

DWA_03.4 Knowledge Check_DWA3.1

1. Please show how you applied a Markdown File to a piece of your code.

```
① README.md > # Book Connect > ## Features
1 | # Book Connect
2 |
3 | "As a junior JavaScript developer, you have been approached by a small startup
  | called Book Connect. They run a social media platform specifically targeted at book
  | enthusiasts. A basic version of the product was created by another freelance
  | developer.
4 |
5 | The team was extremely impressed by their HTML and CSS code. However, it eventually
  | became clear that the developer was not entirely honest about their competency with
  | JavaScript. While the client is happy with the current HTML and CSS, they have asked
  | you to review the existing JavaScript code. Currently, it throws several errors
  | preventing the code from even running. You will have to fix all critical issues, as
  | well as do a full audit of the existing code. The goal is to highlight areas where
  | improvements can be made to performance, readability and future maintainability. The
  | client has provided you with prioritised user stories by means of the current
  | backlog. These user stories express the product behaviour as intended, and the app
  | will not be considered as fixed unless all these user stories are met."
6 |
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  | - [Book Connect](#book-connect)
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12 | ## Features
13 | - Simple and user-friendly
14 | - Ability to search for books with specific criteria
15 |
16 |
17 | ## User Stories
18 | - As a user, I want to view a list of book previews, by title and author, so that I
  | can discover new books to read.
19 | - As a user, I want an image associated with all book previews so that I can
  | recognize a book by the cover even if I forgot the name.
20 | - As a user, I want to have the option of reading a summary of the book so that I
  | can decide whether I want to read it.
21 | - As a user, I want to have the option of seeing the date that a book was published
  | so that I can determine how easy it is to obtain second-hand.
22 | - As a user, I want to find books based on specific text phrases so that I don't
  | need to remember the entire title of a book.
23 | - As a user, I want to filter books by author so that I can find books to read by
  | authors that I enjoy.
24 | - As a user, I want to filter books by genre so that I can find books to read in
  | genres that I enjoy.
25 | - As a user, I want to toggle between dark and light modes so that I can use the app
  | comfortably at night.
```

2. Please show how you applied JSDoc Comments to a piece of your code.

```
/**
 * Creates the html showing various race details for athletes.
 * @param {Object} athlete
 * @returns {DocumentFragment} The newly created html fragment.
 */
const createHtml = (athlete) => {
  const { firstName, surname, id, races } = athlete
  const [latestRace] = races.slice(-1)
  const {date, time} = latestRace
  const fragment = document.createDocumentFragment();
  let title = document.createElement('h2');
  title.textContent = id;
  fragment.appendChild(title);
  const list = document.createElement('dl');
  const newDate = new Date(date)
  const day = newDate.getDate();
  const month = MONTHS[newDate.getMonth()];
  const year = newDate.getFullYear();
  const [first, second, third, fourth] = time;
  let total = first + second + third + fourth;
  const hours = Math.floor(total / 60);
  const minutes = total % 60;
  list.innerHTML = `
    <dt>Athlete</dt>
    <dd>${firstName} ${surname}</dd>

    <dt>Total Races</dt>
    <dd>${races.length}</dd>

    <dt>Event Date (Latest)</dt>
    <dd>${day} ${month} ${year}</dd>

    <dt>Total Time (Latest)</dt>
    <dd>${hours.toString().padStart(2, '0')}:${minutes}</dd>
  `;
  fragment.appendChild(list)
  return fragment;
}
```

From IWA16

3. Please show how you applied the @ts-check annotation to a piece of your code.

```
JS scripts.js > ...
1 // @ts-check
2
3 const MONTHS = [
4   'Jan',
5   'Feb',
6   'Mar',
7   'Apr',
8   'May',
9   'Jun',
10  'Jul',
```

@ts-check at top of scripts file

```
/**
 * Creates the html showing various race details for athletes.
 * @param {Object} athlete
 * @returns {DocumentFragment} The newly created html fragment.
 */
const createHtml = (athlete) => {
```

Returns DocumentFragment

```
102
103   <dt>Total Time (Latest)</dt>
104   <dd>
105     Type 'string' is not assignable to type 'DocumentFragment'. ts(2322)
106     View Problem (Alt+F8) Quick Fix... (Ctrl+.)
107   return '';
108 }
109
```

```
93   <dt>Total Time (Latest)</dt>
94   <dd>${hours.toString().padStart(2, '0')}:${minutes}</dd>
95   `;
96   fragment.appendChild(list)
97   return fragment;
98 }
```

4. As a BONUS, please show how you applied any other concept covered in the 'Documentation' module.
