Hierarchy Data Object Demonstration

Documentation

Written by Adrian Teh ([adrianteh@hotmail.com](mailto:adrianteh@hotmail.com)) on 20/05/2014

# Introduction

# Configuration

# Design

# User Interface

# Data Design

# Algorithm

## Appendix.

Below is the technical test our Software Architect and Max put together.

The ETA for this task is around 1 full day (8 hours of work).

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.

If you have any question regarding this task, please contact Max on mpak@switch.tv or 02 8012 2949 / 0423 767 953.