Examples for Interview with Treverse LLC, La Vergne TN, 9/12/24

DOMHelper

Minimal abstraction to assist with plain HMTL development.

GitHub Example

Main function from lines 21 to 44, keeps track of data that is added in the construction staps and then later used to create or update the element.

The goal was to provide a minimal helper to assist with routine tasks while still providing a pure HTML development experience.

Red-Black Tree

This was a hobby project where I experimented with implementing a Red-Black Tree.

GitHub Demo

- You can click the insert button and it will insert nodes from a test array into the tree. The first node has value 62, the next one has value 12, and so on.

- You see the node and the total number of nodes under that node, including the node itself.

- You can enter a number in the text box and Get At will pull that node from a 0-based array index (the nodes in red black tree seen as an array, from left to right). So put 1 into the text box to get the 62 node after the second insert, node 12 is as index 0.

- If you click Get Index after entering the number you can retrieve the position for that node, e.g., after four inserts, node 12 is at index 1.

- The other functions were mainly for testing during development.

- All outputs will go to the console in the F12 tools, so you need to open those in order to see them.

SoapImpl

This is set of classes for a minimal SOAP11 client after the asmx based SOAP clients where not taken over into .NET Core. There where two alternative frameworks available but hard to use but these view base classes in the **SOAP11** folder sufficed.

GitHub

The **SharePoint** and **WFHelper** folders contain concrete implementations for going to SharePoint or an internal workflow service respectively.

Additionally, the **Controllers** folder has a cache handler where we found that the .NET 6 caching mechanisms didn't exactly provide what was needed.