

Question 4 : Code Review

1. Problems in the code snippet

- Div element not closed.
- Button tag has been closed but not previously opened.
- `_user` datatype is not defined
- `getUsername()` method is being called in the html template but its value is assigned from the variable `_user` which is itself assigned from an observable in the subscribe method, this caused problems of getting undefined when the template loads before the observable stream has finished emitting values.

2. How to solve

- Close the div with the `</div>` closing tag after the button closing tag **OR** remove the div tag and style the button class as shown below.

```
<button class="user-panel">getUsername()</button>
```

- Put an opening `<button>` tag
- define `_user` datatype to any or a specified interface
- Use an async pipe on the interpolation so that it displays only when it is available **OR** use a placeholder e.g "username" for the case when username is undefined.

3. Benefits and Drawbacks

Method	Benefits	Drawbacks
Close div tag	Easy to implement Retains code style	Code becomes bulky
Remove div tag	Code becomes less bulky	It distorts the style of the page
Use async pipe	Username is only displayed when it is available. Less errors occur during runtime	Page can become confusing to the user when no values are displayed
Use a placeholder	Less errors	