Relationships - Class Diagram

Factory
- ○ BraitenbergVehicle * ConstructRobot(json_object& entity_config)
- ○ Food * ConstructFood(json_object& entity_config)
- ○ Light * ConstructLight(json_object& entity_config)

Arena
- ☐ ArenaEntity * entities
- ☐ Factory factory

A ArenaEntity
- ○ virtual void TimestepUpdate(unsigned int dt)
- ○ virtual void Reset()
- ○ virtual void Update()
- ○ void RelativeChangeHeading(const double delta)
- ○ virtual void LoadFromObject(json_object& entity_config)

A ArenaMobileEntity

A ArenaImmobileEntity

BraitenbergVehicle
- ☐ vector light_sensors_
- ☐ MotionBehavior * motion_behavior_
- ☐ WheelVelocity wheel_velocity_
- ☐ Behavior light_behavior
- ☐ Behavior food_behavior_
- ☐ const ArenaEntity * closest_light_entity
- ☐ const ArenaEntity* closest_food_entity_
- ☐ double defaultSpeed_
- ☐ double colliding_

- ○ BraitenbergVehicle()
- ○ void TimestepUpdate(unsigned int dt)
- ○ void Update()
- ○ void HandleCollision(EntityType ent_type, ArenaEntity * object)
- ○ void SenseEntity(const ArenaEntity& entity)
- ○ void UpdateLightSensors()
- ○ void LoadFromObject(json_object& entity_config)

A MotionBehavior

C Light

C Food

C BehaviorCoward

C BehaviorAggressive

C BehaviorLove

C BehaviorExplore

C BehaviorNone