TrainerManager

- trainers: AbstractTrainer[]
- next available id: int
- + 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(id:int, 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: int
- + get num trainers(): num trainers:int
- + get num gym leader(): num gym trainer:int
- + get_num_regular_trainer(): _num_regular_trainer:int
- + get_num_trainer_have_partner(): int
- + get num per location(): int

AbstractTrainer

- id:int
- name:string
- pokemon team:dict
- _trainer_class:string
- _pokecoins:int
- location:string
- + get type(): string
- + get details(): string
- + get name(): string
- + get pokemon team(): dict
- + get trainer class(): string
- + get location(): string
- + get_pokecoins(): int
- _set_id(id:int)
- get id(): int
- str validator(arg:string)
- -_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 type(): string
- + get details(): string
- + get movement speed(): float
- + have phone num(): boolean
- + have partner(): boolean
- str validator(arg:string)
- boolean validator(arg:boolean)

GymLeader

- + TRAINER TYPE: string
- + TRAINER CLASS:string
- badge:string
- element:string
- _prize:string
- + get type(): string
- + get details(): string
- + get badge(): string
- + get element(): string
- + get prize(): string
- str validator(arg:string)