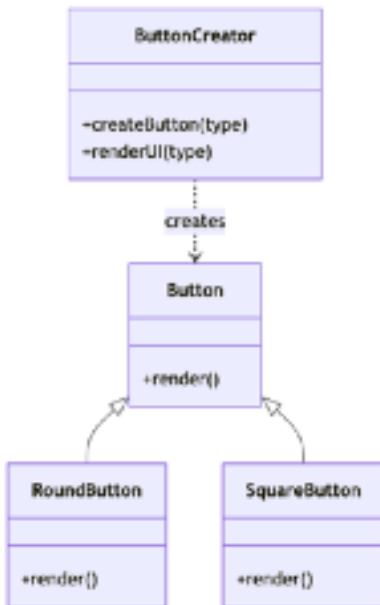
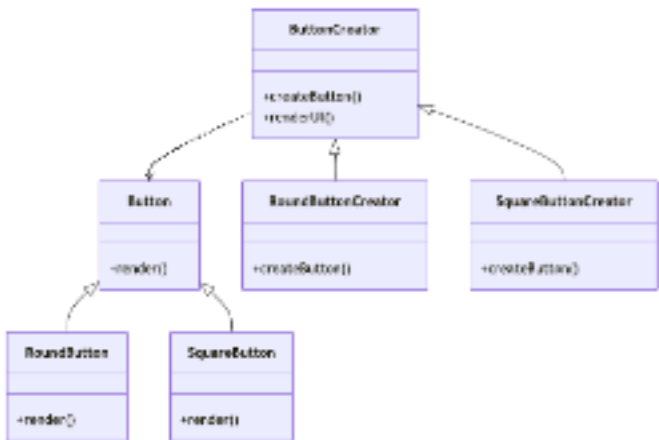


## Step 4: Replace Product Constructors with the Factory



- 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.

## Step 5: Refactor the Factory Method into Subclasses



- To improve the code, let's create subclasses of **ButtonCreator** for each button type and override the `createButton` method in each subclass. This approach removes the need for a switch statement.
- By overriding `createButton` in **RoundButtonCreator** and **SquareButtonCreator**, we're delegating button creation to specific subclasses, eliminating the switch statement and improving maintainability.