

## An Intelligent Agent for Adapting and Delivering Electronic Course Materials to Mobile Learners

The concept of mobile learning is often defined as learning that takes place with the help of mobile devices to access course materials; however, these devices operate in different ways and have different capabilities. To make course materials available on these mobile devices as well as on desktop systems, a software program is required to allow course material to be delivered in heterogeneous computing platforms. Because of these heterogeneous computing platforms, some course materials may not be in a format that different mobile devices would accept. This project developed an intelligent software agent capable of adapting to the heterogeneous mobile computing environment. The agent can search for a conversion tool according to the desired format and convert the course materials automatically. The agent is able to understand mobile clients' capabilities. In order for the server to know what type of course material the client wishes to receive, the client needs to feed information on the software and hardware capabilities of the device to the server. However, devices do not normally carry any information about their capabilities. We have chosen the Resource Description Framework (RDF) represented Composite Capabilities/Preferences Profile (CC/PP) promoted by the W3C to describe the device capabilities and user preferences.

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