uses

AMGPetAgency
- -batchable : bool
- -people : vector
- -available_pets : vector
- -adopted_pets : vector
- -available_breeds : vector
- -input_buffer : string
- -input_value : string
- -input_value2 : string
- -animal_types : string
- -RunInteractive() : void
- -RunBatchMode() : void
- -PrintMenu() : void
- -InitializeData() : void
- -ListPeople() : void
- -ListAvailablePets() : void
- -ListAdoptedPets() : void
- -PromptAdoptAnimal() : void
- -PromptAddPerson() : void
- -PromptAddAnimal() : void
- -PromptAddDog() : void
- -PromptGiveBackAnimal() : void
- +AMGPetAgency()
- +~AMGPetAgency()
- +SetBatchable(in a : bool) : void
- +SetValue(in a : string) : void
- +GetBatchable() : bool
- +SetMode(in a : string) : void
- +Run() : void

uses

AMGAnimalDirector
- -builder : AMGAnimalBuilder
- +AMGAnimalDirector()
- +~AMGAnimalDirector()
- +AMGAnimalDirector(in a : AMGAnimal)
- +Build() : AMGAnimal

AMGPersonDirector
- -builder : AMGPersonBuilder
- +AMGPersonDirector()
- +~AMGPersonDirector()
- +AMGPersonDirector(in a : AMGAnimalBuilder)
- +Build() : AMGPerson

AMGPersonBuilder
- -product : AMGPerson
- +AMGPersonBuilder()
- +~AMGPersonBuilder()
- +AMGPersonBuilder(in first : string, in last : string)
- +SetGender(in a : GENDER) : void
- +SetRace(in a) : void
- +SetAge(in a : int) : void
- +SetHairColor(in a) : void
- +SetEyeColor(in a) : void
- +SetNationality(in a) : void
- +SetWeight(in a : float) : void
- +SetHeight(in a : float) : void
- +SetWaistSize(in a : int) : void
- +Build() : AMGPerson

AMGAnimalBuilder
- #product : AMGAnimal
- +AMGAnimalBuilder()
- +~AMGAnimalBuilder()
- +Build() : AMGAnimal
- +SetGender(in a : GENDER) : void
- +SetOwner(in a : AMGPerson) : void
- +SetHeight(in a : float) : void
- +SetWeight(in a : float) : void
- +SetBreed(in a) : void

«inherits»

«inherits»

ANGCustomerBuilder
- -product : AMGPerson
- +AMGCustomerBuilder()
- +~AMGCustomerBuilder()
- +AMGCustomerBuilder(in first : string, in last : string)
- +SetGender(in a : GENDER) : void
- +SetRace(in a) : void
- +SetAge(in a : int) : void
- +SetHairColor(in a) : void
- +SetEyeColor(in a) : void
- +SetNationality(in a) : void
- +SetWeight(in a : float) : void
- +SetHeight(in a : float) : void
- +SetWaistSize(in a : int) : void

AMGDogBuilder
- -product : AMGAnimal
- +AMGDogBuilder()
- +~AMGDogBuilder()
- +AMGDogBuilder(in name : string)
- +Build() : AMGAnimal
- +SetGender(in a : GENDER) : void
- +SetOwner(in a : AMGPerson) : void
- +SetHeight(in a : float) : void
- +SetWeight(in a : float) : void
- +SetBreed(in a) : void

<<create>>

AMGAnimal
- #adoption_time_seconds : int
- #gender
- #name : string
- #height : float
- #weight : float
- #owner : AMGPerson
- #breed
- +ToString() : string
- +GetType() : string
- +Adopt(in a : AMGPerson, in b : bool) : void
- +AMGAnimal()
- +~AMGAnimal()
- +GetGender() : GENDER
- +GetName() : string
- +GetHeight() : float
- +GetWeight() : float
- +GetOwner() : AMGPerson
- +SetGender(in a : GENDER) : void
- +SetOwner(in a : AMGPerson) : void
- +SetHeight(in a : float) : void
- +SetWeight(in a : float) : void
- +SetBreed(in a) : void
- +SetName(in a : string) : void

inherits

Note that additional classes were added for completeness

«enumeration»
GENDER
- +NONE
- +MALE
- +FEMALE

uses

uses

AMGPerson
- -first_name : string
- -last_name : string
- -gender : GENDER
- -race
- -age : int
- -hair_color
- -eye_color
- -nationality
- -weight : float
- -height : float
- -waist_size : int
- +GetFirstName() : string
- +GetLastName() : string
- +ToString() : string
- +AMGPerson(in builder : ANGCustomerBuilder)
- +SetFirstName(in a : string) : void
- +SetLastName(in a : string) : void
- +GetGender() : GENDER
- +GetRace() : <unspecified>
- +GetAge() : int
- +GetHairColor() : <unspecified>
- +GetEyeColor() : <unspecified>
- +GetNationality() : <unspecified>
- +GetWeight() : float
- +GetHeight() : float
- +GetWaistSize() : int
- +SetGender(in a : GENDER) : void
- +SetRace(in a) : void
- +SetAge(in a : int) : void
- +SetHairColor(in a) : void
- +SetEyeColor(in a) : void
- +SetNationality(in a) : void
- +SetWeight(in a : float) : void
- +SetHeight(in a : float) : void
- +SetWaistSize(in a : int) : void

<<create>>

AMGDog
- -adoption_time_seconds : int
- -gender
- -name : string
- -height : float
- -weight : float
- -owner : AMGPerson
- -breed
- +ToString() : string
- +GetType() : string
- +Adopt(in a : AMGPerson, in b : bool) : void
- +AMGAnimal()
- +~AMGAnimal()
- +GetGender() : GENDER
- +GetName() : string
- +GetHeight() : float
- +GetWeight() : float
- +GetOwner() : AMGPerson
- +SetGender(in a : GENDER) : void
- +SetOwner(in a : AMGPerson) : void
- +SetHeight(in a : float) : void
- +SetWeight(in a : float) : void
- +SetBreed(in a) : void
- +SetName(in a : string) : void

Abel Gancsos

:User   **:AMGPetAgency**   **:AMGDogBuilder**   **:AMGDog**   **:AMGAnimalDirector**

1: PrintMenu:=PrintMenu()

List of operations are displayed

2: Provides data

3: AMGPetAgency validates input

4: PromptAddAnimal:=PromptAddAnimal()

Prompt for animal type is displayed

5: Provides data

6: AMGPetAgency validaes input

7: PromptAddAnimal:=PromptAddAnimal()

7.1: AMGDogBuilder

7.2: AMGDog(a)

7.3: Prompt for gender

7.4: Provides data

7.5: AMGPetAgency validaes input

7.6: SetGender

7.7: SetGender:=SetGender(a)

7.8: Prompt for height

7.9: Provides data

7.10: AMGPetAgency validaes input

7.11: SetHeight

7.12: GetHeight:=GetHeight()

7.13: Prompt for weight

7.14: Provides data

7.15: AMGPetAgency validaes input

7.16: SetWeight:=SetWeight(a)

7.17: SetWeight:=SetWeight(a)

7.18: Prompt for breed

7.19: Provides data

7.20: AMGPetAgency validaes input

7.21: SetBreed:=SetBreed(a)

7.22: SetBreed:=SetBreed(a)

8: AMGAnimalDirector(a)

8.1: Build:=Build()

New animal

8.2: AMGPetAgency adds animal to list

8.3: Display confirmation

Use Case

1. The AMGPetAgency system displays a list of options and prompts for a response
2. The user provides a numeric value from the menu (ie. Add Pet)
3. The AMGPetAgency system validates the user input
4. The AMGPetAgency system prompts for animal type
5. The user provides numeric value from list of available pet types
6. The AMGPetAgency system validates the input
7. The AMGPetAgency system prompts for values for the pet object
8. The AMGPetAgency system adds the new pet to the available pets list and displays a confirmation

Abel Gancsos