Relationships - Class Diagram

C Factory

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

C 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(jsen_object& entity_config)

A ArenaMobileEntity

A ArenaImmobileEntity

C BraitenbergVehicle

- □ vector light_sensors_
- □ MotionBehaviorDifferential * 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)

C MotionBehaviorDifferential

C Light

C Food