

CS 353 Spring 2023
PROJECT FUNCTIONALITIES

In the project's second phase (design report), you need to provide UIs and SQL queries (User Interface Design & Corresponding SQL Statements part) for the **marked** functionalities of your system. Below, you can find the ones that will be checked. Two of them are common for all project groups, and one of them is topic-specific. Notice that you may need to alter your E/R diagram to capture all these functionalities. **In this part of the design report, provide UIs and SQL queries of common functionalities and the first topic-specific functionality, each having its own subsections.** The remaining two topic-specific functionalities are not required for the design report. You will prepare them in the later stages. The subsections of topic-specific functionalities guide you to complete a scenario step by step.

COMMON FUNCTIONALITIES

1. Login and Register functionalities for different user types. If there are not several user types available, admin should be considered. **(DESIGN REPORT)**
2. The additional functional requirement that you introduced into the project context. You should discuss this functionality with your project TA to ensure the functionality's scope is sufficient. **(DESIGN REPORT)**

TOPIC-SPECIFIC FUNCTIONALITIES

1. Online Ticket Purchasing App for Transportation

1. Buying a ticket: **(DESIGN REPORT)**
 - i. Apply filters if necessary (e.g., departure, destination, transport type, etc.)
 - ii. List all possible companies and/or timetables
 - iii. The user selects the vehicle and date/time.
 1. Trip restrictions are checked.
 2. The system checks if the trip's date/time collides with any trips on the user's travel list.
 - iv. Show / Enter the user's payment method
 - v. Make the payment: The money is deducted from the payment method.
 - vi. The ticket is added to the user's (upcoming) travel list.
2. The company creates a transportation profile:
 - i. Specify the timetables, departure, destination, transport type, etc.
 - ii. Add restrictions to the trips if there are any. (e.g., capacity, etc.)
 - iii. Publish the transportation profile so that other users can list it.

3. Planning a journey: A journey has a list of trips.
 - i. Enter a name for the journey (i.e., summer holiday)
 - ii. List all possible companies and/or timetables
 - iii. Apply filters if necessary (e.g., departure, destination, transport type, etc.)
 - iv. Select multiple trips and add them to the current journey.
 - v. The journey is stored in the user account.
 1. You may add some options to the journey, such as “reserve all tickets” or “buy all tickets”

2. Online Pharmacy: Medicine Delivery System

1. The user orders a medicine: **(DESIGN REPORT)**
 - i. List all possible medicines
 - ii. Apply filters if necessary (e.g., what it is used for, dosages for age groups, side effects, etc.)
 - iii. The user selects the medicine
 1. Medicine restrictions are checked (e.g., prescription, etc.)
 - iv. Show / Enter the user’s payment method
 - v. Make the payment: The money is deducted from the payment method.
 - vi. The medicine is added to the user’s past orders list.
2. A doctor prescribes a medicine for a patient:
 - i. List all possible medicines
 - ii. Apply filters if necessary (e.g., what it is used for, dosages for age groups, side effects, etc.)
 - iii. The doctor selects the medicine
 - iv. The doctor prepares the prescription:
 1. The doctor selects/enters the patient
 2. Writes an explanation for details such as dosage.
 - v. Prescription is added to the database so the patient can view it under prescribed medicines in his/her account.
3. Pharmacist registers a new drug:
 - i. Specify the name, dosage, and type (liquid, tablet, etc.)
 - ii. Choose the drug class (e.g., painkiller, fever reducer, etc.)
 - iii. Add restrictions to the medicine (e.g., age, prescription, etc.)
 - iv. Publish the medicine so that other users can list it.

3. Professional Career Network (e.g., LinkedIn)

1. Job hunter applies for a job/internship: **(DESIGN REPORT)**
 - i. List all possible job/internship adverts
 - ii. Apply filters if necessary (e.g., profession, skills, location, type, etc.)
 - iii. The user selects the advert
 - iv. The user fills in the required information:
 1. Enters personal information (education, skills, experience, etc.)
 2. Uploads a resume
 - v. The job application is added to the user's applications list and the recruiter's candidates list.
2. The recruiter creates a job advert:
 - i. Specify the position, company, profession, location
 - ii. Choose the working type (e.g., remote, office, etc.)
 - iii. Add restrictions (e.g., skills, age, etc.)
 - iv. Publish the job advert so that other users can list it.
3. Creating a post:
 - i. Specify the title
 - ii. Choose the type of post (e.g., comment, information, etc.)
 1. Only career experts can add informative content.
 - iii. Write the text
 - iv. Publish the post so that other users can see it.

4. Room / Flat Rental Application (e.g., Airbnb)

1. Booking a room or flat: **(DESIGN REPORT)**
 - i. List all possible rooms and flats
 - ii. Apply filters if necessary (e.g., location, accommodation type, date, etc.)
 - iii. The user selects an accommodation
 - iv. Show / Enter the user's payment method
 - v. Make the payment: The money is deducted from the payment method.
 - vi. The booking is added to the user's list.
2. Homeowner puts up home for rent
 - i. Specify the location, capacity, etc.
 - ii. Choose the accommodation type (e.g., room, flat, etc.)
 - iii. Add restrictions (e.g., age, pets, etc.)
 - iv. Publish the place so that other users can list it.

3. User makes a review on a place:
 - i. List all the previous bookings that the user stayed
 - ii. Apply filters if necessary (e.g., date, location, type, etc.)
 1. Search the place by name and select it
 - iii. Prepare the review
 1. Write the opinion
 2. Specify the rating
 - iv. Publish the review so that other users can see it when they view the place's page.

5. Food Delivery Application (e.g., Yemeksepeti)

1. The user orders food: **(DESIGN REPORT)**
 - i. List all restaurants
 - ii. Apply filters if necessary (e.g., food, cuisine, price range, etc.)
 - iii. The user selects the restaurant and food from the menu given.
 1. An optional cart can be offered for multiple foods.
 - iv. Show / Enter the user's payment method
 - v. Make the payment: The money is deducted from the payment method.
 - vi. The order is added to the user's past orders list.
2. The restaurant creates the profile:
 - i. Enter the name, location, open hours, cuisine, etc. of the restaurant
 - ii. Create the menu by entering different foods
 - iii. Add restrictions for deliveries if there are any. (e.g., minimum order total, location, etc.)
 - iv. Publish the restaurant profile so that other users can list it.
3. The user reviews a food order:
 - i. List all the previous orders of the user
 - ii. Apply filters if necessary (e.g., date, restaurant, cuisine, etc.)
 1. Search the order by restaurant name and select it
 - iii. Prepare the review
 1. Write the opinion
 2. Specify the rating
 - iv. Publish the review so that other users can see it when they view the restaurant's page.