In this handout, we'll explore a C# codebase for a pet management system. We'll delve into its structure, functionalities, and potential areas for improvement.

**Purpose of Structs**:

**User Struct**: Stores information about a user including their ID, name, email, password, contact details, address, city, state, and role.

**Pet Struct:** Stores details about a pet including its ID, name, category, and the ID of the user who owns the pet.

**Main Functionalities:**

**User Registration**: Allows users to register by providing their details such as name, email, password, etc.

**User Login:** Users can log in using their email and password.Check the role of the user. If the user is publicUser goto the options Post pet,List Pets,Logout.

**Posting Pets**: Users can post details of pets, including their name and category.

**Listing Pets:** Displays details of all posted pets.

**User Registration and Login:**

**Registration:** Users can register by inputting their details, which are then stored in an array.

**Login:** Users can log in by providing their email and password, which are checked against the stored user data.

**Posting and Listing Pets:**

**Posting Pets**: Users can input details of pets, which are stored in an array.

**Listing Pets:** Displays details of all posted pets, including the name, category, and owner's name retrieved from user data.

**Role Enum:**

Defines roles for users, including "Admin" and "PublicUser".