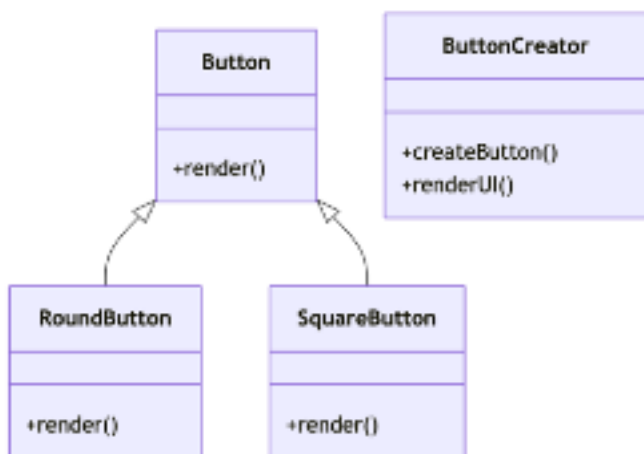
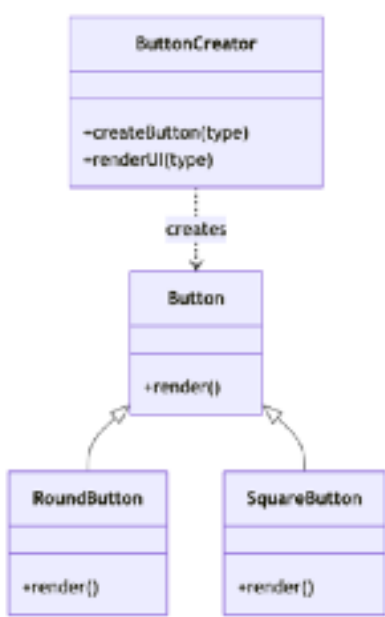


Step 3: Introduce the Creator Class with an Empty Factory



- Now we'll create a ButtonCreator class with an empty createButton method. This factory method will handle the creation of different button types.
- The ButtonCreator class has an empty createButton factory method, which forces any subclasses to implement it. Right now, if you call renderUI, it will throw an error, as createButton isn't yet implemented.

Step 4: Replace Product Constructors with the Factory



- We'll now modify createButton in the base ButtonCreator class to handle different button types. For flexibility, we'll add a type parameter to control which button type to create.
- The createButton method now includes a type parameter and uses a switch statement to decide which button to create. While the code is functional, it isn't yet elegant, as the switch statement could lead to maintenance issues if many button types were added.