

# ① HomeActivity

[ getWindow() → functions (flags) → add action bar to activity

[ Tts listener - starts tts engine  
tts object → context & listener in constructor

## ② ShakeDetector class - implement SensorEventListener

@Override  
onSensorChanged (Event)

↓  
Based on shake ~~count~~ <sup>event</sup> (distinct - ignore events which are too close - soons) returns shake count to onShakeListener → onShake (count)

~~@Override~~ Listener  
setOnShakeListener (Listener) { this.listener = listener

@Override  
onSensorChanged

interface onShakeListener {

public void onShake (int count);  
} - implemented in calling place.

mShakeDetector = new ShakeDetector();

mShakeDetector.setOnShakeListener (new ShakeDetector.  
onShakeListener() {

@Override onShake (count) {  
intent

}

});

[ Shared Preferences → check if app is installed for first time for showing tutorial.

[ showDialog <sup>1</sup>/<sub>2</sub> → AlertDialog Builder for speech rate & text size with the help of seek bar.

[ MenuItem <sup>onCreateOptionsMenu</sup> → inflate menu items  
<sup>onOptionsItemSelected</sup> → action for selected item.



showTut() → clingManager → dependency  
↓  
addCling ← title  
          content  
          build

```
@OnActivityResult ( requestCode, resultCode, Intent data )  
{
```

```
    if ( requestCode == RE_OCR_CAPTURE )
```

```
    {  
        if ( resultCode == SUCCESS )
```

```
        {  
            if ( data != null )
```

```
            {  
                stop & repeat → visible
```

```
                tts.speak ( text )
```

```
            }  
            else → no text captured
```

```
        }  
        else → error reading text
```

```
    }  
    else
```

```
    {  
        super.onActivityResult ( requestCode, resultCode, data )  
    }
```

onPause → sensorManager → unregister

onResume → " → register again

③ Graphic Overlay → google Samples → android-vision

↳ view which pastes a series of objects  
custom graphics to be overlaid on top of  
an associated preview

GraphicScaleX & Y → adjust size of supplied value  
from preview scale to view scale

GraphicTranslate → adjust coordinate from preview  
coordinate system to view coordinate system

HashSet - mGraphics ← add Graphics Items  
remove

↳ onDraw → draws overlay with  
associated graphic objects

④ CameraSource → google Samples - android-vision

⇒ Manages camera & detector at same time.

⇒ This receives frames (preview frames) from camera  
at specified rate, sending those frames to detector  
as fast as it is able to process those frames.



⑤ CameraSource Preview → google-samples - android-vision  
↳ permissions to start camera & put all items together and initialize them.

⑥ OcrCaptureActivity.

↳ OcrGraphic class → redraw GraphicOverlay as new graphic is added.  
(7) ↳ boolean contains → check (x,y) lies in box or not  
↳ draw  
↳ to draw something - 4 basic components  
(i) Bitmap - to hold pixels  
(ii) Canvas - writing into bitmap.  
(iii) Drawing primitive - Rect, path, text  
(iv) Paint - describe colors & styles.

(i) @onCreate

check permission → ~~not~~ not granted → req permission  
granted.

createCameraSource()

(i) checks text recognizer is active or not

(ii) build cameraSource builder.

(ii) startCameraSource()

CameraSourcePreview.start(cameraSource, GraphicOverlay)

(iii) onTap (rawX, rawY)

↳ mGraphicOverlay.getGraphicAtLocation (rawX, rawY)

↳ extract text blocks and add it to mmGraphics.  
sort text in mmGraphics

send text to home activity.

⑧ SplashActivity → extends AwesomeSplash.

↳ onCreate  
↳ initSplash  
↳ animationFinished.