The difference in using height and weight inside and outside the addEventListener is that when they are declared outside the listener, they are assigned the value of the input fields at the time the page loads. This means that if the user changes the values of the input fields before submitting the form, the height and weight variables will not be updated.

When height and weight are declared inside the listener, they are assigned the value of the input fields at the time the form is submitted. This means that the height and weight variables will always contain the latest values entered by the user.

In the example code you provided, if height and weight were declared outside the listener, and the user changed the values of the input fields before submitting the form, then the results element would contain an error message when the form is submitted, because the height and weight variables would contain the old values.

If height and weight are declared inside the listener, then the results element will always contain the correct BMI calculation, because the height and weight variables will always contain the latest values entered by the user.

**Here is a summary of the difference:**

|  |  |
| --- | --- |
| Declaration | Behavior |
| Outside addEventListener | Assigned the value of the input fields at the time the page loads |
| Inside addEventListener | Assigned the value of the input fields at the time the form is submitted. |

**Recommendation:**

It is generally recommended to declare height and weight inside the addEventListener function, so that the height and weight variables always contain the latest values entered by the user. This will ensure that the BMI calculation is always accurate.