Internet Interoperability

UCT CSC4000w/4003w – Final Exam – November 2007

Facebook has taken the world by storm. This is arguably in large part due to its "Facebook-as-platform" approach to extensibility, with open APIs for interconnecting third party applications with Facebook.

Sakai is an open-source learning management system in use at many universities around the world – at UCT, the Sakai system is named Vula. Sakai could possibly benefit from an open and interoperable architecture such as that of Facebook to resolve some issues with flexibility and extensibility.

You have been approached by the Centre for Educational Technology at UCT because they would like to extend Sakai so that it can allow plugin applications in a manner similar to Facebook. However, they do not know much about Facebook or practical interoperability. You have been asked to write a discussion document explaining how Facebook's application plugin feature works and where and how this can be applicable to Sakai.

As an outline for the discussion document, you have already decided upon the following:
  ❖ Introduction to Interoperability
  ❖ A short overview of Facebook from end-user and developer perspectives
  ❖ Differences between Facebook and Sakai
  ❖ Core design principles for a Sakai API: encoding (REST/SOAP/etc.), simplicity, orthogonality, etc.
  ❖ Discussion of Facebook's various APIs, whether each is applicable to Sakai and, if so, how each needs to be modified
  ❖ Discussion of any additional APIs that could be useful for Sakai
  ❖ References

Your task is to complete the report, following the outline above, focussing on the design principles and discussion of APIs, and including any additional sections on major issues that you deem important.

You may assume that the requestor of the report already knows about underlying technology such as XML and databases. Otherwise, clearly state any assumptions and include reasons for decisions wherever applicable.

You may consult any reference materials (paper or online), but you MAY NOT discuss the problem with any individuals (that includes your classmates and especially persons associated with CET, Facebook and Sakai).

Format your discussion document as 12pt Times Roman, 2.54cm margins, single-spacing. Your proposal must not exceed 3000 words and must not number more than 8 pages, including figures, tables and references. Include all references to documents consulted.

Submit a **printed copy** to the CS admin office (Jane Wright or Salegga Valley) by 12 noon, Friday 9 Nov 2007. No late handins or electronic or handwritten solutions will be accepted.