Project for the semester Autumn 2018: SweetIT Information System

SweetIT is a web-based information system run by confectioners. It supports table booking, recipe management, and ingredients status tracking. It also allows the ordering of cakes and desserts prepared either directly by the sweet shop or through external confectioners. The system can be deployed in one sweet shop or in a network consisting of several shops.

Booking of tables

Customers can book tables in advance at the sweet shop. The unregistered customer has the option to fill out the reservation form on the webpage, where they will fill in the contact details, date and time of arrival, and the number of persons. Such a reservation must still be confirmed by the sweet shop operator. After confirmation or rejection of the booking, the customer will receive a notification. In addition, a registered customer has the option of selecting a specific table when booking, and their reservation does not need to be further confirmed by the operator. Reservations can also be made by phone. Such reservations (bookings) are entered to the system by the operator. When entered via the online form, an unregistered customer needs to make the reservation at least two hours in advance, registered at least one hour in advance.

Management of desserts and ingredients

The dessert offered on site at the sweet shop are prepared directly by the sweet shop itself. The chef and other confectioners are in charge of the preparation. Desserts are prepared according to recipes in the system administered by the chef. The kitchen records the current state of the ingredients, especially their quantity and expiration date. In the event of the expiration of ingredients, the system alerts the chef. The state of ingredients after dessert preparation is updated by the chef in the system.

New ingredients are ordered by the chef. He/she enters an order in a system that then sends it to the supplier system. Upon confirmation, the supplier system sends an invoice to the sweetIT system. Invoices are confirmed by the manager. At the end of the month, all confirmed invoices are paid through an electronic banking system.

After preparing a dessert, the chef updates the status of the desserts currently available in the sweet shop. This status is adjusted whenever the operator enters the customer's order at the sweet shop. In the sweet shop, the customer can pay in cash or with a card via a payment terminal. The system also allows the operator to print receipts and send them to the Electronic Revenue Records (EET) system.

Food orders

The customer can order desserts from the sweet shop menu via the system. When ordering, the customer specifies the quantity of individual items, the place of pickup and the required delivery date. The order must be confirmed by the chef. After confirmation, the customer has an option to pay for the order with the card via payment gateway. The order can be personally picked at the chosen sweet shop, or the customer can have the order delivered to a given address.

In addition to that, the system allows registered physical persons - external confectioners - online sale of their own desserts. Registered confectioners can manage their offer and set prices, quantities, delivery times, etc. The ordering process is similar to when ordering desserts from the sweet shop, but in this case the order is confirmed by the confectioner itself (not the chef). The confectioner also confirms the completion of the preparation of the ordered desserts and their readiness to be picked up.

The confectioner's office charges 30% fee from the order price. Desserts delivery is also included in the price.

The delivery vehicles and drivers, employed by the sweet shop, take care of the delivery of the desserts. The system compiles the delivery schedule for each driver automatically to meet customer orders. Drivers can view the schedule in the system or allow the system to export addresses in gpx format that drivers can import into their own navigation devices.

The customer can add ratings and text review to all ordered desserts.

Desserts can be searched and filtered based on various parameters, such as (un)availability of certain ingredients or allergens, or according to calories, dimensions, weight, etc.

Loyalty program

A registered customer may request a loyalty card at the sweet shop. The card contains a code that is scanned when the customer is paying at the sweet shop. From the amount paid, 5% is credited to the account of the customer as a credit. If the customer spends at least 2,000 CZK in the sweet shop within the last 30 days, they are credited 10%. Credit can be used when ordering desserts online. Then the resulting order price is reduced by the amount of credit used.

Human resources

In addition to the already mentioned users, there are managers working with the system. Every sweet shop has its manager and there is still a main manager for the sweet shop network. Managers can view different reports and statistics related to the sweet shop operation in the system. The main manager can also view reports related to the entire sweet shop network.

Managers are also responsible for keeping records of employees in the system together with their employment contracts. That includes all employees, including maintenance and cleaning staff. The main manager is responsible for the records of the managers.