Report: Stateful Lifecycle of Stateful Widget

Stateful Widget Lifecycle:
The stateful lifecycle of a stateful widget consists of several distinct phases. Each phase represents a specific point in the widget's lifespan and provides opportunities for performing specific operations or handling state changes. The typical stateful widget lifecycle consists of the following phases:

1. Creation:
- The widget is instantiated using the constructor.
- The initState() method is called, providing an opportunity to initialize any variables or resources needed by the widget.

2. Initialization:
- The dependencies of the widget are resolved.
- The didChangeDependencies() method is called, allowing the widget to handle changes in its dependencies.

3. State Changes:
- The build() method is called, which builds the widget's user interface based on its current state.
- User interactions or external events can trigger state changes.
- The setState() method is called to notify the framework that the state has changed.
- The framework calls the build() method again to update the user interface based on the new state.

4. Deactivation:
-The deactivate() method is called when the widget is removed from the widget tree.
- It provides an opportunity to clean up resources or perform any necessary cleanup operations.

5. Disposal:
-The dispose() method is called when the widget is permanently removed from the widget tree.
- It allows the widget to release any resources it has acquired during its lifetime.