Aggregation

Association

Inheritance ——Extends——

Dependency

User

Extends   Extends   Extends   Extends

Flagged Users
Administrator
Pet Owner
Pet Finder
Pet Adopter

PetListing ——Extends——

Extends

Flagged Listings
Lost Pet Listing
FindersReport
AdoptPetListing
Adoption Requests

FlaggedListingAnd UserController

Requests Controller

Pet Adopter Controller

Administrator Controller
Pet Owner Controller
User Controller
Pet Finder Controller

Administrator UI
Pet Owner UI
Pet Finder UI
Pet Adopter UI

User UI

User
- userID: String
- fullName: String
- email: String
- password: String
- phoneNumber: String
- profilePhoto_url: String
- isFirstTimeUser : bool

(Abstract) PetListing
- listingId: int
- title: String
- description: String
- status: String // ("Active", "Flagged", "Removed")
- owner: User
- createdAt: Date
- petName: String
- species: String
- breed: String
- color: String
- age: String
- contactInfo: String

FlaggedUser
- flagUserId: int
- flaggedUserID: int
- flaggedById: int
- reason: String
- timestamp: String
- reviewed: boolean
- status: String // ("Pending", "Reviewed", "Dismissed")

Administrator
- user: User
- adminId :int
- assignedDate: String

Pet Owner
- lostPets: List<LostPet>

Pet Finder
- finderId: int
- finderReports: List<FinderReport>

Adopter
- adopterId: int
- name: String
- email: String
- phone: String

FlaggedListing
- flagId: int
- flaggedBy: User
- listing: PetListing
- reason: String
- flaggedAt: String
- status: String // ("Pending", "Reviewed", "Dismissed")

Lost Pet Listing
- lastSeenLocation: int
- LastSeenDate: String
- finders: List<FinderReport>

FinderReport
- reportId: int
- listing: LostPetListing
- finder: User
- reportDate: Date
- proofImage:String
- notes: String
- status: String // ("Pending", "Verified", "Rejected")

Adopt Pet Listing
Adopters: List<AdoptionRequest>

AdoptionRequest
- requestId: int
- adopterId: int
- listingId: int
- message: String
- status: String

Extends

FlaggedListingAndUserController
+ flagListing(userId: int, listingId: int, reason: String): void
+ getAllFlaggedListings(): List<FlaggedListing>
+ reviewFlag(flagId: int, adminId: int): void
+ flagUser(flaggedUserId: int, flaggedById: int, reason: String): void
+ getAllFlaggedUsers(): List<FlaggedUser>
+ reviewFlaggedUser(flagUserId: int, adminId: int): void

RequestsController
+ submitAdoptionRequest(adopterId: int, listingId: int, message: String): void
+ cancelAdoptionRequest(requestsId: int): void
+ getSubmittedRequests(adopterId: int): List<AdoptionRequest>
+ listPetsForAdoption(ownerId: int): List<AdoptionRequest>
+ addPetForAdoption(ownerId: int): void
+ removePetFromAdoption(ownerId: int, listingId: int): void

Pet Owner Controller
+ createLostPetListing(): void
+ editLostPetListing(): void
+ deleteLostPetListing(): void
+ verifyPetFinderImage(): void
+ flagPetFinder(): void
+ updateStatus(status: String): void
- manageRequest(): void
- viewRequestList(): void
ReviewLostPetSubmission():void

User Controller
+ createAccount(): void
+ deleteAccount(): void
+ login(): void
+ logout(): void
+ manageProfile(): void
- editProfile(): void
+ flagListing(listingId: int, reason: String): void
+ walkthrough() : void
+ viewLostPetListing (): void
+ viewMap():void

Pet Finder Controller
+ reportLostPet(): void
+ uploadPetImage(): void
+ confirmReport(): void

AdopterController
+ submitAdoptionRequest(listingId: int, message: String): void
+ cancelAdoptionRequest(requestId: int): void
+ viewSubmittedRequests(): List<AdoptionRequest>

Administrator Controller
+ reviewReports(admin: Administrator): void
+ banUser(admin: Administrator, targetUser: User): void
+ deleteListing(admin: Administrator, listing: Listing): void
+ dismissReport(admin: Administrator, reportId: int): void

Administrator UI

Pet Owner UI

Pet Finder UI

Pet Adopter UI

User UI
+ displayUI(): void
+ viewListings(): List<Listing>

Use

Extends

Refer to the link below if KeyClass and UML Diagram unclear:

https://app.diagrams.net/#G1eWo2ZiP7xf8XR0v4-0_HgXTXHS__UV7S#%7B%22pageId%22%3A%22n2wUbdfS t2RgHk_jHw6y%22%7D