Binary Tree Problem

Implement a function to check if a binary tree is balanced. For the purposes of this question, a balanced tree is defined to be a tree such that the heights of the two subtrees of any node never differ by more than one.

Solution

This solution is intended to run on Ruby 2.4.3 but should run on 2.3 and up. It takes advantage of the safe navigation operator. The solution for the implements the `BinaryTree` and `BinaryTreeNode` classes in `binary_tree.rb`. The node class has a method called `height` that recursively calculated its own height from its children nodes. This height method is used for calculating whether or not a node is balanced in the `balanced?` method.

Running the Examples and Unit Tests

`run_example.rb` contains a couple of examples of the tree. You can run it with:

```
ruby run_example.rb
```

`test_binary_tree.rb` contains unit tests for the tree class. You can run it with:

```
ruby test_binary_tree.rb
```