
```
classdef Path < handle
    %PATH A path of configurations as a linked list

    properties
        configs (1,:) % Head node of linked list path
    end

    methods
        function obj = Path()
            %PATH Construct an instance of this class
            % Detailed explanation goes here
            obj.configs = [];
        end

        function insert(obj, config)
            % insert a config into the path
            if isempty(obj.configs)
                obj.configs = [config];
            else
                obj.configs(length(obj.configs)+1) = config;
            end
        end

        function draw(obj, color)
            % Draw all the configs in the path
            for i=1:length(obj.configs)-1
                obj.configs(i).draw(color);
            end
        end

        function animate(obj, ws, color)
            % Animate the path
            for i=1:length(obj.configs)-1
                obj.configs(i).draw(color);
                local_planner(obj.configs(i), obj.configs(i+1), ws,
0.02, color);
            end
            obj.configs(length(obj.configs)).draw(color);
        end
    end
end
```

Published with MATLAB® R2020a