Activity Diagram - RRT Algorithm

Start

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set Start and Goal points

add Start point to tree

is added point goal?

Yes

No

path is only one point

Sample random point on Workspace

is point outside obstacles?

No

Yes

find closest point in tree to sampled point

Move one unit step towards sampled point from closest point

Is new point in obstacle?

Yes

No

add point to Tree

remove point from
Sample Space

does Sample Space
contain only the goal
point?

No

Yes

No

is added point one
unit step distance from
goal point?

throw exception
"goal point
unreachable!"

Yes

add goal point to tree
with previous point as
parent

get path to goal point
by traversing the tree

End