Drone - position: Vector3 - direction: Vector3 - speed: float - available: bool - pickedUp: bool nearestEntity: IEntity* toRobot: IStrategy* toFinalDestination: IStrategy* - toRobotSwitch: int nearestEntitySwitch: int - jumpHeight: float - goUp: bool - graph: Graph* - details: JsonObject& + Drone(JsonObject&) + ~Drone() +GetNearestEntity(std::vector<IEntity*>) : void Update(double,std::vector<IEntity*>)

+ Rotate(double): void

+ Jump(double): void

std::string subject_: Drone& - static_number_: int = 0 - number_: int - controller_: IController& + DroneObserver(subject: Drone&, controller: IController&) + ~DroneObserver() + Update(message_from_subject: const std::string&) : void + RemoveMeFromTheList() : void + PrintInfo(): void SimulationModel entities: std::vector<IEntity*> - scheduler: std::vector<IEntity*> - graph: IGraph* -compFactory:CompositeFactory* droneCounter: int robotCounter: int

DroneObserver

- message_from_subject_:

- controller: IController& + CreateEntity(entity:

JsonObject&): void + ScheduleTrip(details: JsonObject&): void + Update(dt: double): void + AddFactory(factory: IEntityFactory*): void

- id: int - graph: IGraph* + IEntity() ~IEntity() + GetId(): int + GetPosition(): Vector3 + GetDirection(): Vector3 + GetDestination(): Vector3 + GetDetails(): JsonObject + GetColor(): std::string + GetSpeed(): float + GetAvailability(): bool + GetStrategyName(): std::string +SetStrategyName(strategyName_ std::string): void + SetAvailability(choice: bool): + Update(dt: double, scheduler: std::vector<IEntity*>): void + SetGraph(graph: const IGraph*): void + SetPosition(pos_: Vector3): void + SetDirection(dir_: Vector3): void + SetDestination(des_: Vector3): + SetColor(col_: std::string): void + Rotate(angle: double): void + Jump(height: double): void + Random(Min: float, Max: float): float + Atach(observer: IObserver*): + Detach(observer: IObserver*): void | + Notify(): void + CreateMessage(std::string

message = "Empty"): void

+ getNum(): int + setNum(int n): void

+ HowManyObserver(): void

IEntity