## TrainerManager

- db session: sessionmaker
- + \_\_init\_\_(db\_filename: string)
- + add(trainer:AbstractTrainer): int
- + get\_trainer\_by\_id(id:int): AbstractTrainer
- + get all(): AbstractTrainer[]
- + get\_all\_by\_type(type:string): AbstractTrainer[]
- + get all by location(location:string): AbstractTrainer[]
- + update( trainer:AbstractTrainer)
- + delete(id:int)
- + get\_stats(): TrainerStats
- -\_abstracttrainer\_validator(trainer:AbstractTrainer)
- -\_int\_validator(arg:int)
- str validator(arg:str)

#### **TrainerStats**

- \_num\_trainers:int
- \_num\_gym\_leader:int
- \_num\_regular\_trainer:int
- \_num\_have\_partner: int
- \_num\_per\_location: dict
- + get\_num\_trainers():int
- + get\_num\_gym\_leader():int
- + get\_num\_regular\_trainer():int
- + get\_num\_trainer\_have\_partner(): int
- + get\_num\_per\_location(): dict

### AbstractTrainer

- + id:int
- + name:string
- + pokemon team:dict
- + trainer\_class:string
- + pokecoins:int
- + location:string
- + get details(): string
- + to dict(): dict
- str\_validator(arg:string, max\_length:int)
- int validator(arg:int)
- pokemon\_team\_validator(arg:dict)

## RegularTrainer

- + TRAINER TYPE: string
- + MOVEMENT\_TYPE\_DICT: dict
- + movement\_type: string
- + phone\_num:boolean
- + have\_partner:boolean
- + get\_details(): string
- + to\_dict(): dict
- + get\_movement\_speed(): float
- str\_validator(arg:string, max\_length:int)
- -\_boolean\_validator(arg:boolean)

# GymLeader

- + TRAINER\_TYPE: string
- + TRAINER\_CLASS:string
- + badge:string
- + element:string
- + prize:string
- + get\_type(): string
- + get details(): string
- + to dict(): dict
- -\_str\_validator(arg:string, max\_length:int)