

WAP INTERNET ACCESS



By

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244001-002

SUBMITTED TO:
THE FACULTY OF COMPUTER SCIENCE
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IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF
MASTERS IN COMPUTER SCIENCES
2002 - 2003

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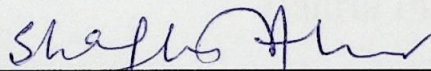
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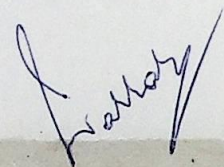
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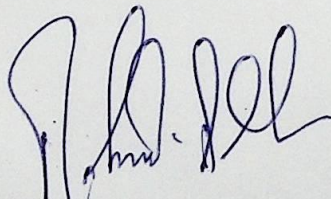
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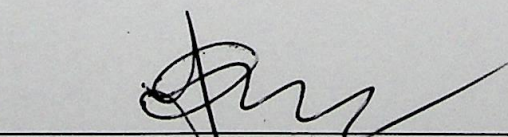
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Abstract

The next big challenge of the Internet is mobile access. More and more information is available on the Internet and Intranets, and mobile users will also need access to it. Wireless Application Protocol (WAP) based devices make it possible to access Wireless Markup Language (WML) based services with mobile browsers. WAP compliant devices have already been released on the market and more are to come.

In the future there will be a need for Web services that are specially targeted for mobile users. We have studied this mobile-aware approach towards the Internet and based on our evaluation results we recognize challenges for future WAP devices and mobile-aware services.

We have studied the possibility of accessing the already existing Internet information with WAP devices. We have developed an *HTML to WML conversion proxy server*, which will convert HTML-based Web contents automatically and on-line to WML. This approach gives the mobile users transparent access to their familiar Web pages from their mobile phones and other mobile devices. Our study indicates that if HTML-based Web services follow certain guidelines, they can be converted automatically to WML and adapted to the client device. In principle these guidelines already exist as W3C Web Content Accessibility Guidelines and W3C Note for HTML 4.0 Guidelines for Mobile Access.

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