```
Clear[t1, t2, t3];
l1 = 1.0;
l2 = 1.0;
l3 = 1.0;
tfinal = 5.99;
J[t_] := {{-l1 Sin[t1[t]] - l2 Sin[t1[t] + t2[t]] -
    l3 Sin[t1[t] + t2[t] + t3[t]],
   -l2 Sin[t1[t] + t2[t]] - l3 Sin[t1[t] + t2[t] + t3[t]], -l3
    Sin[t1[t] + t2[t] + t3[t]]}, {
   l1 Cos[t1[t]] + l2 Cos[t1[t] + t2[t]] + l3 Cos[t1[t] + t2[t] + t3[t]],
   l2 Cos[t1[t] + t2[t]] + l3 Cos[t1[t] + t2[t] + t3[t]],
    l3 Cos[t1[t] + t2[t] + t3[t]]}};

(*  The diagonals of this W matrix give the relative
  weighting for each joint velocity.  If W is the identity matrix,
 then it is just the standard Moore Penrose pseudo inverse. *)
W = {{1, 0, 0}, {0, 1, 0}, {0, 0, 1}};

xd = -1.0;
yd = 0.0;

eqn[t_] :=
 Inverse[W] . Transpose[J[t]] . Inverse[J[t] . Inverse[W] . Transpose[J[t]]] . {xd, yd};

soln = NDSolve[
   {t1'[t] == eqn[t][[1]], t2'[t] == eqn[t][[2]], t3'[t] == eqn[t][[3]], t1[0] == 0.0,
    t2[0] == 0.0, t3[0] == 0.01}, {t1, t2, t3}, {t, 0, tfinal}];

t1[t_] := Evaluate[t1 /. soln[[1]]][t];
t2[t_] := Evaluate[t2 /. soln[[1]]][t]; t3[t_] := Evaluate[t3 /. soln[[1]]][t];

mag = Plot[Sqrt[t1'[t]^2 + t2'[t]^2 + t3'[t]^2], {t, 0, tfinal}];



g = {};
count = 1;
Do[
  t1 = Evaluate[t1 /. soln[[1]]][t];
  t2 = Evaluate[t2 /. soln[[1]]][t];
  t3 = Evaluate[t3 /. soln[[1]]][t];
 orig = {0, 0};
 p1 = {l1 Cos[t1], l1 Sin[t1]};
 p2 = {l1 Cos[t1] + l2 Cos[t1 + t2], l1 Sin[t1] + l2 Sin[t1 + t2]};
 p3 = {l1 Cos[t1] + l2 Cos[t1 + t2] + l3 Cos[t1 + t2 + t3],
   l1 Sin[t1] + l2 Sin[t1 + t2] + l3 Sin[t1 + t2 + t3]};
 If[count >= 10,
 g = Append[g, Graphics[{RGBColor[1, 0, 0], Line[{orig, p1, p2, p3}]}]];
  count = 0];
 count++,
 {t, 0, tfinal, 0.01}];

ShowAnimation[g, PlotRange -> {{-3, 3}, {-3, 3}}, Axes -> True]
```