

## HoweWork 2 (1dhl40430)

Q. 4

a. Should we place JavaScript in the HTML head or body?  
Please specify the necessary arguments of your choice

Ans i) Scripts which are used to modify the content of page or that performs action that are necessary when page is displayed, are placed in 'body' section. It is better to place them in 'body' section of HTML.

Reason: a) If we place scripts in ~~header~~ tag, they may ~~show~~ <sup>result in</sup> slow loading of the page.

b) Browser needs to wait until script is loaded.

ii) If javascript code contains functions & calling function. It is good to store these functions in head part.

iii) Whenever, function is called, they can be accessed through head part. It makes handling & differentiating function def<sup>n</sup> & function call easy.

iv) But, keeping script in head tag may result in page block.

v) Content which require javascript for display is placed in body part.

vi) We place jquery libraries in head part followed by `<script>` `</script>` & define script code.



b. which JQuery event allows for proper handling of Javascript code present in the HTML document head section? Why is this event handling required?

Ans i) As normal practice, the scripts are placed inside body tag.

Consider the foll<sup>n</sup> JQuery code:

```
$(document).ready(function() {
```

```
    // some JQuery methods
```

```
});
```

ii) It is good practice to place above code in head tag as it prevents running any JQuery code before the browser has finished loading of entire document. i.e. displaying contents.

iii) Document ready event in JQuery allows proper handling of javascript code.

iv) if this event is not handled properly, it results in content conflicts or content manipulation.

v) So, this event is required to perform actions only when page is fully loaded.



Q. Provide example web application use cases that require:

i) Asynchronous Communication ii) Synchronous communication

As: i) Asynchronous Communication:

a) Email sending: A learner sends you an e-mail message. You later read & respond to the message. There is a time lag between the time the learner sent the message & you replied,

b) Viewing videos linked to the course site, reading a textbook,

c) Blackboard or eLearning messages can be added at any time and read at student's leisure; student do not read someone else's message as it is being created & student can take as much time as he needs to respond.

ii) Synchronous Communication:

a) While booking flight ticket, when you put card details, ticket confirmation will be displayed only after money is drawn from ~~be~~ your bank account. Before proceeding, it validates all card details, money needs to be transferred.

Thus, it is synchronous comm<sup>n</sup> where it blocks succeeding operations until it completes its own pre processing.

b) If our class uses only writing-based tools to communicate the only synchronous comm<sup>n</sup> possible is chat session. Everyone gets online in same room & types questions, comments in real time.

c) If class involves multimedia tools, synchronous comm<sup>n</sup> might involve audio or video feeds to the computer.