15.1: GUI is a graphical user interface

15.2: JavaFX is a Java library for developing applications with graphics

15.3: Components are things used to present data to the user and to be interacted with (buttons, labels, checkboxes, etc.)

15.4: Events is an action that takes place in a program; event listeners automatically execute when an event happens

15.5: A tree-like hierarchal data structure with nodes

15.6: Root, branch, leaf

15.7: Roots and branches can have children, leaves cannot

15.8: Markup language that describes components in a JavaFX scene graph

15.9: FXML

15.10: Library

15.11: Content

15.12: Hierarchy

15.13: Inspector

15.14: a name that identifies a component in the FXML file which generates when its saved

15.15: It loads the FXML file and launches the application

15.16: The controller class handles events that happen when the app is running

15.17: An event listener handles events by executing them automatically when the program is running

15.18: It needs to be registered to the AnchorPane

15.19: Assign the listener to the component in the section OnClick (which is when it executes).

15.20: Assign them to a ToggleGroup.

15.21: Checkboxes

15.22: a toggle group allows a user to “toggle” between choices, only being able to select one

15.23: RadioButtons

15.24: Image in properties

15.25: The radiobuttonlistener methods.

Scene graph – Tree-like hierarchal data structure with nodes

Root Node – The parent of all other nodes; first node in the structure

Branch node – Can have other nodes as children

Leaf node – Leaves can’t have children

Container – a node that can have children; a component that can hold other components inside.

(i.e. A button could be a branch, the leaves are the label components)

Anchor pane – a container for all other components

FXML – Markup language that describes components in a JavaFX scene graph