Final Project

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INFO-C451: System Implementation

Sheltr App Demo

Problem Statement

Adopting a pet should be a joyful journey, not a communication maze. Animal shelter employees struggle with overwhelmed inboxes and limited hours, while potential pet parents face dead ends and delayed connections.

Sheltr transforms the experience. Our user-friendly app brings shelters and adopters face-to-digital-face, enabling instant communication, streamlined scheduling, and effortless meet-and-greets.

With Sheltr, finding your furry forever friend is just a tap away, leaving frustration behind and paving the way for happy pets and pet parents.

Sheltr App Demo

Sheltr App Features

EASY-TO-BROWSE PET PROFILES

01

Rich pet profiles allow Shelter Staff to publish photos and details about adoptable pets with prospective pet parents

MEET & GREET REQUESTS

02

Users can quickly request a Meet & Greet with potential matches, which helping Shelter staff easily manage in-person appointments

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SHELTER PROFILES

03

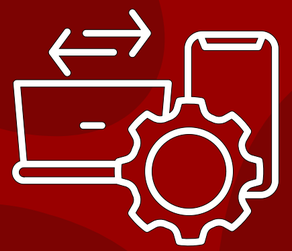
Shelter staff can easily manage information about Shelter hours, adoption policies, and location right in the app

USER PROFILES

04

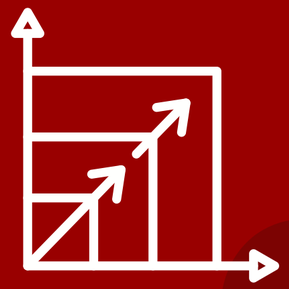
Users can share contact information, pet preferences, and special requirements on their profile, making it easy to match pets and parents

Why Dart + Flutter + FireBase?



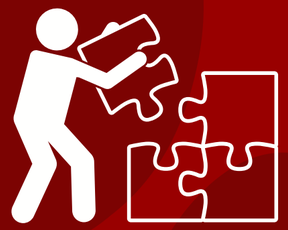
CROSS-PLATFORM

Sheltr can be deployed for iOS, Android, and Web from a single codebase.



SCALABLE

Sheltr's secure, fully cloud-based backend is scalable out-of-the-box. Users just need an email address.



FREE-TO-BUILD

The services deployed for free today can be seamlessly scaled to accomodate a user base of any size.

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User Types

GUEST

Can view all available pets

Can register for a User Account

USER

Can view all available pets

Can request and view meet & greets

Can request upgrade to Shelter Account

SHELTER

Can publish and edit pets

Can view all pets published by the shelter

Can approve/reject meet & greet requests

ADMIN

Can view, edit, and delete all pets

Can approve/reject upgrades to Shelter Accounts

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Development Milestones

UX PROTOTYPING

Developed an interactive prototype in Figma to identify all required routes, views, widgets, and UX requirements

APP SCAFFOLDING

Initial code implementation, creating wireframe code objects for the entire system, connected all relevant routes and widgets.

SERVICE PROVISIONING & DATA MODELING

Provisioned FireBase services, implemented classes with necessary CRUD methods,

ROUTE IMPLEMENTATION

Implemented the app Context object, passing app state across widgets. Loosely connected individual data objects and routes to user type.

EXPERIENCE SEGMENTATION

Fully segmented route and database access based on UserType flag.

VALIDATION & SUBMISSION

Performed final testing, captured validation screenshots, assembled final report

Live App Demo

Sheltr App Demo