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Task 05

1- Stateless   Widget   life cycle

Immutable: Cannot   change   state   after   creation.

Lifcycle Methods:

Constructor: Called   when   the   widget is   created.

build(): Called   to   render   the   UI.

2- Stateful Widget   lifecycle

1- Creation   Phase:

- Constructor: Called   when   the   widget   is   created.

- createState(): Creates   the   associated   state   object.

- mounted: Boolean   to   check   if   the   widget

is   in   the   widget   tree.

2- Initialization   Phase:

- ~~initState~~ · initState(): Called   once   for   one-time

setup.

- didChangeDependencies(): Called   after   initState()

and   when   dependency   changes.

3- Build   Phase:

- build(): Called   to   render   the   UI.

4- Update Phase:

- did update Widget(): Called when the widget is updated with new configuration.
- SetState(): Triggers a rebuild of the widget.

5- Destruction Phase:

- deactivate(): Called when the widget is temporarily removed from the tree.
- dispose(): Called when the widget is permanently removed.

Lifecycle Flow:

1. Creation: Constructor → createState() → initState() → didchangeDependencies() → build().

2. Update: didUpdateWidget() → build().

3. Destruction: deactivate() → dispose().