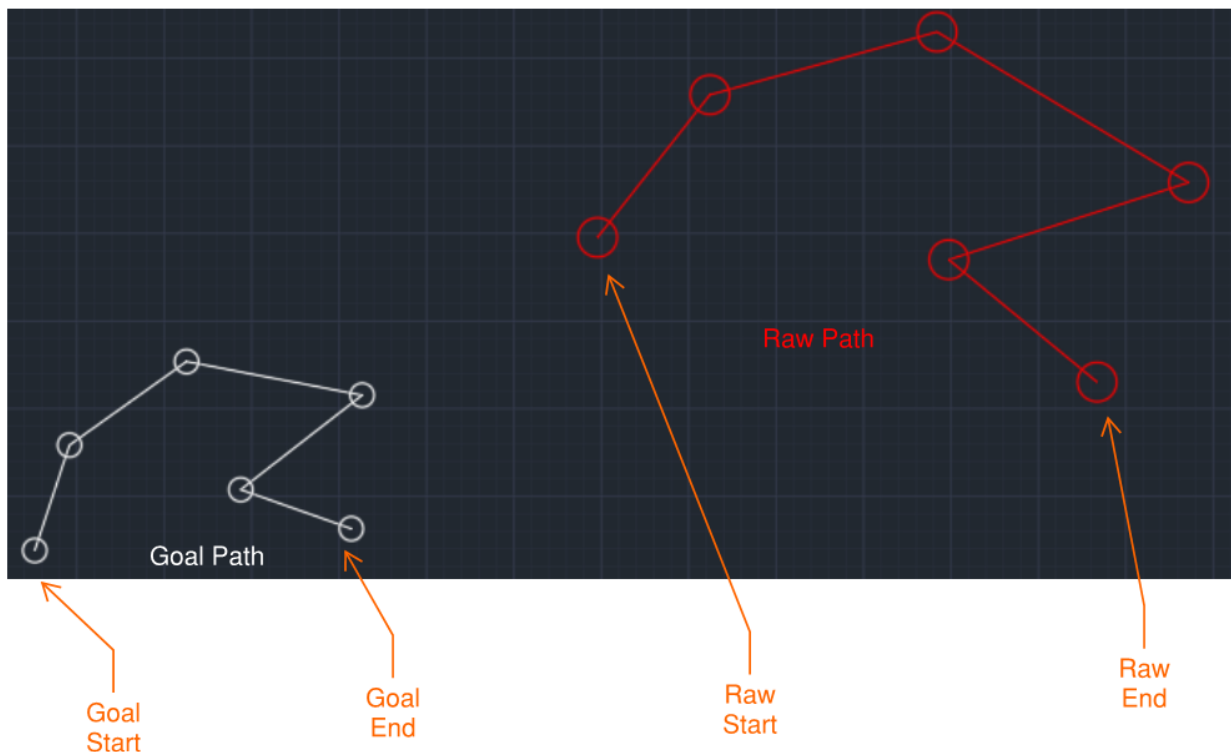


Objective:

We have a series of points, called DRAWING COORDINATES, that is defined by a series of points that can be described in terms of (X,Y) positions. We want these points to be aligned to MODEL COORDINATES, by matching two common positions between DRAWING COORDINATES and MODEL COORDINATES.

MODEL COORDINATES:

-A Transformed, Rotated, and Scaled set of points, such that the common points between DRAWING COORDINATES and MODEL COORDINATES match



Suggested Approach:

1. TRANSFORM common coordinates of DRAWING COORDINATES to match common coordinates of MODEL COORDINATES
2. ROTATE set of points of DRAWING COORDINATES in order to match set of points of MODEL COORDINATES
 - a. First find the angular measurement between MODEL COORDINATES and DRAWING COORDINATES's set of points
 - b. Use the angle to apply transformation on all points on DRAWING COORDINATES
3. SCALE DRAWING COORDINATES so that set of points of raw match set of points of MODEL COORDINATES

- a. Find distance between set of points of MODEL COORDINATES, and separately of DRAWING COORDINATES
- b. Find the multiplication factor, and multiply to raw to match MODEL COORDINATES