TrainerManager

- _db_session: sessionmaker
- _next_available_id:int

+ __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)

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)
- _int_validator(arg:int)
- _pokemon_team_validator(arg:dict)

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

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)
- _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)