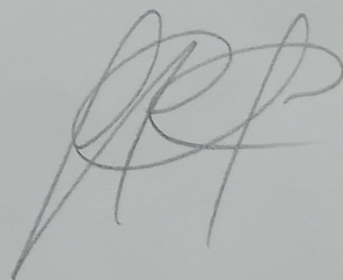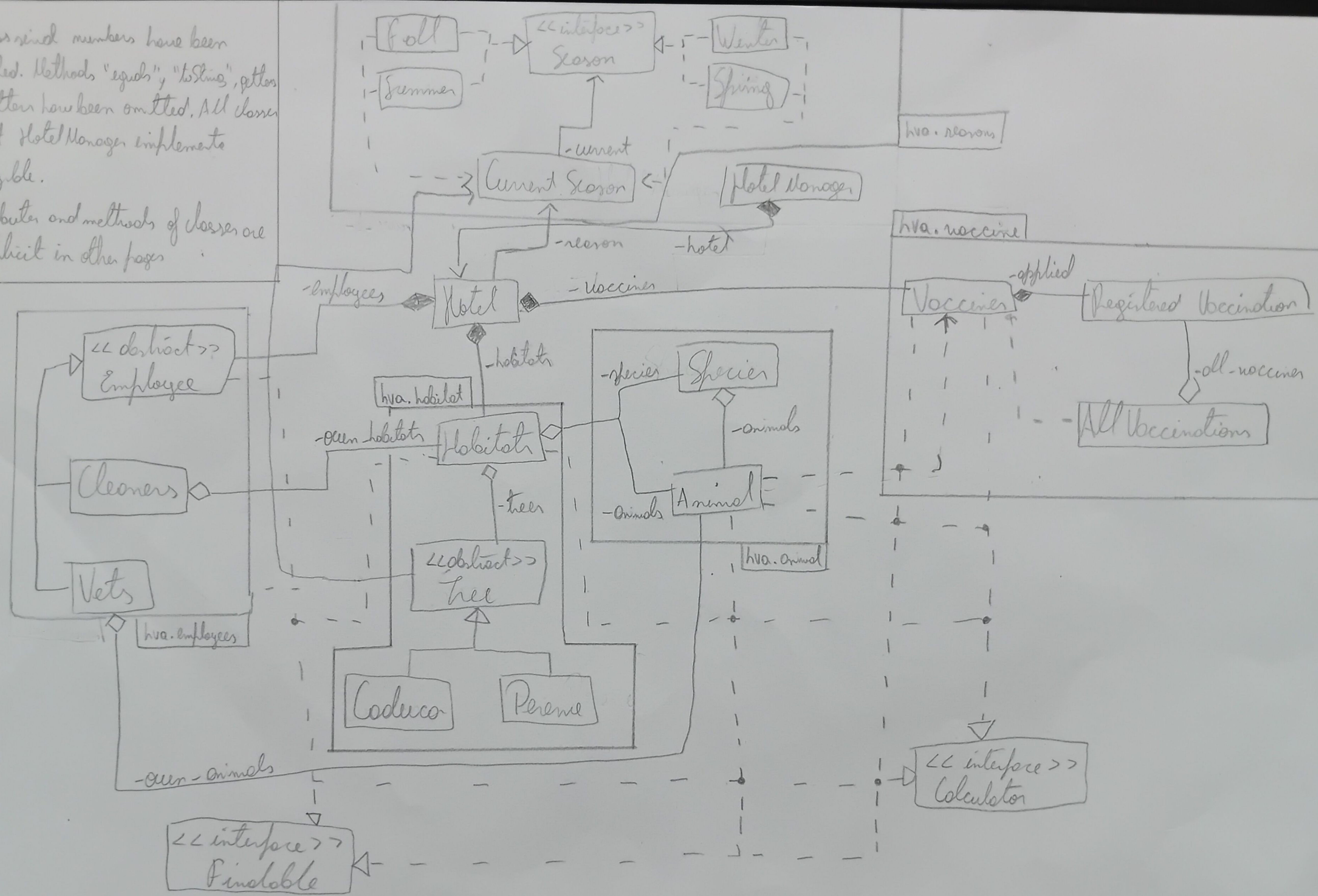Declaro pela minha honra que este
diagrama foi redigido apenas pelo elemento
que constitui o grupo

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Class kind numbers have been omitted. Methods "equals", "toString", getters and setters have been omitted. All classes except HotelManager implements Sriazble.

Attributes and methods of classes are explicit in other pages.

Fall
Summer

<<interface>>
Season

Winter
Spring

hva. reasons

- current

Current Season

Hotel Manager

hva. vaccine

- reason   - hotel

- employees   Hotel   - vaccines

Vaccines   - applied   Registered Vaccination

- habitat

hva. habitat

<>
Employee

- own habitat

Habitat

- species   Species

- oll - vaccines

All Vaccinations

Cleaners

- animals

hva. Animal

Vets

- trees

<>
Tree

- Animals   Animal

hva. employees

Coduco   Perene

- own - animals

<<interface>>
Calculator

<<interface>>
Findable

Classes Employee, Habitat, Animal and Vaccines implement both Findable and Calculator

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```
Habitat
-------------------------------------------
- hotel : Hotel
- h_Key : String
- name : String
- area : int
- adjustments : Map<Species, int>
-------------------------------------------
+ removeAnimal (animal : Animal) : void
+ addAnimal (animal : Animal) : void
+ showLeeData (season : Seasons) : String
+ showOwnAnimals () : void
+ addLee (id : String, name : String, age : int, diff : double, type : String) : void
```

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<<interface>>
Seasons

+ nextSeason (season: Season): void

Current Season

- season: Seasons

+ nextSeason(): void

Vaccines

- vaccine_Key: String
- name: String
- hotel: Hotel

+ Vaccinate (id: String, animal_id: String, vet_id: String): double

---

Registered Vaccination

- id_vaccine: String
- id_animal: String
- id_vet: String
- damage: String

All Vaccination

+ Show All Vaccination (): void
+ Show Animal Vaccines (id_animal: String): void
+ Wrong Vaccination (): void
+ Medical Acts (vet_id: String): void
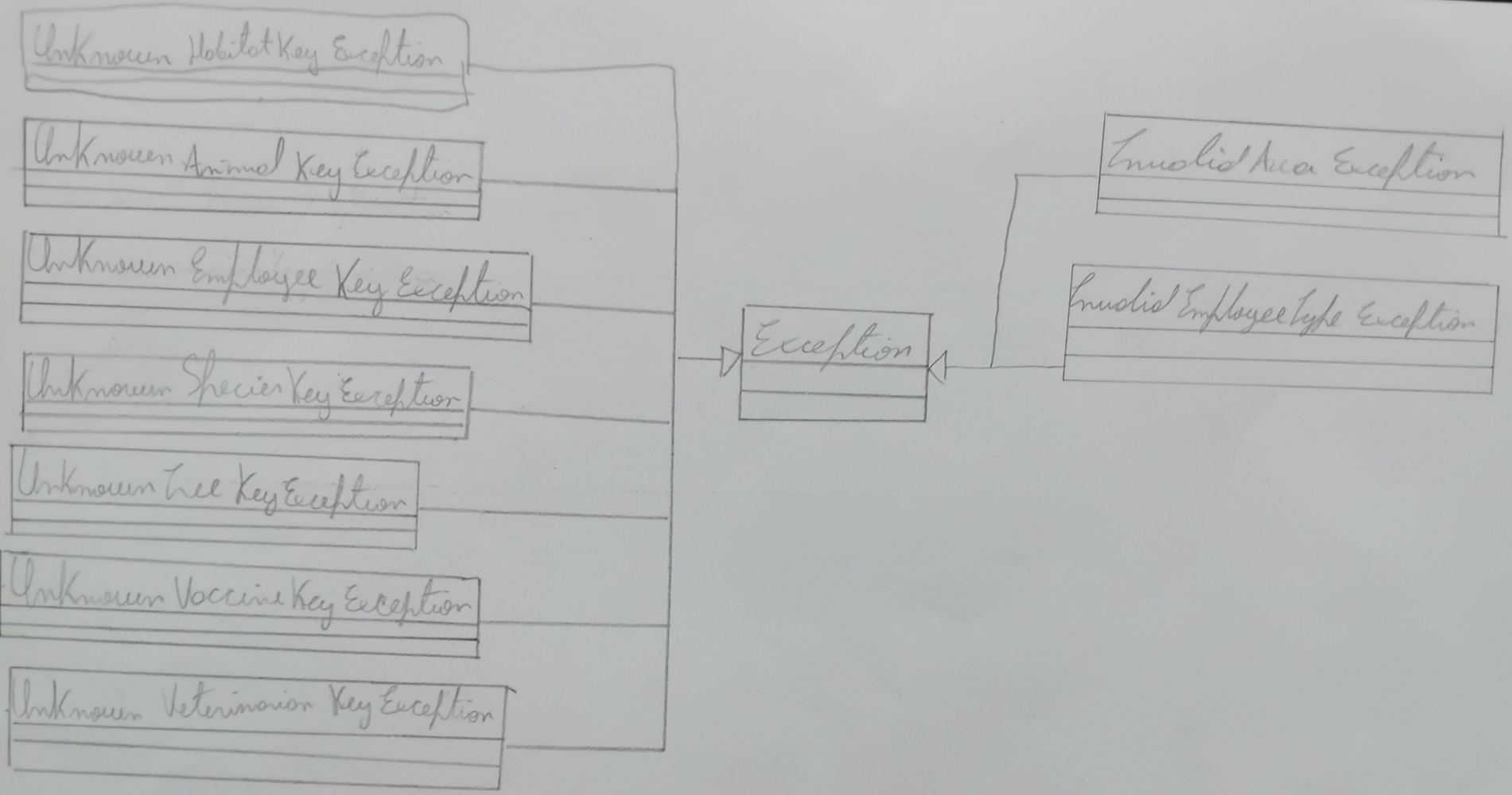

<>
Employee

- hotel: Hotel
- name: String
- employee_Key: String

+ addResponsibility (id: String): void
+ removeResponsibility (id: String): void

Species

- vet: Vets
- hotel: Hotel
- name: String
- species_Key: String

Animal

- species: Species
- animal_Key: String
- name: String
- habitat: Habitat
- h_history: List<String>

+ change Habitat (other: Habitat): void
+ update History (damage: double): void
+ Show History (): void

<>
Tree

- tree_Key: String
- habitat: Habitat
- name: String
- age: int
- difficulty: double
- biostate: String
- p_Season: Seasons

+ age_tree(): void

Caduca

+ change Bio State (): void

Perene

+ change Bio State (): void

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```
┌─────────────────────────────┐
│ Unknown Habilat Key Exception│
└─────────────────────────────┘
        │
┌─────────────────────────────┐
│ Unknown Animal Key Exception │
├─────────────────────────────┤
│                             │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Unknown Employee Key Exception│
├─────────────────────────────┤
│                             │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Unknown Species Key Exception│
├─────────────────────────────┤
│                             │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Unknown Tree Key Exception   │
├─────────────────────────────┤
│                             │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Unknown Vaccine Key Exception│
├─────────────────────────────┤
│                             │
└─────────────────────────────┘

┌───────────────────────────────┐
│ Unknown Veterinarian Key Exception│
├───────────────────────────────┤
│                               │
└───────────────────────────────┘
```

```
                    ┌───────────┐          ┌──────────────────────┐
                 ▷──│ Exception │──◁       │ Invalid Area Exception│
                    ├───────────┤          ├──────────────────────┤
                    │           │          │                      │
                    └───────────┘          └──────────────────────┘

                                           ┌──────────────────────────────┐
                                           │ Invalid Employee Type Exception│
                                           ├──────────────────────────────┤
                                           │                              │
                                           └──────────────────────────────┘
```

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Hotel Manager
- filename: String

+ Save(): void
+ SaveAS(name: String): void
+ load(name: String): void
+ ImportFile(textfile: String): void
+ find(id: String): Object
+ RegisterAnimal(id: String, name: String, species_id: String, h_id: String): void
+ ShowCurrentSeason(): void
+ ShowSobInfection(): void
+ transfer(id: String, new_h_id: String): void
+ RegisterEmployee(id: String, name: String, type: String): void
+ RegisterVaccine(id: String, name: String, species: String): void
+ Vaccinate(id: String, animal_id: String, vet_id: String): double
+ nextSeason(): void
+ ShowMedicalActs(id: String): void
+ ShowVaccines(): void
+ ShowWrongVaccines(): void
+ ShowAnimals(): void
+ ShowHabitats(): void
+ ChangeArea(other: int, id: String): void
+ RegisterHabitat(name: String, id: String, area: int): void
+ addHotel(): void

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Hotel

+ register New Animal (animal-id: String, name: String, species-id: String, h-id: String): void
+ show All Animals (): void
+ Show Global Satisfaction (): void
+ next Season (): void
+ Show Current Season (): void
+ find (id: String): Object
+ transfer Animal (animal-id: String, new-h-id: String): void
+ Register Employee (id: String, name: String, type: String): void
+ Show All Habitats (): void
+ Register Habitat (id: String, name: String, area: int): void
+ Show Animal Satisfaction (id: String): void
+ Show Employee Satisfaction (id: String): void
+ Show All Trees (id-habitat): void
+ Plant Tree (id: String): void
+ Register Vaccine (id: String, name: String, species-id: String): void
+ Show All Vaccines (): void

```
<< interface >>
Calculator
─────────────────────────────
+ calculate Satisfaction (): double
+ calculate Damage (): double
+ cleaning Dificulty (): double
```

```
<< interface >>
Findable
─────────────────────────────
+ fire ID (): String
```