CS353 Fall 2023
PROJECT FUNCTIONALITY DOCUMENT

In the second phase of the project (design report), you need to provide UIs and SQL queries (User Interface Design & Corresponding SQL Statements part) for marked functionalities of your system. Below, you can find the ones that will be checked. Two of them are common among all project groups, and three of them are 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 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)
2. The additional functional requirement that you introduced into the project context. You should discuss this functionality with your project TA to make sure the scope of the functionality is sufficient. (DESIGN)

TOPIC-SPECIFIC FUNCTIONALITIES
Pet Adoption and Care System
1. Pet Adoption Process: (DESIGN)
   a. Animal shelters can list pets available for adoption, specifying details like age, breed, and medical history.
   b. Potential adopters can search for pets based on criteria, view detailed pet profiles, and express interest in adoption.
   c. Adopters can submit adoption applications, which are reviewed by administrators.
   d. Adopters can schedule meet-and-greet sessions with pets and submit adoption fees online.
2. Pet Care Resources:
   a. The platform offers a comprehensive pet care information section with articles and guides.
   b. Pet owners can access personalized pet health records, schedule vet appointments, and receive reminders for vaccinations and check-ups.
   c. Expert veterinarians and trainers are available for virtual consultations, offering advice on pet health, behavior, and training.
3. Vet Appointment Scheduling:
   a. Pet owners can schedule vet appointments directly through the platform by selecting a preferred date and time.

  b. Veterinarians can confirm or reschedule appointments, and users receive reminders.

 4. Administrative Functions:

  a. Administrators manage adoption applications, verifying credentials and approving adoptions.

  b. They manage pet listings, update pet availability status, and handle adoption-related inquiries.

  c. Administrators prepare system reports for top vets, the most number of pets adopted by a user, and the most adopted pet breed.

Online Art Gallery and Auction Platform

 1. Artist and Artwork Management: (DESIGN)

  a. Artists can upload artwork, set reserve prices, and specify auction durations.

  b. They can manage their portfolios, edit artwork descriptions, and set starting bids.

  c. Artists receive notifications when their artwork is favorited or added to a user's collection.

  d. Collector can list all of the available artworks on auction and apply filters such as price and date posted. They should be able to view the detailed page of the artwork and submit a bid.

  e. Artist can accept or reject a bid.

 2. Collector and Enthusiast Interactions:

  a. Collectors and art enthusiasts can explore a diverse collection of art and browse artist profiles.

  b. Users can place bids in online auctions, receive real-time notifications on bid updates, and track their activity history.

  c. Collectors can create and share collections of artworks with other users.

 3. Educational Resources and Community Building:

  a. The platform hosts webinars, workshops, and tutorials conducted by renowned artists, providing educational opportunities for both artists and enthusiasts.

 4. Administrative Functions:

  a. Administrators manage the platform's functionality, ensuring the accuracy of art listings and overseeing payment processing.

  b. Administrators prepare system reports for top-selling artists, the greatest number of bids on an artwork, and top collectors.

Online Language Learning Platform

 1. Taking a language class (DESIGN)

  a. Select a language and the level

  b. Select a teacher (by the learner)

    c. Send a class request to the teacher (by the learner)
- i. The teacher can see the class requests and the ongoing/accepted classes
- ii. Accepting or rejecting the class request (by the teacher)

    d. Assign homework to the student(s) (by the teacher)
- i. Grade the homework

2. Speaking exercise
   a. Select a language and the level
   b. Select a language native speaker (by the learner)
   c. Send a request to the native speaker (by the learner)
      - i. Specify date and time (by the learner)
      - ii. Language natives can see the current requests and the accepted requests
      - iii. Accepting or rejecting the request (by the native speaker)
   d. Grade the speaking exercise (by the native speaker)

3. Prepare system report (by the admin)
   a. Specify a language
      - i. How many students are learning this language?
      - ii. Specifying a level, what is their grade average in homeworks / exams?
      - iii. What is the grade average of the learners in the speaking exercises?