

SightWeaver: A Table Repair Tool

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Motivation

- **Why bother with website accessibility?**
 - **Significant percentage of Internet users are disabled**
 - **Legal liability**
- **Myths about accessibility**
 - **Cost**
 - **Difficulty**
- **Auxillary benefits**
 - **More visitors**
 - **Better website quality**
 - **Improved search engine rankings**
 - **Reduced bandwidth use**

Accessibility

- **W3C Web Accessibility Initiative**
- **Web Content Guidelines**
 - Text alternatives
 - Valid markup
 - Colour, language, abbreviations, etc.
- **Tables**
 - Summaries and captions
 - Headers and header associations, axes
 - Abbreviations
- **Priority Levels**
- **Authoring Tool Guidelines**

Requirements

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 - **User can import existing HTML, CSV, etc documents**
 - **Program will preserve existing table accessibility**
 - **Headings and association will be detected**
 - **User can revise table accessibility and alter if necessary**
 - **Program will output fully accessible XHTML Strict 1.0**
- **Non-functional Requirements**
 - **Cross-platform**
 - **Modularized code**
 - **The program must itself be accessible**

Features

- **Robust (X)HTML parser & tidier, CSV parser**
- **Multiple table display & cell spanning support**
- **Existing accessibility recognition and preservation**
- **Sophisticated header & header association discovery algorithm**
- **Full author control over all accessibility features (captions, headers, etc.)**
- **Valid XHTML Strict 1.0 output**

Demonstration

Conclusion

- **Testing**
 - **Samples with all table features, all supported HTML formats**
 - **Testing output against WCAG**
 - **Program testing for bugs and ATAG**
- **Evaluation**
 - **Did program meet requirements?**
- **What was learnt**
 - **Accessibility**
 - **Swing (and Swing accessibility)**
 - **CVS, L^AT_EX**