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)