CSC 148

Assignment 2

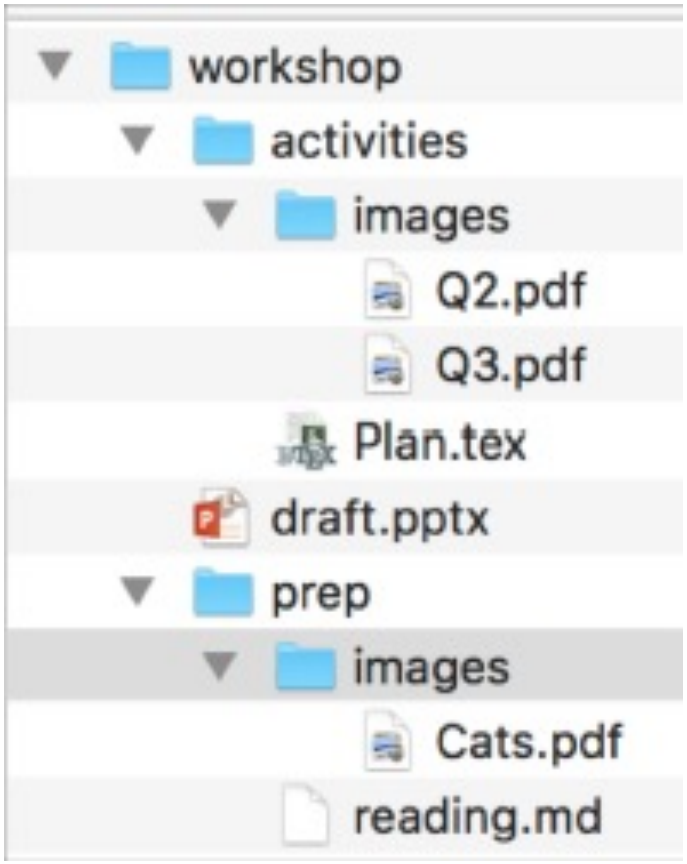
Overview

University of Toronto Mississauga,

Department of Mathematical and Computational Sciences

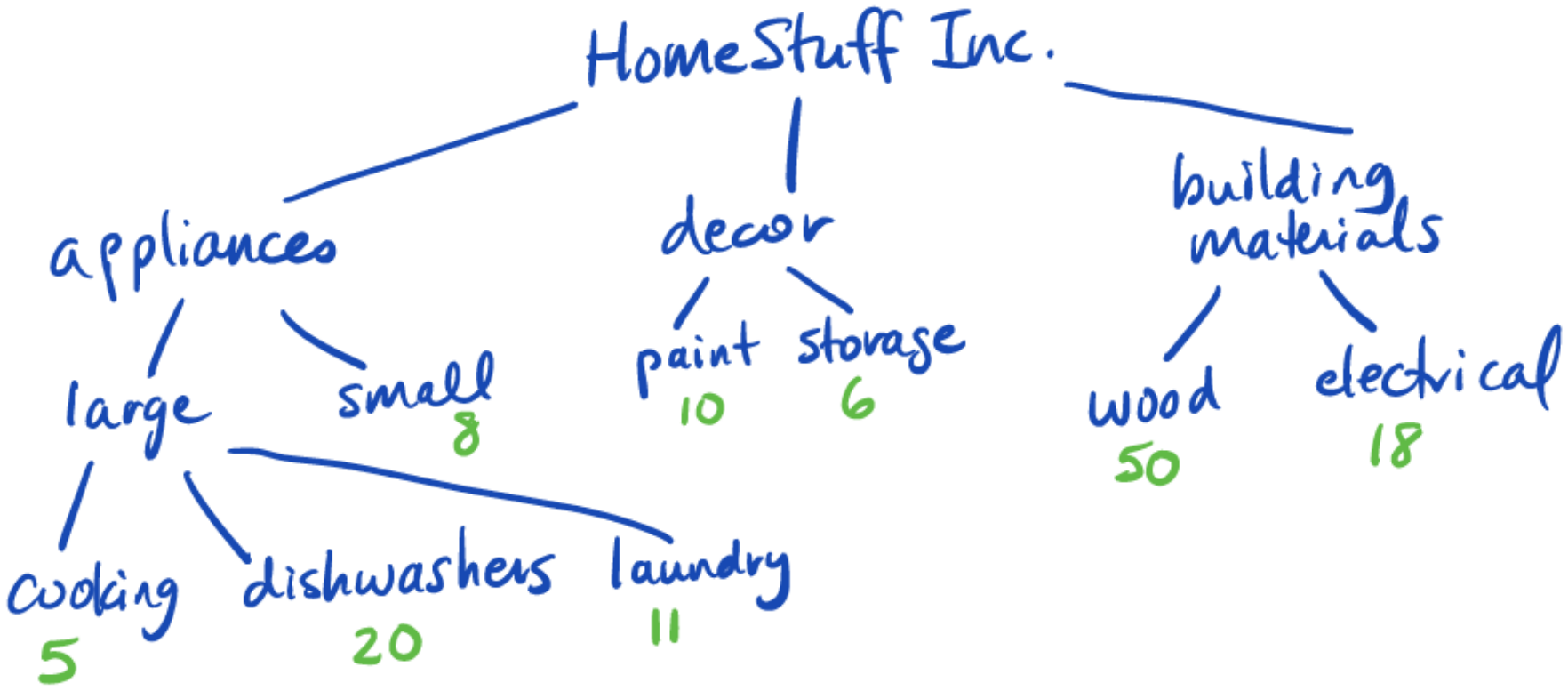
Representing Sized Hierarchical Data

- Sometimes with hierarchical data, the leaves have a size



Representing Sized Hierarchical Data

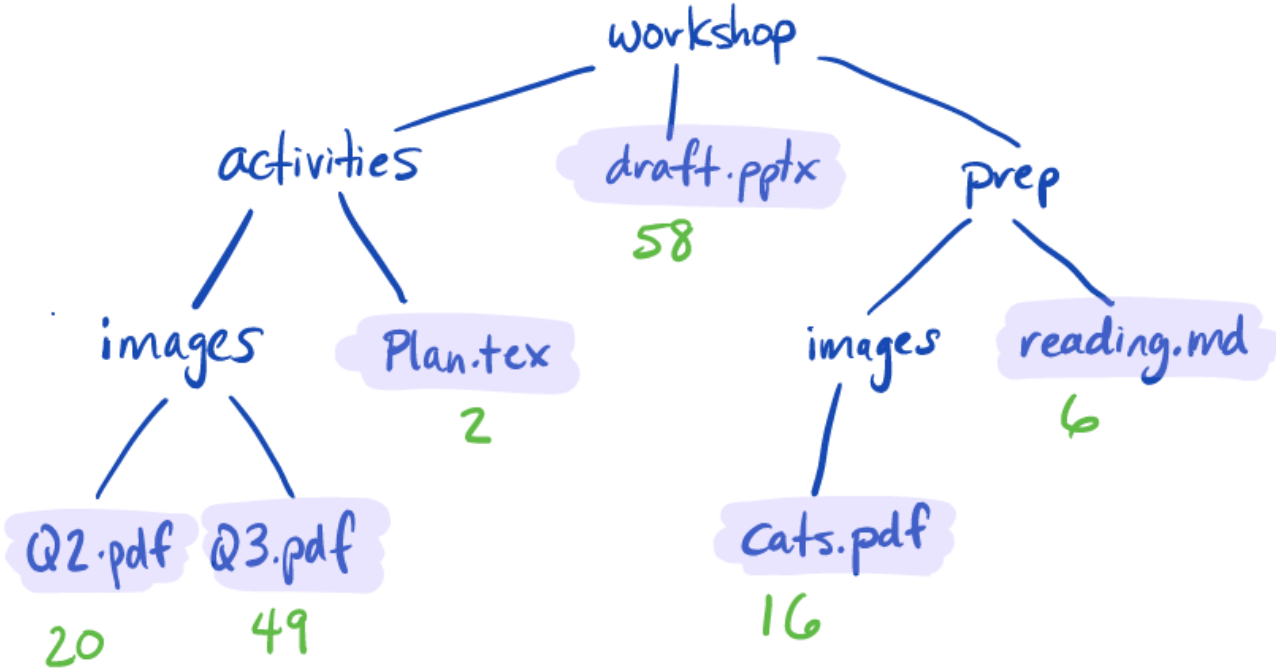
- Another example, with info on sales in a company



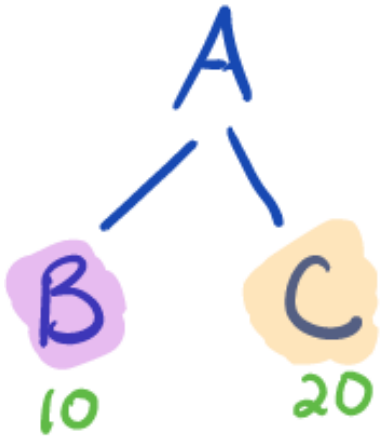
Representing Sized Hierarchical Data

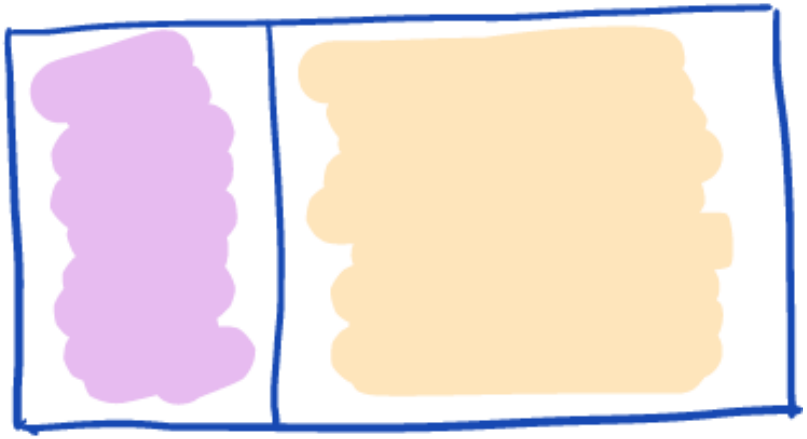
- It makes sense to infer a size for the internal nodes:

- The size of an internal node is the sum of the sizes of its subtrees

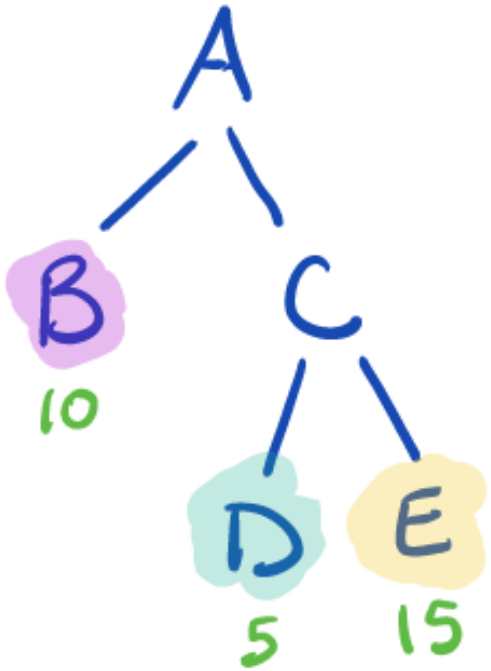


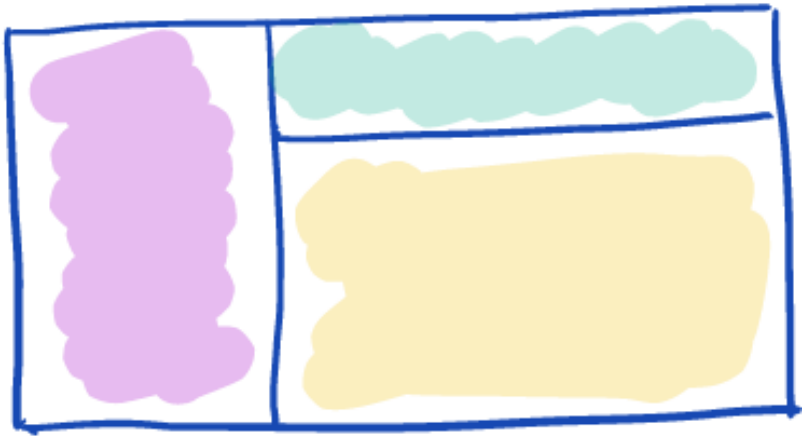
Visualizing Sized Hierarchical Data



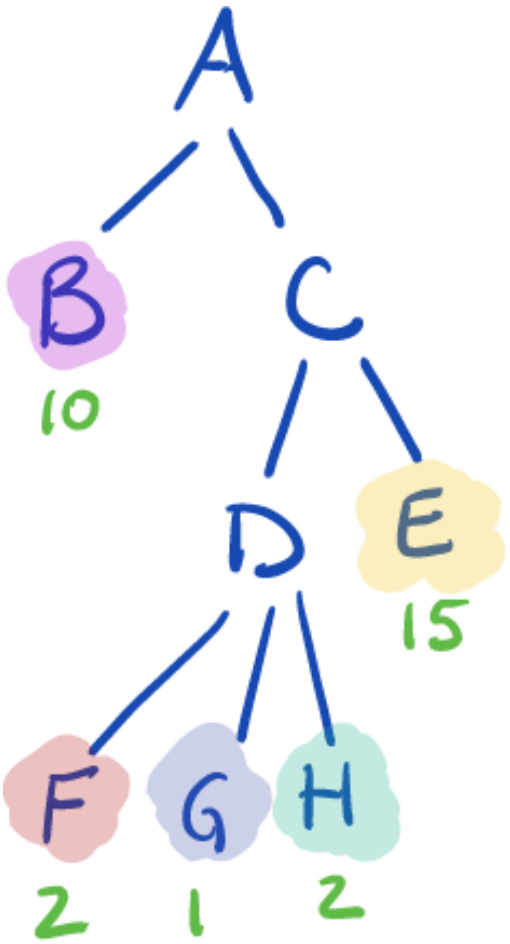


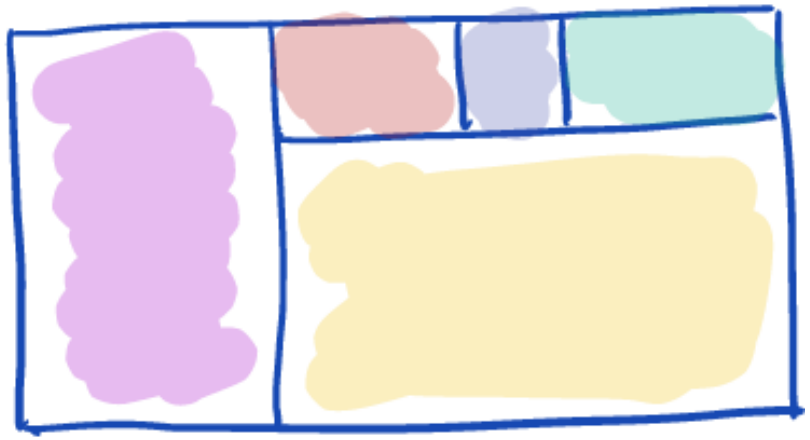
Visualizing Sized Hierarchical Data



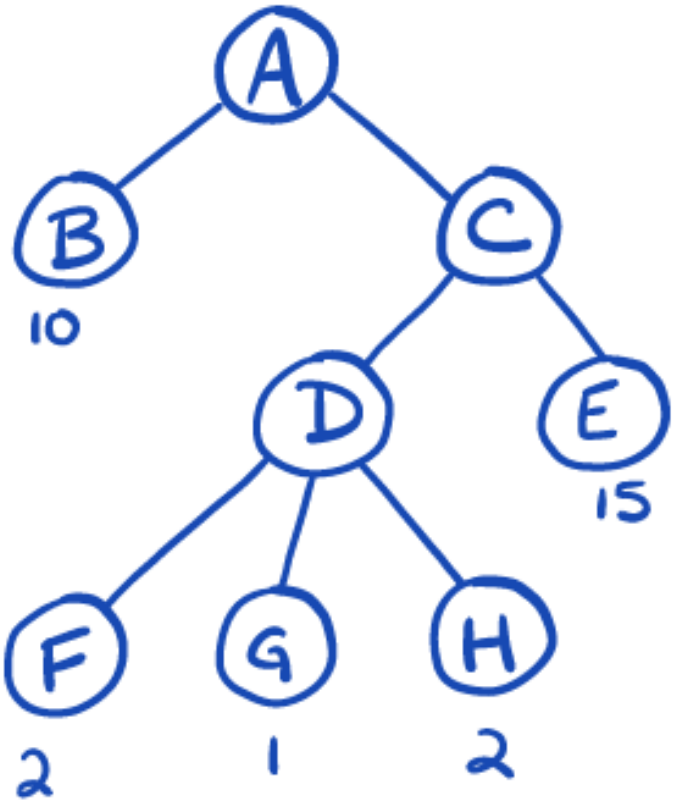


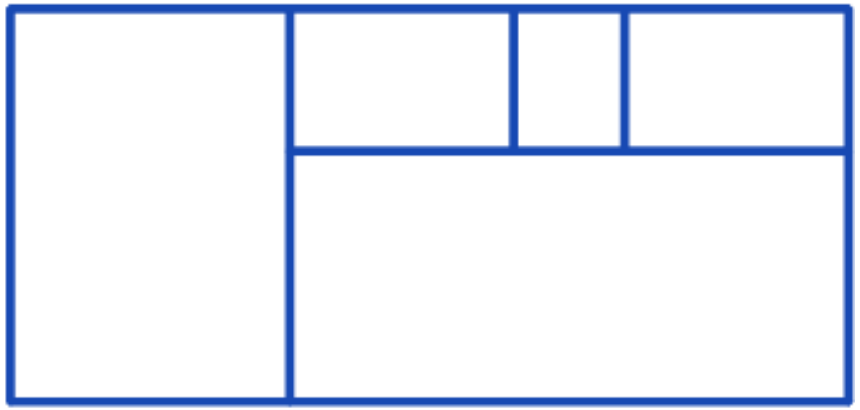
Visualizing Sized Hierarchical Data





Treemaps

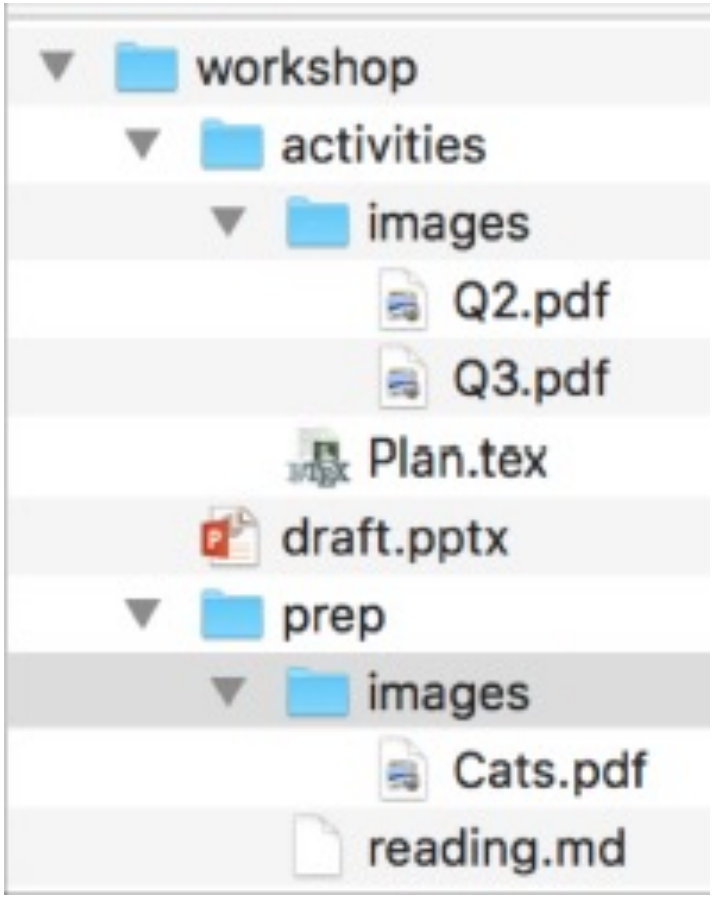




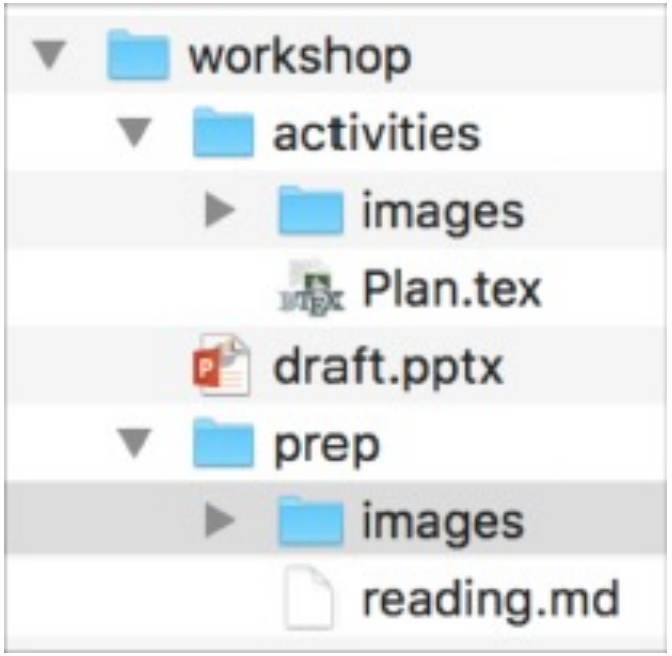
This visualization is called a "treemap"

Expanding and Collapsing

Here is a fully expanded list of files:

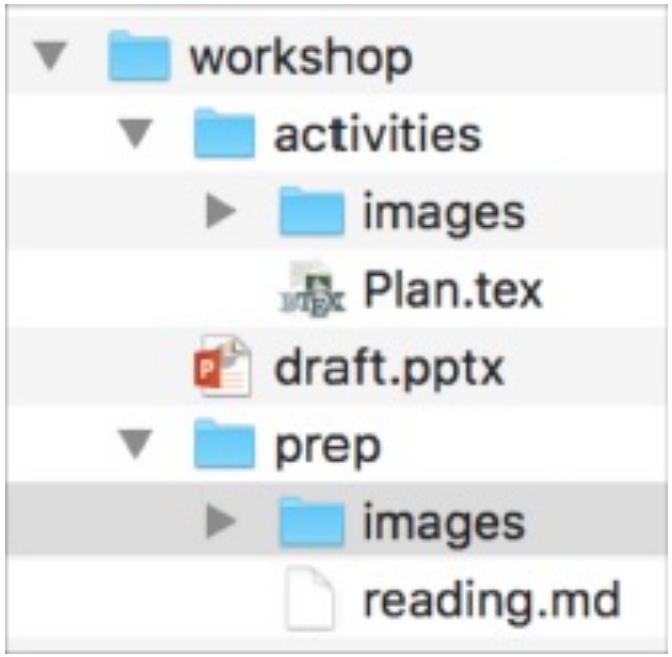


Here we have collapsed the 2 "images" folders:



Representing Expanded Nodes

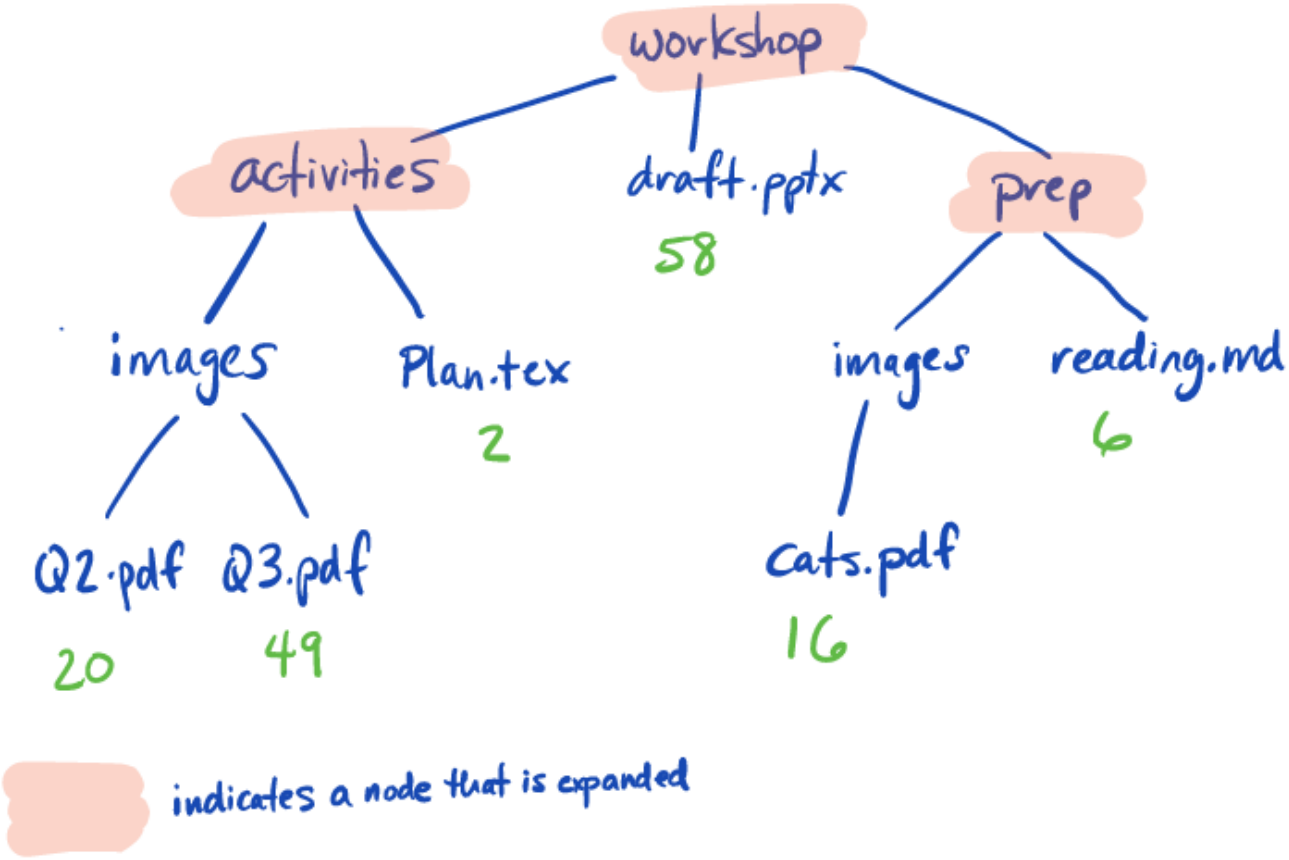
Here we have collapsed the 2 images folders:



Each node is either expanded or collapsed.

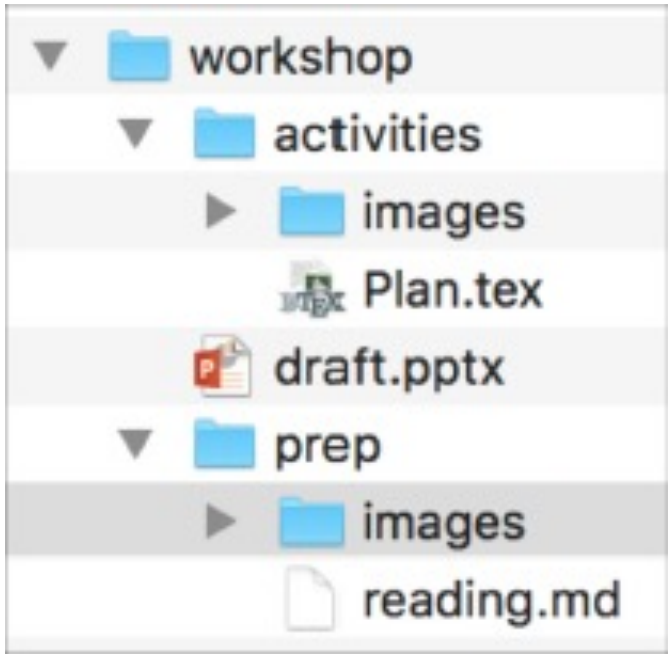
We mark the expanded nodes in the tree.

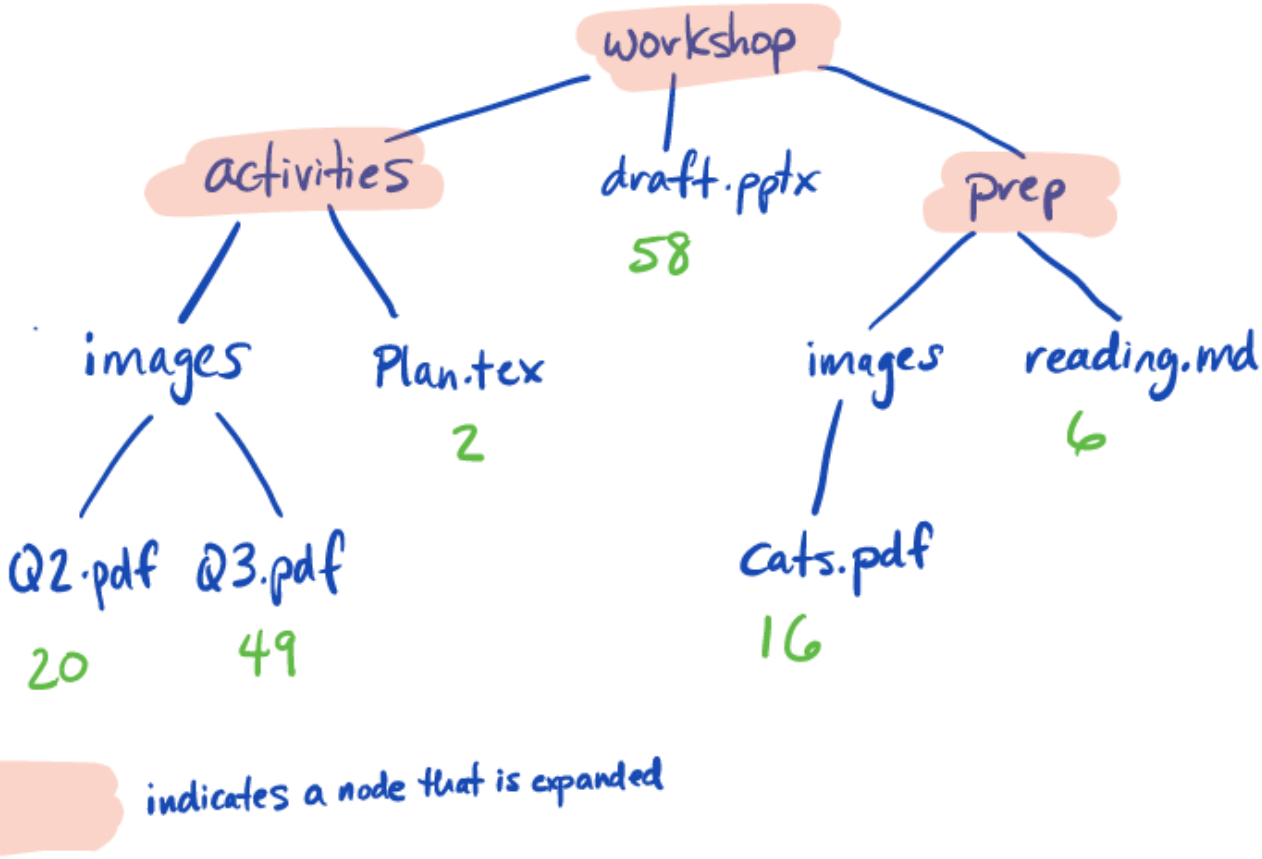
Everything else is collapsed:



Visualization and Tree Correspondence

We see the expanded folders and their children.





Visualization and Tree Correspondence

indicates a node that is expanded

We see the expanded nodes and their children.