Environment

- int width
- int height
- std::string type
- std::unique_ptr< ISpatialIndex < boost::uuids::uuid > > spatialIndex
- std::unordered_map< boost ::uuids::uuid, std::shared _ptr< EnvironmentObject > > objectsMapper
- std::vector< std::shared _ptr< Organism > > deadOrganisms
- unsigned long foodConsumption

+ Environment(int width, int height, std::string type="default")
+ int getWidth() const
+ int getHeight() const
+ void add(const std::shared _ptr< Organism > &organism, float x, float y)
+ void add(const std::shared _ptr< Food > &food, float x, float y)
+ void remove(const std ::shared_ptr< Organism > &organism)
+ void remove(const std ::shared_ptr< Food > &food)
+ void reset()
+ void simulateIteration (int, std::function< void (const Environment &)> on _each_iteration=nullptr)
+ std::vector< std::shared _ptr< Organism > > getAllOrganisms () const
+ std::vector< std::shared _ptr< Food > > getAllFoods () const
+ std::vector< std::shared _ptr< EnvironmentObject > > getAllObjects() const
+ std::vector< std::shared _ptr< Organism > > getDeadOrganisms () const
+ unsigned long getFoodConsumption InIteration() const
- void checkBounds(float x, float y) const
- void updatePositionsInSpatial Index()
- void handleInteractions()
- void postIteration()
- void cleanUp()
- void removeDeadOrganisms()