



CS144 Web Applications Discussion Session

Week-2

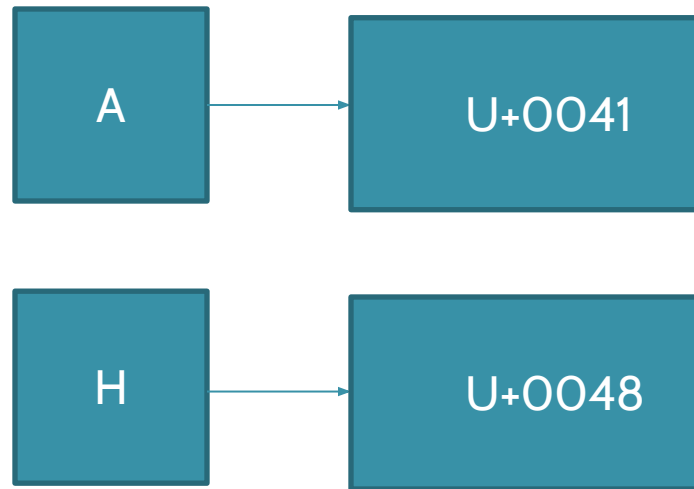


Outline

- Unicode
- CSS
- Servlets and JSPs

Unicode

- Motivation: Assign a unique number for every character in the world
- Every character maps to a CODE POINT



Unicode

- 3 different scheme of Unicode

Name	Length	Property	Adoption
UCS-2	2 bytes	Original version	not well adopted by internet applications
UTF-8	1-3 bytes	backward compatible with ASCII encoding	used by 90% of web sites, Linux
UTF-16	2 or 4 bytes	extend the character set based on UCS-2	Adopted by Windows/macOS

- Homework: review your lecture handouts for the actual encoding scheme.

Unicode

- How can we specify Unicode?
 - specified by the "charset" parameter:
 - HTML:
 - *Content-Type: text/html; charset=UTF-8*
 - HTML5:
 - `<meta charset="utf-8">`

CSS

- Full name is Cascading Style Sheet
- A complementary file to separate style from structure of HTML pages.
- CSS rule = selector + declaration block
- Example:
 - Contents inside the <style> tag.
 - <http://oak.cs.ucla.edu/classes/cs144/examples/css.html>
 - A breakdown in next slides

CSS example

- `h1 { // selector: tag, class or ID name
font-size: 30pt; // declaration block: list of CSS properties and values`
- `}`
- `h1, p { // multiple selectors separated by commas. * means all tags`
- `font-family: "Times New Roman"; }`
- `.code { // "." Indicates class name`
- `font-family: monospace;`
- `white-space: pre;`
- `background-color: lightgrey;`
- `border: 1px solid black;`
- `}`
- `#warning1 { // "#" indicates ID name`
- `color: red;`

CSS

- How two specify a CSS file?
 - Inside the HTML file: using `<style>` tag
 - Outside the HTML file: using `<link>` tag to link a outside file.
 - `<link ref="stylesheet" href="example.css">`
 -

CSS rules

- Cascading and Inheritance
 - CSS can be specified in three places. Higher precedence property “cascades”
 - A very good reference for CSS (Anyone who interest in front end development should read this)
https://www.w3.org/wiki/Inheritance_and_cascade
- Specificity: In case of conflict, most “specific” rule wins!
 - Class vs ID: multiple elements with the same class can exist. ID is unique inside a page.
 - A very good reference for specificity:
<https://developer.mozilla.org/en-US/docs/Web/CSS/Specificity>