CS763 - Assignment 2

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Problem 2

First we find the pixel points corresponding to the outer Dee (box) in the image (marked in red). Using this points, we find the 2D homography matrix which can transform the outer box to a rectangle of size $18yd \times 44yd$ (scaled in the code). Then using this homography matrix, we transform 3 points (marked in black) that correspond to the playing area. Using the transformed points we calculate the field dimensions which come out to be $125yd \times 74yd$. All the points marked and other data required (dimensions of the outer box) is saved in `Q2/input/Q2data.mat`.

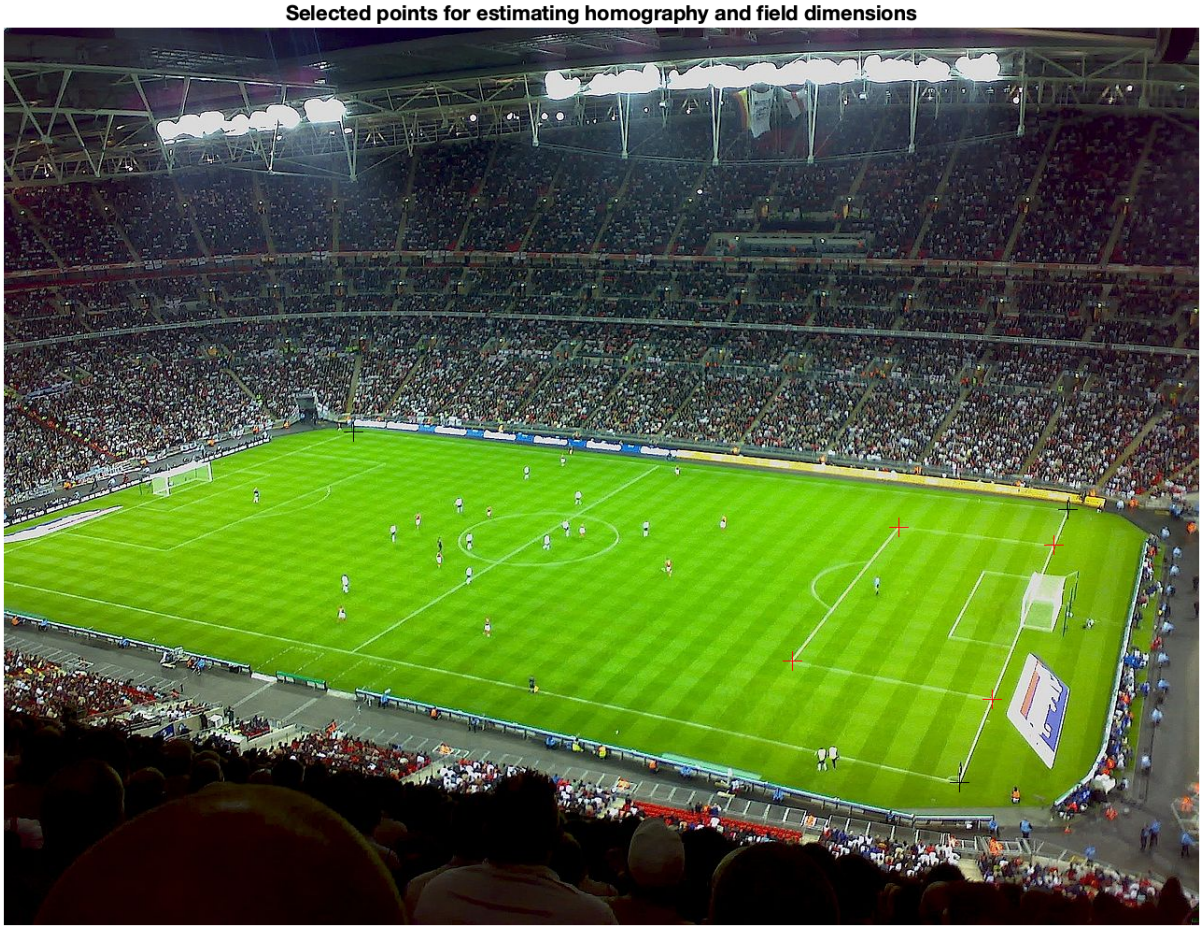

Figure 1: Marked points in the image