UML Class Diagram — hva (Hotel dos Animais)

hva.exceptions

- Unknown Species Exception
- Unknown Tree Exception
- Veterinarian Not Authorized
- Duplicate Animal Exception
- Duplicate Employee Exception
- Duplicate Habitat Exception
- Duplicate Tree Exception
- Duplicate Vaccine Exception
- File Open Failed Exception
- No Responsibility Exception
- Unknown Animal Exception
- Unknown Employee Exception
- Unknown Habitat Exception
- Unknown Veterinarian Exception
- Unknown Vaccine Exception
- Hotel Exceptions

hva.habitat

- «interface» Tree Effort
- Evergreen Tree
- Deciduos Tree
- «Abstract» Tree
- Animal
- Specie
- Habitat
- «interface» Record Manager Tools

hva.calculator

- «interface» calculator
- Cleaning Effort
- Damage
- Animal Satisfaction
- Keeper Satisfaction
- Veterinarian Satisfaction

- Vaccine
- Hotel
- Flora
- «Abstract» Employee
- Veterinarian
- Keeper
- «interface» Responsibility

hva.manager

- Manager Exceptions
- Hotel Manager
- Import File Exception
- Missing File Association Exception
- Unavailable File Exception
- Unrecognized Entry Exception

«throws» «species» «habitat» «employees» «vaccines» «flora» «trees» «animal»

Some getters and setters have been omitted. Class serial numbers have also been omitted. Exceptions have been ommitted from the more detailed pages and their representation does not show in detail the relations with the classes.

Declaro por minha honra que este diagrama foi elaborado pelos elementos do grupo
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Grupo 98
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Scanned with CamScanner

Hotel

- _Vaccinations : ArrayList<String>
- _wrongVaccinations : ArrayList<String>
- _flora : Flora
- _species : HashMap<idSpecie, Specie>
- _employee : HashMap<idEmployee, Employee>
- _Vaccines : HashMap<idVaccine, Vaccine>
- _habitats : HashMap<idHabitat, Habitat>

+ RegisterAnimal (idAnimal: String, name: String, idSpecie: String, idHabitat: String): Void
+ ShowAllAnimals (): Collection<Animal>
+ ShowSatisfactionAnimal (idAnimal: String): int
+ TransferHabitat (idHabitat: String, idAnimal: String) Void
+ AddResponsability (idEmployee: String, id1: String, id2: String) Void
+ RegisterEmployee (idEmployee: String, name: String, type: String): Void
+ RemoveResponsability (idEmployee: String, id1: String, id2: String): Void
+ ShowAllEmployees (): Collection<Employee>
+ ShowSatisfactionEmployee (idEmployee: String): int
+ AddTreeHabitat (idHabitat: String, name: String, age: int, diff: int, type: String): Void
+ ChangeHabitatArea (idHabitat: String, area: int): Void
+ ChangeHabitatInfluence (idHabitat: String, idSpecie: String, influence: String): Void
+ RegisterHabitat (idHabitat: String, name: String, area: int): Void
+ ShowAllHabitats (): Collection<Habitat>
+ ShowAllTreesHabitat (idHabitat: String): Collection<Tree>
+ ShowAnimalsHabitat (idHabitat: String): Collection<Animal>
+ ActsVeterinarian (idEmployee: String): Collection<String>
+ ActsAnimal (idAnimal: String) Collection<String>
+ WrongVaccinations (): Collection<String>
+ VaccinateAnimal (idVaccine: String, idVeterinarian: String, idAnimal: String): Vad
+ ShowAllVaccines (): Collection<Vaccine>
+ ShowVaccinations (): Collection<String>

HotelManager

- _hotel : Hotel

+ AdvanceSeason (): int
+ saveAs (filename: String): Void
+ OpenAnimalsMenu (): Void
+ OpenEmployeesMenu (): Void
+ importFile (filename: String): Void
+ OpenHabitatsMenu (): Void
+ OpenLookupsMenu (): Void
+ OpenVaccinesMenu (): Void
+ Save (): Void

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Habitat

- -_id : String
- -_name: String
- -_area : int
- -_population : int
- -_numTrees : int
- -_TreeList : ArrayList <Tree>
- -_AnimalList : ArrayList <Animal>
- -_SpecieInflu : HashMap <IdSpecie, Influ>

- + get AllTrees (): Collection <Tree>
- + get All Animals (): Collection < Animal >
- + new Animal (a : Animal) : void
- + new Tree (t : Tree) : void
- + is Valid Animal (id: String) : boolean
- + is Valid Tree (id : String) : boolean
- + remove Animal (id: String) : void
- + change Influence (i : int) : void
- + change Area (i : int) : void
- + new Species (e : Specie) : void
- + remove Species (id: String) : void
- + is Valid Species (id: String) : void

Specie

- #_idSpecie : String
- #_nameSpecie : String
- -_AnimalList : ArrayList <Animal>

- + addAnimal (a: Animal) : void
- + get All Animals (): Collection <Animal>

«Abstract» Tree

- -_idTree : String
- -_idade : int
- -_cleaningDif : int

- + increase Age (): void

EvergreenTree

- -_effort : int

Deciduos Tree

- -_effort : int

«interface» Tree Effort

- + get Effort (i : Item) : int

Animal

- -_idAnimal : String
- -_nameAnimal : String
- -_healthRecord : ArrayList <String>
- -_current Habitat : Habitat

- + Change Habitat (h: Habitat) : void

«interface» Reccord Manager Tools

- + add (s: String) : void
- + get All (): Collection <String>

Employee «Abstract»

- -_idEmployee : String
- -_nameEmployee : String

Veterinarian

- -_species : ArrayList <Species>
- -_historic : ArrayList <String>

Keeper

- -_habitat : ArrayList <Habitats>

«interface» Responsibility

- + add Responsibility (i : Item) : void
- + is Valid Responsibility (i : item) : boolean
- + remove Responsibility (i : item) : void

Flora

- -_current Season : int
- -_TreeSeason : HashMap <idTree, season>
- -_Sazonal Effort : ArrayList <int>

- + change Season (): void
- + get Effort (i: int, i2: int) : int

Vaccine

- -_idVaccine
- -_nameVaccine
- -_Appropriate Species : ArrayList <Species>
- -_Applications : ArrayList <String>

«interface» Calculator

- + calculate (i : item) : item