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LLL Class will be the "self organizing list" that holds the BSTs and the program data inside those BSTs.

Linear Linked List Class

Containing Relationship

List Node Class will hold a BST in which all data held see the same frequency of use.

List Node Class

Containing Relationship

BST Class will be the data structure that holds data of the same use frequency. It will contain the nodes of which hold the data the we are recording (e.g. Websites, Social Apps, and Game Apps). These will be organized by name.

Binary Search Tree Class

Containing Relationship

BST Node Class is used to create the BST data structure. Each BST Node will hold a point to the Abstract Base Class "Program".

BST Node Class

Containing Relationship

Abstract Base Class

Program Class

These three classes will be specializations of the Program class. They add unique data members to the relationship to better represent Websites, Social Apps, and Game Apps. To clarify, all three are publicly derived from the Program class.

Website Class

Derived Class

Social App Class

Derived Class

Game App Class

Derived Class

Hierarchical Relationship

