

Mike Nicholson
Report on solo project's user case diagram

StopLight

Report on Configuration DefaultConfig

PACKAGES

Default

GLOBALS:

ACTORS:

Car

A car is an object that can stop at a stop light or run a red stop light.

Relations:

itsPull up to Light

Association with Pull up to Light, Multiplicity of 1, Bi-directional

itsRun Red

Association with Run Red, Multiplicity of 1, Bi-directional

Pedestrian

A pedestrian is a person on foot who wants to use a crosswalk.

Relations:

itsPush Button

Association with Push Button, Multiplicity of 1, Bi-directional

Timer

A simple timer that tells the lights to change during heavier traffic, as well as controls the duration of the green yellow lights and pedestrian light during low traffic.

Relations:

itsChange Light

Association with Change Light, Multiplicity of 1, Bi-directional

StopLight

A system of stop lights and pedestrian lights which changes to control traffic and pedestrian movement based on a variety of sensors as well as a timer.

GLOBALS:

USE CASES:

Change Light

The event when the stop light changes from red to green or vice versa as told by the timer, the pedestrian button, or the car sensor.

Relations:

itsTimer

SubUseCases:

Push Button

Pull up to Light

Change Ped Light

A small light with a 'walk' and 'don't walk' on it which tells people when it is safe to cross the street. It is triggered by the pedestrian button and will remain changed long enough for a person to cross the street.

SubUseCases:

Push Button

Pull up to Light

A car can trigger this by pulling up to the light. In heavy traffic this does very little as the timer controls most of the traffic, but in light traffic this event can change the light.

Relations:

itsCar

SuperUseCases:

Change Light

Push Button

Pushing this button causes the pedestrian light to change during the next light cycle in heavy traffic or in light traffic it changes the pedestrian signal and the stop light to allow street crossing.

Relations:

itsPedestrian

SuperUseCases:

Change Ped Light

Change Light

Run Red

The act of a car going through the intersection while the light is red.

Relations:

itsCar

SuperUseCases:

Take Picture

Take Picture

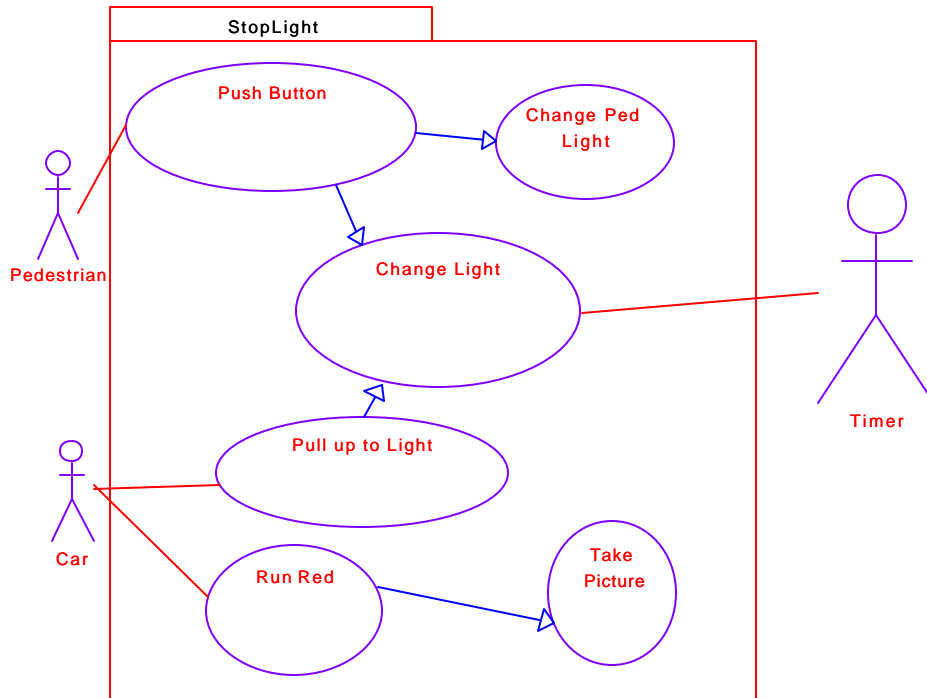
After a car runs a red light, a camera will take the picture of it running the light so that a citation can be mailed to the owner.

SubUseCases:

Run Red

USE CASE DIAGRAMS

StopLightMain



very well done.
Go for it.

APPROVED

COMPONENTS

DefaultComponent

COMPONENT SETTINGS:

Build type: Executable

CONFIGURATIONS:

DefaultConfig

Scope type: Explicit

Instrumentation type: None

Time-model type: Real-time

Statechart generation type: Flat

FILES AND FOLDERS: