Mobile Internet Applications— XML-based Languages

Lesson 07

HTML5

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HTML5

- HTML5 consists of markups, for details refer to http://www.w3.org/TR/html5/

- HTML5 is the latest version for Web applications. It is an enhancement of HTML4, XHTML 1, and DOM Level 2. HTML5 has official specifications by W3C and latest draft recommendations from W3C

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HTML5

- An extensible language
- It provides the markups and APIs for complex Web apps and improves the HTML language

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Features of HTML5

(1) latest multimedia features, real time streaming data, and Web sockets

(2) new form input types (with in-built validation) including email input type

(3) <canvas> for 2D drawing tools and <svg> scalable vector graphics

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Features of HTML5

(4) applicationCache for caching in client-side from data from DataStore at server DataStore for an application

(5) messaging and Web workers

XML Serialized Document

- HTML5 can be used for the XML serialization.

- Transforming data objects in an XML format for storing and communicating

- XML serialized document enables reconstruction later at the same or the other end (say client, server, or computing environment.)

Serialization

- Non-XML serialization in HTML4 means serialization using other programs, such as Java

HTML5

- Expected sole next-generation HTML standard

- Include the features of both XML and non-XML serializations while maintaining easy readability

- has parser, which has rigid parsing rules and which first checks for a well-formed valid document

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FOUR DESIGN PRINCIPLES

(a) interoperable behavioural specifications for the current browsers,

(b) introduces error-handling functions

(c) enables easy authoring of Web applications, and

(d) suggests a rigid HTML syntax like XML for the Web application (non mandatory)

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HTML5 Provisions

- Read details in Section 14.6 Page 486

Summary

- HTML5 new standard

- latest multimedia features, real time streaming data, Web sockets, new form input types (with in-built validation) including email input type, <canvas> for 2D drawing tools and <svg> scalable vector graphics

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...Summary

- applicationCache

- messaging and Web workers

End of Lesson 07

HTML5