Chapter 5 Questions

1. (a) What is KetaiCamera?

(b) What is PImage?

Answers:

(a) This a Ketai Library class providing simplified access to the cameras on an android device.

(b) This is the processing datatype for storing images

2. (a) How do you start a camera?

(b) How do you stop it?

Answers:

(a) KetaiCamera cam = new KetaiCamer(this, 640, 480, 30)

cam.start();

(b)

cam.stop();

3. (a) List the 5 of the specialized KetaiCamera methods.

(b) Which method defines where to save the pictures?

Answers:

(a) onCameraPreviewEvent(), addToMediaLibrary(), autoSettings(), manualSettings(), enableFlash(), and disableFlash(). (choose 5 of these)

(b) setSaveDirectory();

4. (a) List 3 PImage methods

(b) Which method of the PImage class updates the image’s pixels?

Answers:

(a) get(), set(), copy(), resize(), save(), updatePixels(), loadPixels(), loadImage() (choose 3 of these)

(b) updatePixels()

5. (a) In order to save pictures, which permission do we need to add?

(b) On pg. 106 where in the codes does the photos get added to the gallery?

Answers:

(a) The permission is Write\_External\_Storage

(b) in the method onSavePhotoEvent()

6. (a) In order to use the camera, what permission do we need to use?

(b) How would you enable flash on a camera?

Answers:

(a) We need the permission Camera

(b)

KetaiCamera cam = new KetaiCamera(this, 640, 480 , 30);

cam.enableFlash();

7. (a) How would you extract a pixel’s RGB values?

(b) What does popStyle() do?

Answers:

(a) KetaiCamera cam = new KetaiCamera(this, 720, 480, 30)

color pixelColor = cam.get(x, y)

red(pixelColor) extracts the red color value

blue(pixelColor) extracts the blue color value

green(pixelColor) extracts the green color value

(b) It restores the previous style settings

8. (a) How many camera does a typical android device have?

(b) What functions does each camera serve?

Answers:

(a) Typical Android phones and tablets have 2 cameras, a front facing and back facing one.

(b) The front-facing camera is lower-resolution and is designed for lower resolution video calls. The back-facing camera is typically used to capture images and record HD video.

9. (a) How do you set the id of a camera to 1

(b) What does the copy() method do of the PImage class?

Answers:

(a) cam.setCameraID(1);

(b) It copies an entire image

10. (a) What does pushStyle() do?

(b) What is the KetaiSimpleFace()?

Answers:

(a) pushStyle saves the current style settings

(b) It’s a wrapper for the Face class in the FaceDetector package, which returns the midpoint location and distance between the eyes recognised by the device cameras.