

Content Exposure of Slide Show Presentations for Selective Download and Annotation via Mobile Devices

Presentation software, such as Microsoft PowerPoint, has gained popularity as a method of lecture delivery, and the built-in web publishing features make it easy to convert such slide shows to HTML format. The increase in the availability and functionality of handheld devices has provided new opportunities for using mobile technologies in education. We propose the novel integration of these technologies for use in a teaching environment that allows users to selectively download and annotate parts of the slide show using mobile devices. A web application has been developed for use in a lecture theatre or classroom environment that allows students to access content from a slide show during a presentation. An HTML version of a PowerPoint slide show is made available via a wireless access point. A server-side application parses the slides contents to create an image representation of the various content groups. A mobile web application displays these content groups as different coloured blocks which correspond to the content on the main lecture display screen. Each coloured block provides a link to selectively download the desired content group, which the server application then extracts from the slide's contents. In addition, the mobile application allows for the annotation (lecture notes) and storage of the downloaded data. Students can then view the downloaded data and annotations at a later stage for study purposes.

Philip West, Department of Computer Science, Rhodes University, Grahamstown, South Africa

Greg G. Foster, Department of Computer Science, Rhodes University, Grahamstown, South Africa

Peter G. Clayton, Department of Computer Science, Rhodes University, Grahamstown, South Africa

Philip West received a BSc Honours Degree from Rhodes University, Grahamstown, South Africa in 2003. He is currently reading for his MSc degree at the same institution. His research focuses on mobile computing, wireless networks and digital signage. Mr West is the Rhodes University consultant for the Microsoft Academic Program and holds a Telkom Centre of Excellence bursary.

