

TD08 Correction

Matière : ATELIER DEVELOPPEMENT

MOBILE AVANCE

Classes : SEM31

Exercice1

```
private void calculer() {  
    Bitmap bitmap = ((BitmapDrawable) imgCodes.getDrawable()).getBitmap();  
    BarcodeDetector.Builder b = new Builder(this);  
    b.setBarcodeFormats(Barcode.ALL_FORMATS);  
    BarcodeDetector detector = b.build();  
    Frame frame = new Frame.Builder().setBitmap(bitmap).build();  
    SparseArray<Barcode> codes = detector.detect(frame);  
    float somme = 0;  
    for (int i = 0; i < codes.size(); i++) {  
        Barcode code = codes.valueAt(i);  
        somme += getPrix(code.rawValue);  
    }  
    Toast t = Toast.makeText(this, "La somme des prix est: " + somme, Toast.LENGTH_LONG);  
    t.show();  
}
```

Exercise2

```
private void analyser() {
    Bitmap bitmap = ((BitmapDrawable) imgVisages.getDrawable()).getBitmap();
    FaceDetector.Builder b = new FaceDetector.Builder(this);
    b.setTrackingEnabled(true);
    b.setLandmarkType(FaceDetector.ALL_LANDMARKS);
    b.setClassificationType(FaceDetector.ALL_CLASSIFICATIONS);
    FaceDetector detector = b.build();
    Frame frame = new Frame.Builder().setBitmap(bitmap).build();
    SparseArray<Face> faces = detector.detect(frame);
    int nbV = faces.size();
    int nbVS = 0;
    double dOM = 0;
    for (int i = 0; i < faces.size(); ++i) {
        Face face = faces.valueAt(i);
        if (face.getIsSmilingProbability() > 0.75f)
            nbVS++;
        double xG = 0, yG = 0, xD = 0, yD = 0;
        for (Landmark l : face.getLandmarks()) {
            if (l.getType() == Landmark.LEFT_EYE) {
                xG = l.getPosition().x;
                yG = l.getPosition().y;
            }
            if (l.getType() == Landmark.RIGHT_EYE) {
                xD = l.getPosition().x;
                yD = l.getPosition().y;
            }
        }
        double distance = Math.sqrt(Math.pow(xG - xD, 2) + Math.pow(yG - yD, 2));
        if (distance > dOM)
            dOM = distance;
    }
    tvNbV.setText(nbV + "");
    tvNbVS.setText(nbVS + "");
    tvDOM.setText(String.format("%.2f", dOM) + "");
}
```