Pseudocode for driver.py

```
FROM typing IMPORT List
FROM dog IMPORT Dog
FROM monkey IMPORT Monkey
IMPORT intake
IMPORT initialize
IMPORT print_animals
IMPORT reserve_animal

CLASS Driver:
        INIT dog ARRAY
        INIT monkey ARRAY

        METHOD main()
                INIT scnr AS input
                FROM initialize INIT dog_list
                FROM initialize INIT monkey_list

                SET usr_input TO NOTHING

                WHILE usr_input IS NOT q
                        DISPLAY menu
                        SET usr_input TO scnr

                        IF usr_input EQUALS 1
                                DISPLAY "Beginning Dog Intake"
                                FROM intake CALL intake_new_dog

                        ELSE IF usr_input EQUALS 2
                                DISPLAY "Beginning Monkey Intake"
                                FROM intake CALL intake_new_monkey

                        ELSE IF usr_input EQUALS 3
                                DISPLAY "Beginning Animal Reservation"
                                FROM reserve_animal CALL reserve_animal

                        ELSE IF usr_input EQUALS 4
                                DISPLAY "Displaying List of dogs"
                                FROM print_animals CALL print_animals(1)

                        ELSE IF usr_input EQUALS 5
                                DISPLAY "Displaying List of monkeys"
                                FROM print_animals CALL print_animals(2)

                        ELSE IF usr_input EQUALS 6
                                DISPLAY "Displaying List of unreserved animals"
                                FROM print_animals CALL print_animals(3)

                        ELSE IF usr_input EQUALS q
                                DISPLAY "Quitting."
                                END
```

```
                    ELSE
                            DISPLAY "Invalid command."

                    END IF
            END WHILE

     METHOD display_menu()
            DISPLAY 2 new line
            DISPLAY "Rescue Animal System Menu"
            DISPLAY "[1] Intake a new dog"
            DISPLAY "[2] Intake a new monkey"
            DISPLAY "[3] Reserve an animal"
            DISPLAY "[4] Print a list of all dogs"
            DISPLAY "[5] Print a list of all monkeys"
            DISPLAY "[6] Print a list of all animals that are not reserved"
            DISPLAY "[q] Quit application"
            DISPLAY "Enter a menu selection"
```

Pseudocode for dog.py

FROM rescueanimal.py IMPORT RescueAnimal

```
CLASS Dog
     Constructor METHOD (self, name, breed, gender, age, weight, acquisition_date,
acquisition_country, training_status, reserved, in_service_country)
            CALL super() METHOD(name, gender, age, weight, acquisition_date,
     acquisition_country, training_status, reserved, in_service_country)
            SET self.name TO name
            SET self.breed TO breed
            SET self.gender TO gender
            SET self.age TO age
            SET self.weight TO weight
            SET self.acquisition_date TO acquisition_date
            SET self.acquisition_country TO acquisition_country
            SET self.training_status TO training_status
            SET self.reserved TO reserved
            SET self.in_service_country TO in_service_country

     METHOD get_breed(self)
            RETURN self.breed

     METHOD set_breed(self, breed)
            SET self.breed TO breed
```

Pseudocode for monkey.py

FROM rescueanimal.py IMPORT RescueAnimal

```
CLASS Monkey(RescueAnimal)
```

Constructor METHOD (self, name, species, gender, age, weight, tail_length, height, body_length, torso_length, skull_length, neck_length, acquisition_date, acquisition_country, training_status, reserved, in_service_country)
        CALL super() METHOD(name, gender, age, weight, acquisition_date, acquisition_country, training_status, reserved, in_service_country)
        SET self.name TO name
        SET self.species TO species
        SET self.gender TO gender
        SET self.age TO age
        SET self.weight TO weight
        SET self.tail_length TO tail_length
        SET self.height TO height
        SET self.body_length TO body_length
        SET self.torso_length TO torso_length
        SET self.skull_length TO skull_length
        SET self.neck_length TO neck_length
        SET self.acquisition_date TO acquisition_date
        SET self.acquisition_country TO acquisition_country
        SET self.training_status TO training_status
        SET self.reserved TO reserved
        SET self.in_service_country TO in_service_country

METHOD get_species(self)
        RETURN self.species

METHOD set_species(self, species)
        SET self.species TO species

METHOD get_tail_length(self)
        RETURN self.tail_length

METHOD set_tail_length(self, tail_length)
        SET self.tail_length TO tail_length

METHOD get_height(self)
        RETURN self.height

METHOD set_height(self, height)
        SET self.height TO height

METHOD get_body_length(self)
        RETURN self.body_length

METHOD set_body_length(self, body_length)
        SET self.body_length TO body_length

METHOD get_torso_length(self)
        RETURN self.torso_length

METHOD set_torso_length(self, torso_length)
        SET self.torso_length TO torso_length

METHOD get_skull_length(self)
        RETURN self.skull_length

METHOD set_skull_length(self, skull_length)

SET self.skull_length TO skull_length

            METHOD get_neck_length(self)
                    RETURN self.neck_length

            METHOD set_neck_length(self, neck_length)
                    SET self.neck_length TO neck_length

Pseudocode for rescue_animal.py

CLASS RescueAnimal
        Constructor METHOD (self, name, gender, age, weight, acquisition_date, acquistion_country, training_status, reserved, in_service_country)
                    SET self.name TO name
                    SET self.gender TO gender
                    SET self.age TO age
                    SET self.weight TO weight
                    SET self.acquisition_date TO acquisition_date
                    SET self.acquisition_country TO acquistion_country
                    SET self.training_status TO training_status
                    SET self.reserved TO reserved
                    SET self.in_service_country TO in_service_country

        METHOD get_name(self)
                    RETURN self.name

        METHOD set_name(self, name)
                    SET self.name TO name

        METHOD get_gender(self)
                    RETURN self.gender

        METHOD set_gender(self, gender)
                    SET self.gender TO gender

        METHOD get_age(self)
                    RETURN self.age

        METHOD set_age(self, age)
                    SET self.age TO age

        METHOD get_weight(self)
                    RETURN self.weight

        METHOD set_weight(self, weight)
                    SET self.weight TO weight

        METHOD get_acquisition_date(self)
                    RETURN self.acquisition_date

        METHOD set_acquisition_date(self, acquisition_date)
                    SET self.acquisition_date TO acquisition_date

        METHOD get_acquisition_location(self)

```
                RETURN self.acquisition_country

        METHOD set_acquisition_location(self, acquisition_country)
                SET self.acquisition_country TO acquisition_country

        METHOD get_reserved(self)
                RETURN self.reserved

        METHOD set_reserved(self, reserved)
                SET self.reserved TO reserved

        METHOD get_in_service_location(self)
                RETURN self.in_service_country

        METHOD set_in_service_country(self, in_service_country)
                SET self.in_service_country TO in_service_country

        METHOD get_training_status(self)
                RETURN self.training_status

        METHOD set_training_status(self, training_status)
                SET self.training_status TO training_status
```

Pseudocode for intake.py

```
IMPORT dog.py
IMPORT monkey.py

FUNCTION intake_new_dog(scanner, dog_list)
        DISPLAY What is the dog's name?
                READ input ASSIGN TO name

        FOR EACH dog in dog_list
                IF dog.name EQUALS TO name
                        DISPLAY "This dog is already in our system"
                        RETURN
                END IF
        END FOR
        DISPLAY Adding "Dog:" ADD name

        DISPLAY "What is the dog's breed?"
                READ input ASSIGN breed")
        DISPLAY "Breed:" ADD breed

        DISPLAY "What is the dog's gender?"
                READ input ASSIGN gender
```

```
DISPLAY "Gender:" ADD gender

DISPLAY "What is the dog's age?"
        READ input ASSIGN age
DISPLAY "Age:" ADD age

DISPLAY "What is the dog's weight?"
        READ input ASSIGN weight
DISPLAY "Weight:" ADD weight

DISPLAY "When was the dog acquired? Format: mm-dd-yyyy"
        READ input ASSIGN acquisition_date
DISPLAY "Dog Acquired:" ADD acquisition_date

DISPLAY "What Country did the dog come from?"
        READ input ASSIGN acquisition_country
DISPLAY "Country of Origin:" ADD acquisition_country

DISPLAY "What is the dog's training status?"
DISPLAY "Phase I, Phase II, Phase III, Phase IV, Phase V, or In Service"
        READ input ASSIGN training_status
DISPLAY "Training Status:" ADD training_status

DISPLAY "Has this dog been reserved? (True or False)"
        READ input ASSIGN reserved_temp
DISPLAY "Reservation Status:" ADD reserved_temp
ASSIGN reserved TO reserved_temp.lower() EQUALS 'true'

DISPLAY "What country is the dog in service?"
        READ input ASSIGN in_service_country
DISPLAY "Country of Service:" ADD in_service_country

CREATE dog4 AS Dog ASSIGN name, breed, gender, age, weight, acquisition_date,
acquisition_country, training_status, reserved, in_service_country

APPEND dog4 TO dog_list
DISPLAY "New Dog" ADD name ADD "added!"

FUNCTION intake_new_monkey(scanner, monkey_list)
        DISPLAY "What is the Monkey's name?"
                READ input ASSIGN name
```

```
FOR EACH monkey in monkey_list
        IF monkey.name EQUALS TO name
                DISPLAY "This Monkey is already in our system"
        END IF
        RETURN
END FOR
DISPLAY "Adding Monkey:" ADD name

DISPLAY "What is the Monkey's species?"
        READ input ASSING species
IF species IS NOT "capuchin", "guenon", "macaque", "marmoset", "squirrel monkey",
"tamarin"
        DISPLAY "This monkey species is not allowed. Please choose another."
        RETURN
END IF
DISPLAY "Species:" ADD species

DISPLAY "What is the Monkey's gender?"
        READ input ASSIGN gender
DISPLAY "Gender:" ADD gender

DISPLAY "What is the Monkey's age?"
        READ input ASSIGN age
DISPLAY "Age:" ADD age

DISPLAY "What is the Monkey's weight?"
        READ input ADD weight
DISPLAY "Weight:" ADD weight

DISPLAY "What is the Monkey's tail length?"
        READ input ADD tail_length
DISPLAY "Tail Length:" ADD tail_length

DISPLAY "What is the Monkey's height?"
        READ input ASSIGN height
DISPLAY "Height:" ADD height

DISPLAY "What is the Monkey's body length?"
        READ input ASSIGN body_length
DISPLAY "Body Length:" ADD body_length
```

```
DISPLAY "What is the Monkey's torso length?"
        READ input ASSIGN torso_length
DISPLAY "Torso Length:" ADD torso_length

DISPLAY "What is the Monkey's skull length?"
        READ input ASSIGN skull_length
DISPLAY "Skull Length:" ADD skull_length

DISPLAY "What is the Monkey's neck length?"
        READ input ASSIGN neck_length
DISPLAY "Neck Length:" ADD neck_length

DISPLAY "When was the Monkey Acquired? Format: mm-dd-yyyy"
        READ input ASSIGN acquisition_date
DISPLAY "Monkey Acquired:" ADD acquisition_date

DISPLAY "What Country did the Monkey come from?"
        READ input ASSIGN acquisition_country
DISPLAY "Country of Origin:" ADD acquisition_country

DISPLAY "What is the Monkey's training status?"
DISPLAY "Phase I, Phase II, Phase III, Phase IV, Phase V, or In Service"
        READ input ASSIGN training_status
DISPLAY "Training Status:" ADD training_status

DISPLAY "Has this Monkey been reserved? (True or False)"
        READ input ASSIGN reserved_temp
DISPLAY "Reservation Status:" ADD reserved_temp
ASSIGN reserved TO reserved_temp.lower() EQUALS 'true'

DISPLAY "What country is the Monkey in service?"
        READ input ASSIGN in_service_country
DISPLAY "Country of Service:" ADD in_service_country

CREATE monkey3 AS Monkey ASSIGN name, species, gender, age, weight,
tail_length, height, body_length, torso_length, skull_length, neck_length,
acquisition_date, acquisition_country, training_status, reserved, in_service_country

APPEND monkey3 TO monkey_list
DISPLAY "New Monkey" ADD name ADD "added!"
```

Pseudocode for initialize.py

FROM dog IMPORT Dog
FROM monkey IMPORT Monkey

FUNCTION initialize_dog_list()
        CREATE dog1 AS Dog ASSIGN name, breed, gender, age, weight, acquisition_date, acquisition_country, training_status, reserved, in_service_country
        CREATE dog2 AS Dog ASSIGN name, breed, gender, age, weight, acquisition_date, acquisition_country, training_status, reserved, in_service_country
        CREATE dog3 AS Dog ASSIGN name, breed, gender, age, weight, acquisition_date, acquisition_country, training_status, reserved, in_service_country

        ADD dog1, dog2, dog3 TO dog_list

FUNCTION initialize_monkey_list()
        CREATE monkey1 AS Monkey ASSIGN name, species, gender, age, weight, tail_length, height, body_length, torso_length, skull_length, neck_length, acquisition_date, acquisition_country, training_status, reserved, in_service_countr
        CREATE monkey2 AS Monkey ASSIGN name, species, gender, age, weight, tail_length, height, body_length, torso_length, skull_length, neck_length, acquisition_date, acquisition_country, training_status, reserved, in_service_country

        ADD monkey1, monkey2 TO monkey_list

Pseudocode for print_animals.py

FUNCTION print_animals(choice, dog_list, monkey_list)
        IF choice EQUALS TO 1
            DISPLAY "The method printAnimals for dogs needs to be implemented"

        ELSE IF choice EQUALS TO 2
            DISPLAY "The method printAnimals for monkeys needs to be implemented"

        ELSE IF choice EQUALS TO 3
            DISPLAY "Getting Available Dogs:"

            FOR EACH dog IN dog_list
                IF dog IS NOT reserved AND dog.training_status EQUALS "in service"
                    DISPLAY "The dog:" ADD dog.name ADD "is available."
                    DISPLAY dog.name ADD "is from:" ADD dog.acquisition_country
                    DISPLAY dog.name ADD "'s current status is:" ADD dog.training_status
                END IF

```
        END FOR

        DISPLAY "Getting Available Monkeys:"

        FOR EACH monkey IN monkey_list
                IF monkey IS NOT reserved AND monkey.training_status EQUALS "in service"
                        DISPLAY "The Monkey:" ADD monkey.name ADD "is available."
                        DISPLAY monkey.name ADD "is from:" ADD
                monkey.acquisition_country
                        DISPLAY monkey.name ADD "'s current status is:" ADD
                monkey.training_status
                END IF
        END FOR
```

Pseudocode for reserve_animal.py

```
FUNCTION reserve_animal(dog_list, monkey_list)
        DISPLAY "Please enter the animal type you would like to reserve. (Dog or Monkey)"
                READ input ASSIGN animal_type
        IF animal_type EQUALS TO "monkey"
                DISPLAY "Please enter the service country:"
                        READ input ASSIGN in_service_country
                FOR EACH monkey IN monkey_list
                        IF monkey.in_service_country EQUALS TO in_service_country
                                IF monkey.reserved EQAULS TO "yes"
                                        DISPLAY "There are no monkeys available in" ADD
                                in_service_country
                                        RETURN
                                END IF
                        ELSE
                                DISPLAY "Monkey" ADD monkey.name ADD "is available in" ADD
                        in_service_country
                                DISPLAY "Would you like to reserve it? (Enter: Yes or No)"
                                        READ input ASSIGN response_temp
                                IF response_temp EQUALS TO "yes"
                                        ASSIGN monkey.reserved TO True
                                        DISPLAY "Monkey" ADD monkey.name ADD "has been
                                reserved!"
                                        RETURN
                                ELSE IF response_temp EQUALS TO "no"
                                        DISPLAY "Leaving monkey" ADD monkey.name ADD
                                "unreserved."
                                        RETURN
                                END IF
                        END IF
                END FOR

        ELSE IF animal_type EQAULS TO "dog"
                DISPLAY "Please enter the service country:"
                        READ input ASSING in_service_country
                FOR EACH dog IN dog_list
                        IF dog.in_service_country EQUALS TO in_service_country
                                IF dog.reserved EQUALS TO "yes"
```

```
                                        DISPLAY "There are no dogs available in" ADD
                        in_service_country
                                        RETURN
                        ELSE
                                        DISPLAY "Dog" ADD dog.name ADD "is available in" ADD
                        in_service_country
                        END IF
                        DISPLAY "Would you like to reserve it? (Enter: Yes or No)"
                                        READ input ASSIGN response_temp

                        IF response_temp EQUALS TO "yes"
                                        ASSIGN dog.reserved TO True
                                        DISPLAY "Dog" ADD dog.name ADD "has been reserved!"
                                        RETURN
                        ELSE IF response_temp EQUALS TO "no"
                                        DISPLAY "Leaving dog" ADD dog.name ADD "unreserved."
                                        RETURN
                        END IF
                END IF
        END FOR
END IF
```