# **Human Computer Interaction Project**

# **Pet Care App (Deliverable-I)**

**Group Members:**

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## Functional Requirements

1. **Every function which is required by end-user (model each user):**

* **Pet Owners:**
  + Pet owners should be able to create and manage profiles for each of their pets, including details such as name, breed, age, and medical history etc.
  + Pet owners must have the ability to schedule veterinary appointments, specifying the date, time, and reason for the visit.
  + The app should send appointment reminders and notifications to pet owners.
  + Pet owners should be able to view the complete medical history and records of their pets.
  + Pet owners must have the capability to search for veterinarians based on location, specialty, and ratings.
  + Pet owners should be able to provide feedback and ratings for the services received from veterinarians.
* **Veterinarians:**
  + Veterinarians should be able to view and manage their appointment schedules, including the ability to update the status of appointments.
  + Veterinarians must have access to and be able to update the medical records of pets.
  + The app should allow veterinarians to communicate with pet owners through chat or video call.
  + Veterinarians should be able to set their availability and appointment slots.
  + Veterinarians must have the ability to manage their profiles and the services they offer.
* **Admin:**
  + Admins should be able to oversee all user activities and interactions within the app.
  + Admins must manage app content and updates, including news, articles, and tips.
  + The app should enable admins to handle user queries and support requests efficiently.
  + Admins should be able to generate reports on app usage and performance metrics.

1. **Define all required inputs for each function:**

* **Pet Owners:**
  + Inputs required for creating pet profiles include pet name, breed, age, and medical history.
  + Scheduling appointments requires inputs such as the date, time, and reason for the visit.
  + Searching for veterinarians requires inputs such as location, specialty, and preferred ratings.
  + Providing feedback requires inputs like comments and star ratings.
* **Veterinarians:**
  + Inputs for setting availability include dates and times.
  + Updating appointment status requires inputs like notes and prescriptions.
  + Communication with pet owners involves inputs such as text messages and media.
  + Managing profiles requires inputs like bio and services offered.
* **Admin:**
  + User account management requires inputs like verification details and approval status.
  + Content updates need inputs such as news articles and tips.
  + Support responses involve inputs like solutions and FAQs.
  + Generating reports requires inputs like date range and metrics.

1. **Define all required outcomes from each function:**

* **Pet Owners:**
  + Confirmation of successful pet profile creation or updates.
  + Appointment confirmation and reminder notifications.
  + Access to updated pet medical records.
  + Display of search results for veterinarians.
  + Acknowledgment of submitted feedback and ratings.
* **Veterinarians:**
  + Display of the updated appointment schedule.
  + Access to the updated medical records of pets.
  + Logs of communications with pet owners.
  + Confirmation of profile and service updates.
* **Admin:**
  + Logs of user activities and interactions.
  + Reflecting content updates in the app.
  + Notifications of resolved support queries.
  + Generated and accessible reports on app usage and performance.

1. **Define any data conversions, calculations, formulas to be done at each function:**

* **Pet Owners:**
  + Calculation of the pet’s age based on the birth date provided.
  + Conversion of appointment times to local time zones.
  + Aggregation of feedback ratings into an average score.
* **Veterinarians:**
  + Standardization of medical record formats.
  + Calculation of available appointment slots based on the entered schedule.
* **Admin:**
  + Generation of usage statistics and performance metrics.
  + Conversion of support requests into resolved cases.

1. **Define Data Search, data linking, Query fetches at each function:**

* **Pet Owners:**
  + Search functionalities should allow querying veterinarians based on location, specialty, and ratings.
  + Linking pet profiles to their medical records for easy access.
  + Fetching historical appointment data.
* **Veterinarians:**
  + Fetching scheduled appointments from the database.
  + Linking medical records to respective pet profiles.
  + Searching for communication logs with pet owners.
* **Admin:**
  + Searching user activities and interactions within the app.
  + Linking support requests to their respective solutions.
  + Fetching and generating reports on app usage and performance.

1. **Define special requirements for each function:**

* **Pet Owners:**
  + Secure storage and encryption of pet medical records.
  + Real-time notifications for appointment reminders.
  + User-friendly interface for managing profiles and appointments.
* **Veterinarians:**
  + Compliance with HIPAA standards for handling medical records.
  + Reliable and secure communication channels for interacting with pet owners.
  + Intuitive tools for managing schedules and appointments.
* **Admin:**
  + Comprehensive dashboard for monitoring app activities.
  + Efficient ticketing system for handling user support requests.
  + Advanced tools for generating and analyzing usage and performance reports.