Hierarchy Data Object Demonstration

Documentation

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# Introduction

# Configuration

# Design

# User Interface

# Data Design

# Algorithm

## Appendix.

Create a mechanism that can be used to define different hierarchies of objects and

generate tags at each level which can then be used to implement hierarchical search

e.g. tree->branch->twig->leaf hierarchy can define the leaf object birch->leftfork->twig3->leaf50

1. Hierarchies should have no maximum depth

2. Hierarchies should be generic so that any type of hierarchy can be defined

3. Hierarchies cannot be circular – implement checks to ensure this

4. New hierarchies can reference previously defined hierarchies from anywhere in their hierarchy tree

5. Hierarchies should be able to be serialized into a set of text tags which can represent objects at each level in the hierarchy

6. Hierarchy information and tags should be stored in a MySQL database – define the table structures and queries as part of your solution.

7. A UI for viewing, editing and creating hierarchies and viewing their associated tags is required.

8. Take into account that multiple users can be using this interface simultaneously.

Bonus Points:

Each Hierarchy’s tags should be as small as possible but must avoid collisions with

tags from other previously defined hierarchies. Implement an algorithm to achieve this.