

Steps Toward Integrating Accessibility into Development of an Internet Option for the 2010 U.S. Census

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Overview

- Introduction
- Steps toward 2010
- Evaluating the 2005 Internet form
- General recommendations

Introduction

- Moving Census forms from paper to the Internet
- Impact of Federal regulations
(Section 508, Rehabilitation Act)
 - Shortcomings of current development approach
 - Letter versus spirit of the law

Steps Toward 2010

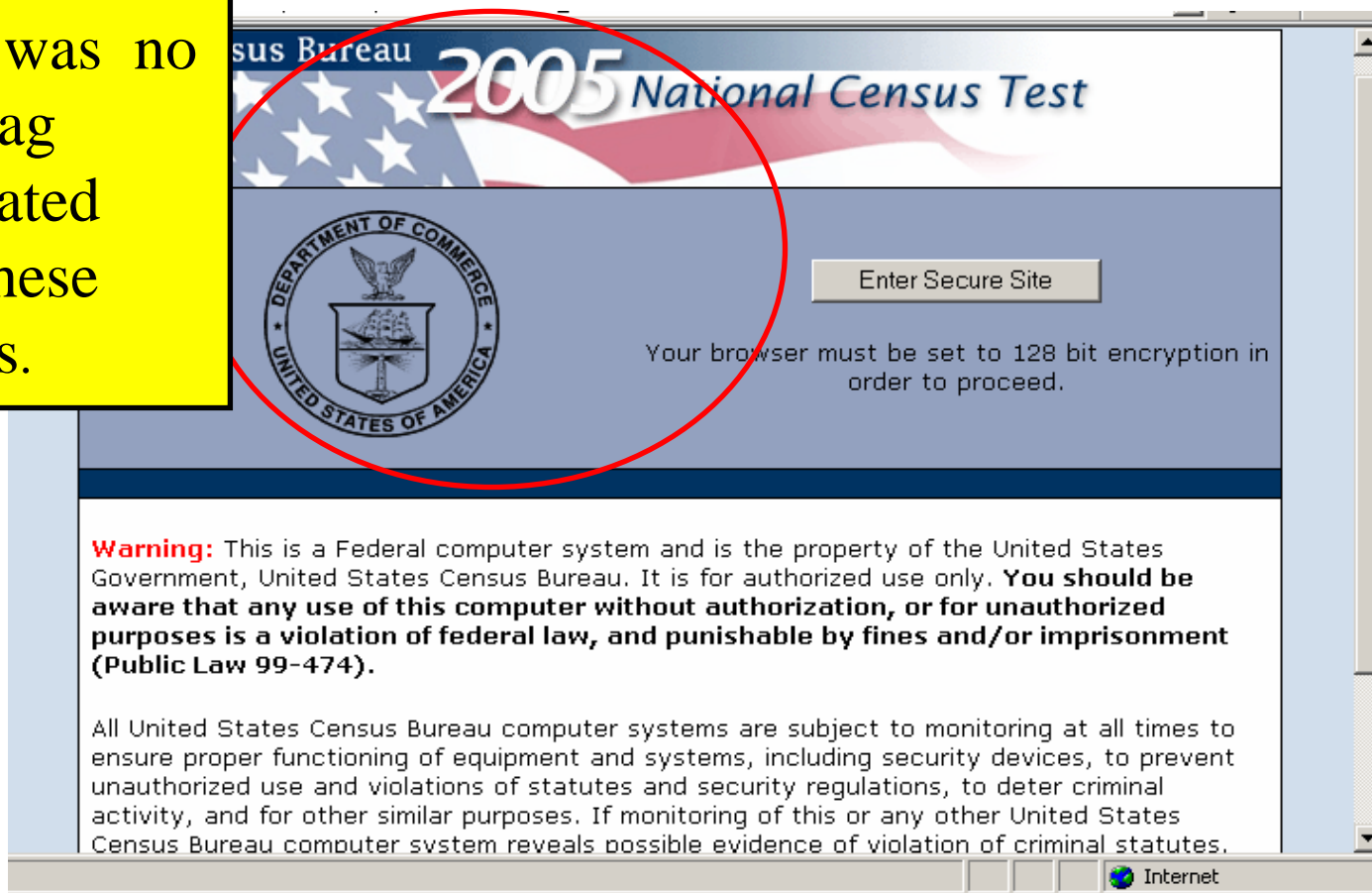
- Developing for usability and accessibility since 2000
 - Rational Unified Process (RUP)
 - Regulations and government standards included in requirements
 - Formal change-control process
 - Participants with visual impairments
 - Lesson learned: 508 compliance does not guarantee usability

Most Recent Development Effort

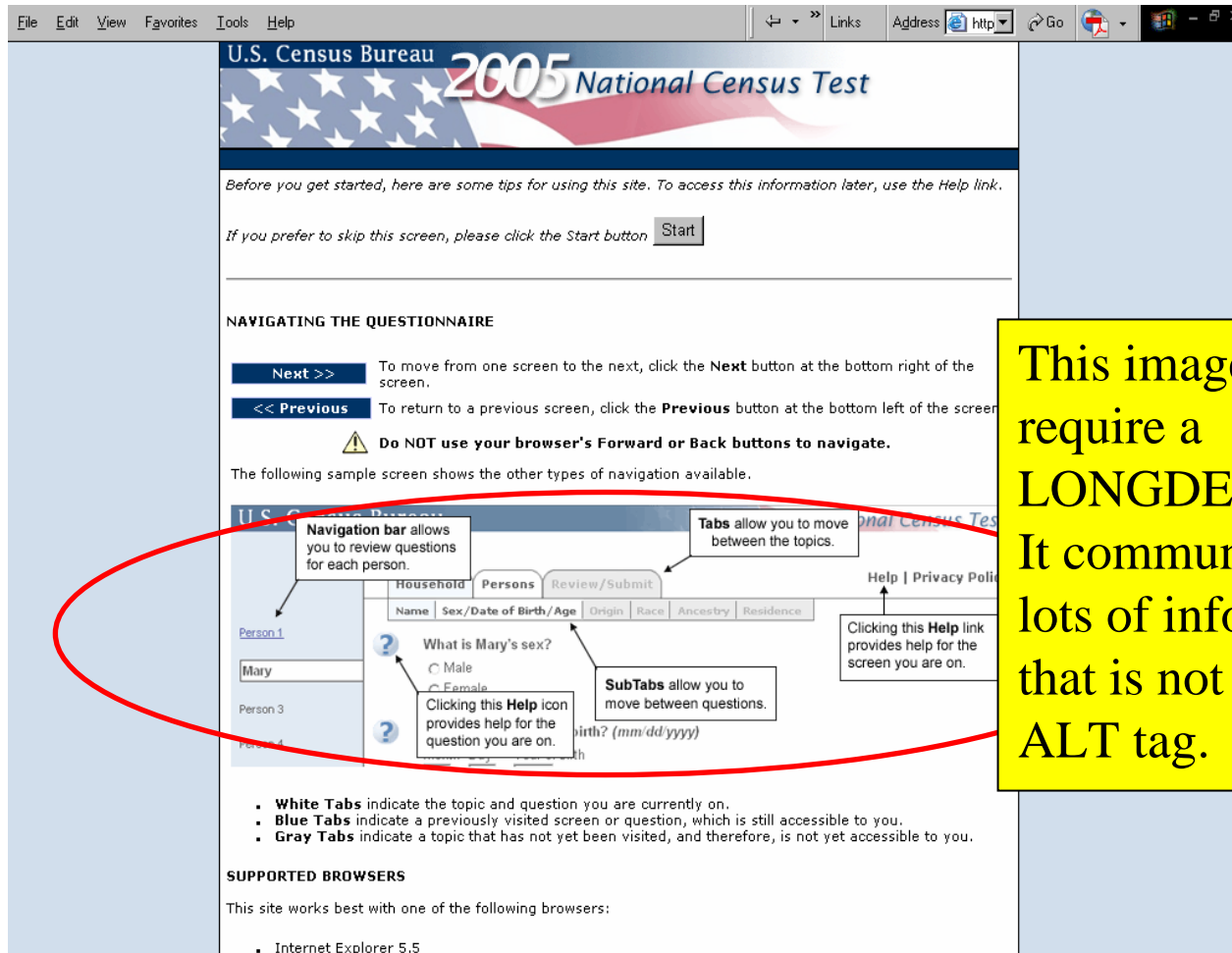
- Developing and testing the prototype Internet applications for the 2005 National Census Test
 - CMM environment → formal requirements documentation...
 - Formal change control
 - Automated tools and visually-impaired participants

Evaluating the 2005 Prototype Internet Form

There was no ALT tag associated with these images.



Evaluating the 2005 Prototype Internet Form



This image may require a LONGDESC tag. It communicates lots of information that is not in the ALT tag.

Evaluating the 2005 Prototype Internet Form

U.S. Census Bureau 2005 National Census Test

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Household | Names | Relationship | Sex/Date of Birth/Age | Origin | Race | Ancestry | Residence | Review/Submit

? **What is each person's sex, date of birth, and age?** *Please report babies as age 0 when the child is less than 1 year old.*

	Sex	Date of Birth (mm/dd/yyyy)	Age (on 09/15/2005)
Joe	<input type="radio"/> Male <input type="radio"/> Female	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> years
Bev	<input type="radio"/> Male <input type="radio"/> Female	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> years
Gwen	<input type="radio"/> Male <input type="radio"/> Female	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> years
Ira	<input type="radio"/> Male <input type="radio"/> Female	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> years

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These data-entry fields did not have explicit labels.

Done Internet

Evaluating the 2005 Prototype Internet Form

- Findings
 - Over 25 unique violations of Federal regulations
- Changes made and re-tested
- All violations resolved

General Recommendations for Integrating Accessibility into Online Form Development Lifecycles

- Include regulations and standards in the documented requirements.
- Conduct early and iterative prototyping and evaluation of alternative designs.
- Track changes through a formal change-control process.
- Replace retrofitting with parallel development of accessible software.