Scaffold class in Flutter

Scaffold is a class in **flutter** which provides many widgets or we can say **APIs** like Drawer, Snack-Bar, Bottom-Navigation-Bar, Floating-Action-Button, App-Bar, etc. **Scaffold** will expand or occupy the whole device screen. It will occupy the available space. Scaffold will provide a **framework** to implement the basic material design layout of the application.

The class Hierarchy is as follows:

```
Object
 ↳ Diagnosticable
   ↳ Diagnosticable Tree
     ↳ Widget
       ↳ StateFul Widget
         ↳ Scaffold
```

Constructor of the Scaffold class:

```
const Scaffold({
    Key key,
    this.appBar,
    this.body,
    this.floatingActionButton,
    this.floatingActionButtonLocation,
    this.floatingActionButtonAnimator,
    this.persistentFooterButtons,
    this.drawer,
    this.endDrawer,
    this.bottomNavigationBar,
    this.bottomSheet,
    this.backgroundColor,
    this.resizeToAvoidBottomPadding,
    this.resizeToAvoidBottomInset,
    this.primary = true,
    this.drawerDragStartBehavior
```

```
            = DragStartBehavior.start,
    this.extendBody = false,
    this.drawerScrimColor,
})
```

Properties of Scaffold Class:

- **app-Bar:** It displays a horizontal bar which mainly placed at the top of the *Scaffold*. *appBar* uses the widget *AppBar* which has its own properties like elevation, title, brightness, etc.

- **body:** It will display the main or primary content in the Scaffold. It is below the *appBar* and under the *floatingActionButton*. The widgets inside the body are at the left-corner by default.

- **floatingActionButton:** *FloatingActionButton* is a button that is placed at the right bottom corner by default. *FloatingActionButton* is an icon button that floats over the content of the screen at a fixed place. If we scroll the page its position won't change, it will be fixed.

- **drawer:** *drawer* is a slider menu or a panel which is displayed at the side of the Scaffold. The user has to swipe left to right or right to left according to the action defined to access the drawer menu. In the Appbar, an appropriate icon for the drawer is set automatically at a particular position. The gesture to open the drawer is also set automatically. It is handled by the Scaffold.

- **bottomNavigationBar:** *bottomNavigationBar* is like a menu at the bottom of the Scaffold. We have seen this navigationbar in most of the applications. We can add multiple icons or texts or both in the bar as items.

- **backgroundColor:** used to set the color of the whole *Scaffold* widget.

- **floatingActionButtonAnimator:** used to provide animation to move *floatingActionButton*.

- **primary:** to tell whether the *Scaffold* will be displayed or not.

- **drawerScrimColor:** used to define the color for the primary content while a drawer is open.

- **bottomSheet**: This property takes in a widget (final) as the object to display it at the bottom of the screen.

- **drawerDragStartBehaviour**: This property holds *DragStartBehavior enum* as the object to determine the drag behaviour of the drawer.

- **drawerEdgeDragWidth**: This determines the area under which a swipe or a drag will result in the opening of the drawer. And it takes in a *double* as the object.

- **drawerEnableOpenGesture**: This property holds in a *boolean* value as the object to determine the drag gesture will open the drawer or not, by default it is set to true.

- **endDrawer**: The ***endDrawer*** property takes in a widget as the parameter. It is similar to the Drawer, except the fact it opens in the opposite direction.

- **endDrawerEnableOpenGesture**: Again this property takes in a *boolean* value as the object to determine whether the drag gesture will open the *endDrawer* or not.

- **extendBody**: The extendBody property takes in a *boolean* as the object. By default, this property is always false but it must not be null. If it is set to true in the presence of a *bottomNavigationBar* or *persistentFooterButtons*, then the height of these is added to the body and they are shifted beneath the body.

- **extendBodyBehindAppBar**: This property also takes in a *boolean* as the object. By default, this property is always false but it must not be null. If it is set to true the *app-Bar* instead of being on the body is extended above it and its height is added to the body. This property is used when the color of the *app-Bar* is not fully opaque.

- **floating Action Button Location**: This property is responsible for the location of the *floating Action Button*.

- **persistent Footer Button**: This property takes in a list of widgets. Which are usually buttons that are displayed underneath the *scaffold*.

- **resize To Avoid Bottom Insets**: This property takes in a B*oolean* value as the object. If set to true then the floating widgets on the *scaffold* resize themselves to avoid getting in the way of the on-screen keyboard.