PS3 Design Analysis

Overview

Key design challenges

There were two main design decisions I faced in this project:

1. How to retrieve comments from the system
2. How to store comments such that they reflect votes and prioritization

Details

Data representation

The admin, post, and comment objects are mirrored in the database. However, there is no user object, and all characteristics of a user are stored within a comment, like the name of the comment author.

Key design decisions

In my design, comments are retrieved by retrieving the HTML comments from a url associated with the particular post. The alternative to this strategy would be to retrieve them via JSON. Using my design gives more flexibility in terms of determining the format in which comments are displayed. The HTML allows for more than just data to be retrieved: the order, format, and buttons are also embedded in this making it much easier to edit if comment attributes change.

Another challenge is storing comments. Since vote counts and prioritization are so dynamic, I made the decision to store all comments as equal, and only query them for differences. Vote counts and prioritization are attributes of all comments, as opposed to the alternative of making different comment objects. For example, I use a binary bit to indicate prioritization, and query the comments for that bit in order to create two categories of comments to display, those that are prioritized and those that are not. This is a dynamic approach that would allow for changes in comment attributes and alterations to how to display the comments, i.e. if you no longer wanted to put prioritized comments on top, you could just query for all comments, ignoring the priority bit. The alternative approach would be much more bulky, as you would have to change how priority comment objects were made.