

Cat Breed Information Client-Server Program

A socket programming project by **Shauntell Gavino-Collins & Jilanie Desert**, where curiosity about cats meets the fundamentals of network communication.

CYSE 250 · MILESTONE 1



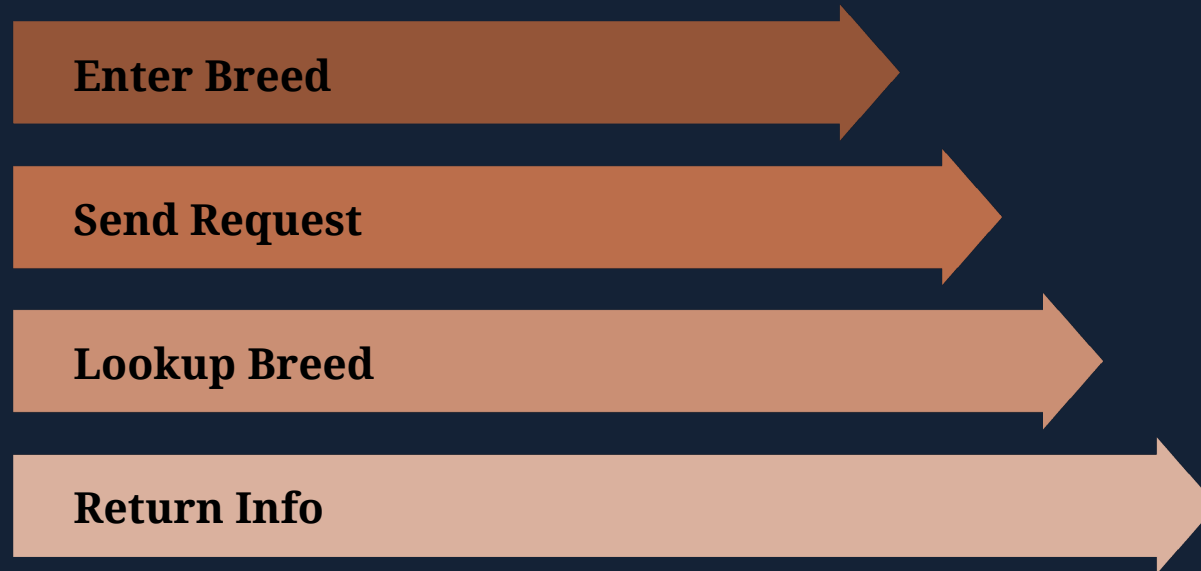
What Are We Building?



The Core Idea

This project is a **client - server program** built with socket programming. A user types the name of a cat breed into the client, and the server responds with a detailed profile of that breed.

How the Program Works



The client and server communicate over a socket connection. The client packages the user's input and sends it to the server, which looks up the breed in its internal data store and sends back a structured response containing the breed's life expectancy, recommended diet, potential health concerns, activity level, and cuteness rating.

What Information Does the Server Return?



Life Expectancy

Average lifespan range for the breed



Recommended Diet

Nutritional guidance tailored to the breed



Common Diseases

Health conditions to watch out for



Activity Level

Low, medium, or high energy profile



Cuteness Rating

A fun 1–10 score (very scientific)



Example Interaction

Client Input

User types:

"Siamese"

The client sends this string over the socket to the server.

Server Response

Life Expectancy:
12–20 years

Diet: High-protein
balanced cat food

Common Diseases:
Dental disease,
respiratory issues

Activity Level:
High

Cuteness Rating:
10/10 🐱

Why This Project Fits

→ **Files** - breed data stored and loaded from files

→ **Functions, loops, & data structures** - functions process requests, loops keep the server running, and dictionaries store cat breed records

→ **Authentication** - optional login layer for the client

→ **Encryption** secure the socket communication channel
