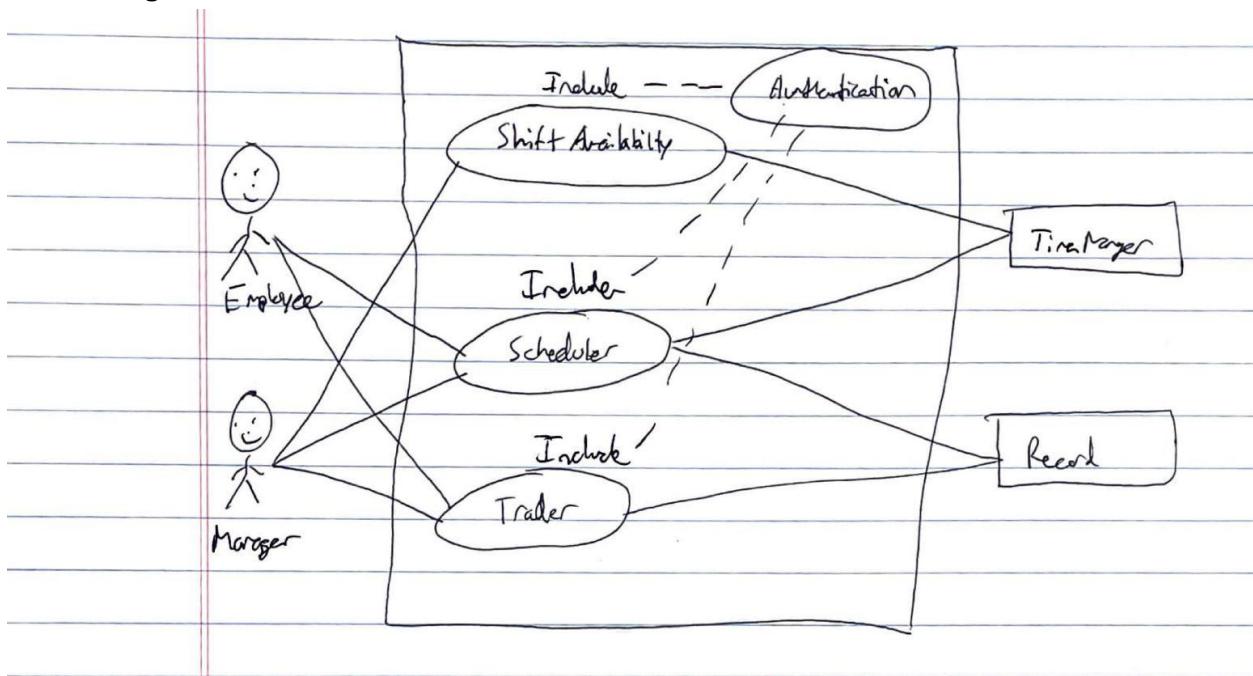
Use Case Diagrams

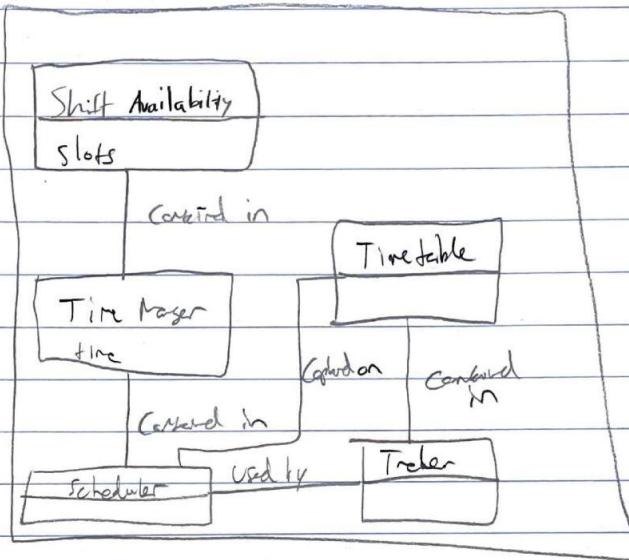
In this section we show 5 different use case diagrams, one for each requirement category that we defined in the previous section.

Training

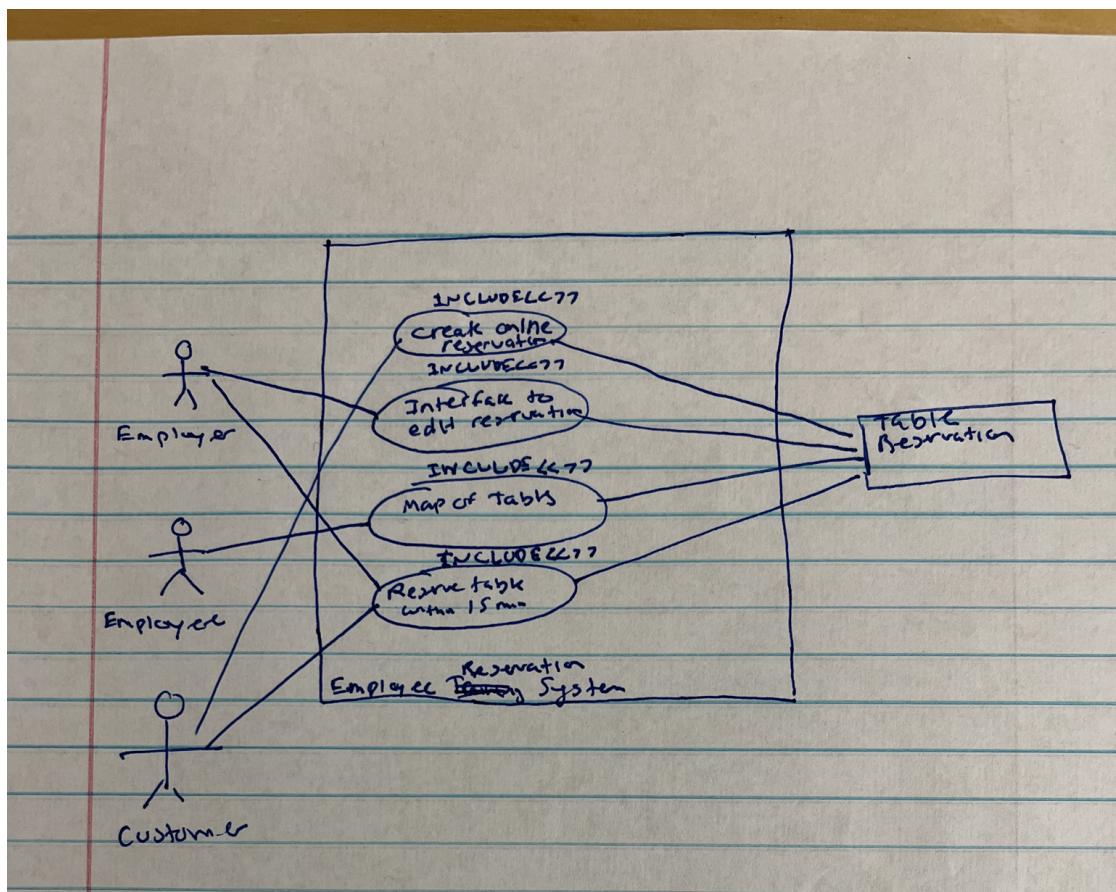


Scheduling

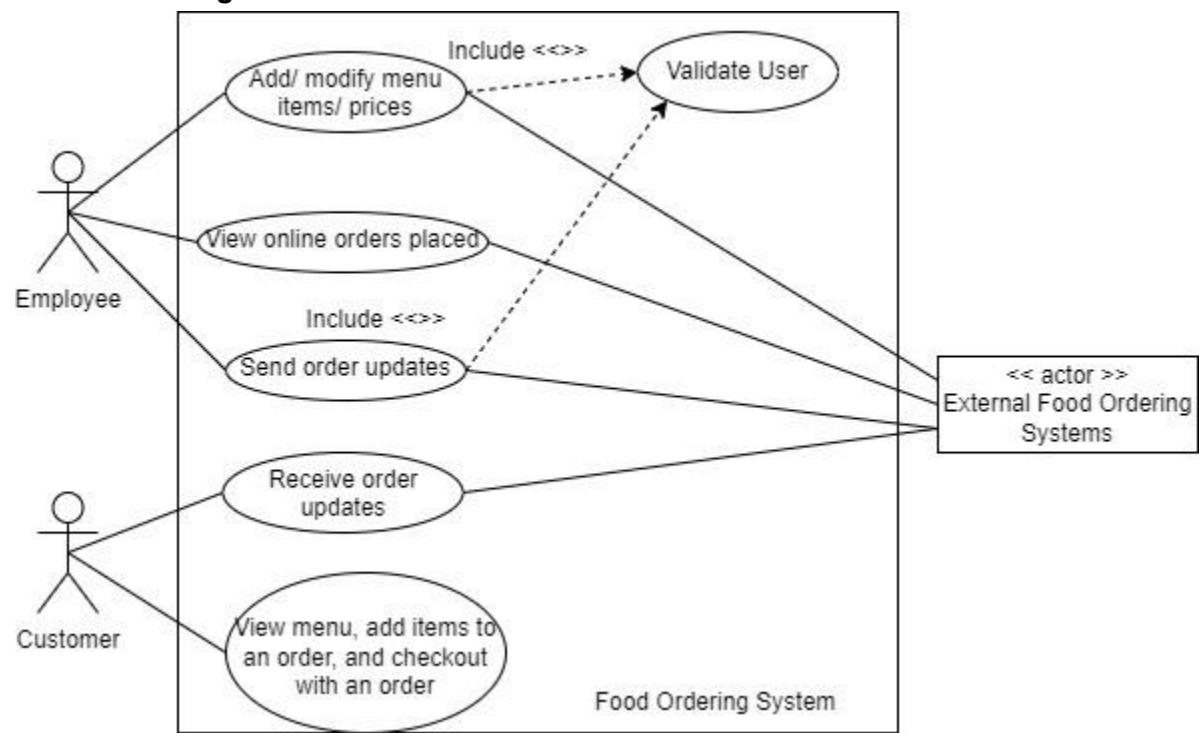




Reservations



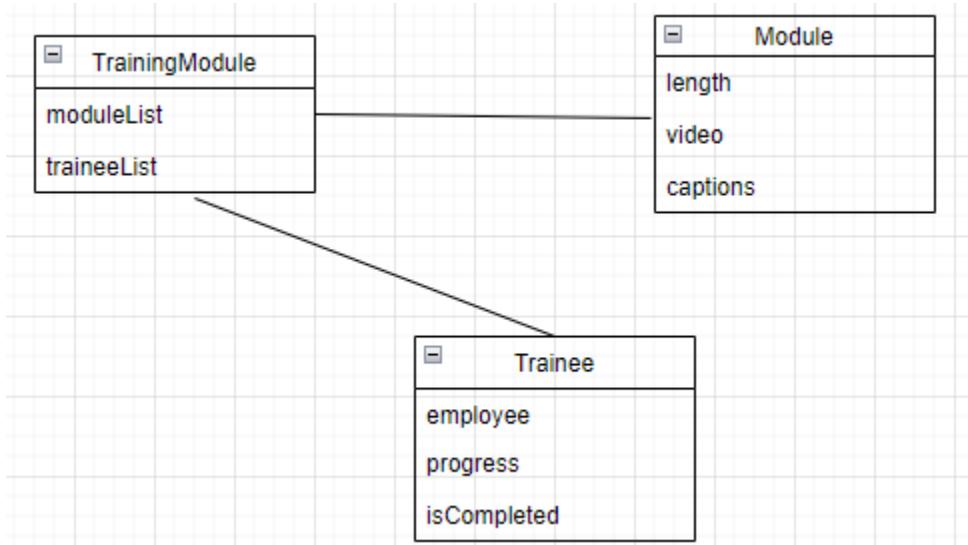
Online Ordering



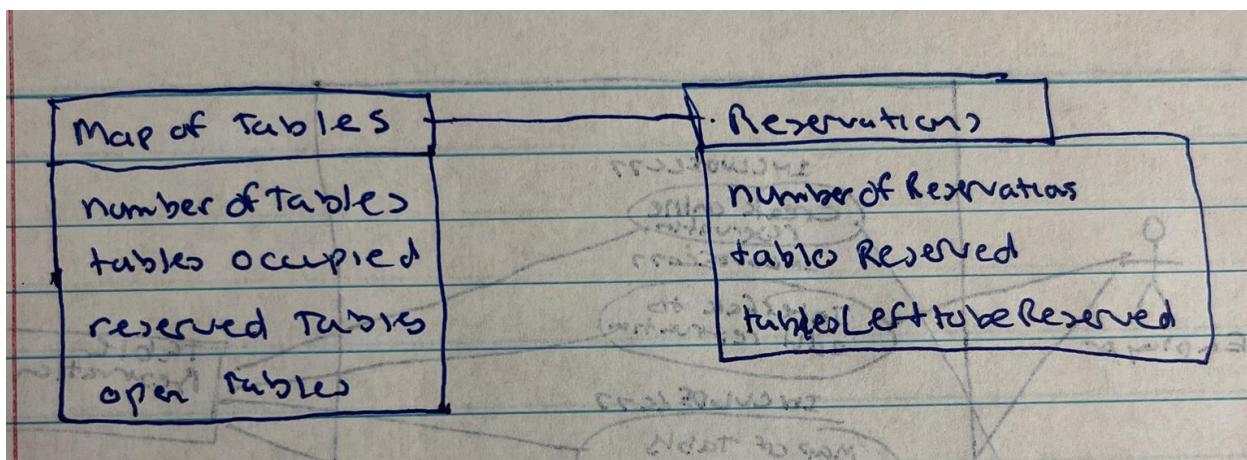
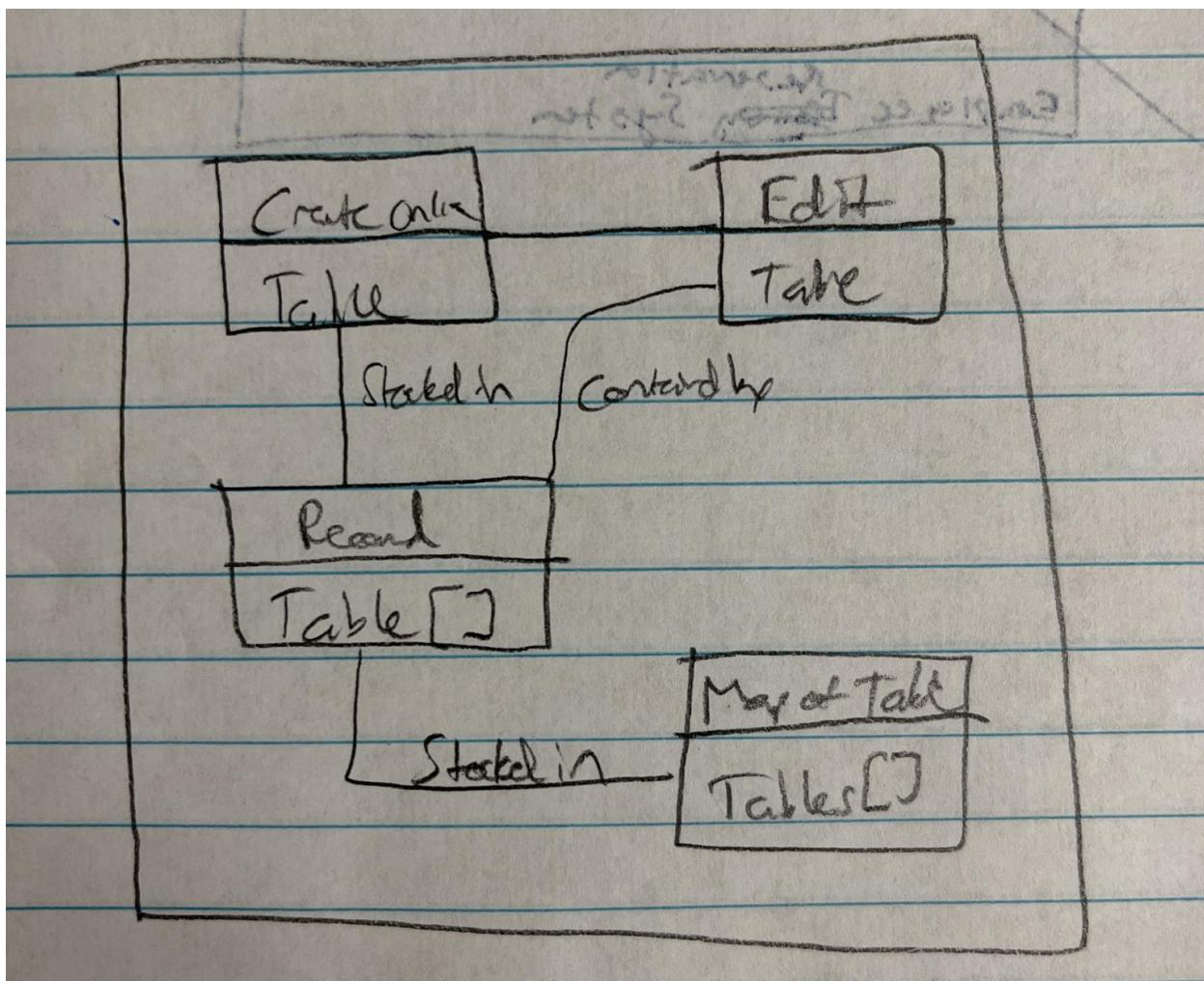
Class Diagrams

In this section we show 5 different conceptual class diagrams, one for each requirement category that we defined in the previous section. These are high level.

Training



Reservations



Online Ordering

