Framing the pbm

skillcorner: player recognition (project name vivatech?)

Working time-> do an analysis on the avg time spent per users, avg length of the project till done

Obj-> finish more tasks in fewer times with fewer resources involved -> increase in productivity

How?

Creation of a model-> computer vision model to do the player tracking 🡪 if this fits the project’s process

Tracking is done manually, the model could ease the process.

Approach:

YOLOv5 algo, transfer learning on football game image dataset

Training, test ,validation set-> roboflow

Labelling-> roboflow

Training: 2 approaches

1-/ use roboflow and add the client images on the test directly to do the prediction

2-/ to have better perf, since distributions might vary, split some of our clients’ images on train, test and validation test.

Benefits:

Reusable for all similar future projects and sports

Assumption:

We do not track players by name (no identification but only tracking) and we do not display players’ name on each label-> totally a different problem and requires a whole new model/approaches

Data exploration: postgresql + jupyter notebook

Data prepa: preprocessing + labelling

After launch: retrain on a regular basis on fresh data (clients’ data)

Needs to have access to the real project data to see the output’s format