

# Automated Web Page Redesign

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# Problem

Many sites that we interact with on a day-to-day basis are extremely inefficient to use, poorly formatted and organized, and are just simply awful, thereby hampering user's ability to understand the information presented.

Solution

Automated website redesign

# Related Work

- Design Principles for Visual Communication (Agrawala, et al.)
- Automated Layout Techniques (Lok and Feiner)
- Principles for Web Page Usability (Nielsen)
- Online resources describing effective web design principles

# Milestones

1. Implement web page parser
2. Identify style guidelines
3. Redesign via Principle #1: Hierarchical Information
4. Redesign via Principle #2: Overall Layout
5. Redesign via Principle #3: Navigation
6. Design/implement UI
7. User Testing
8. Poster
9. Presentation
10. Paper

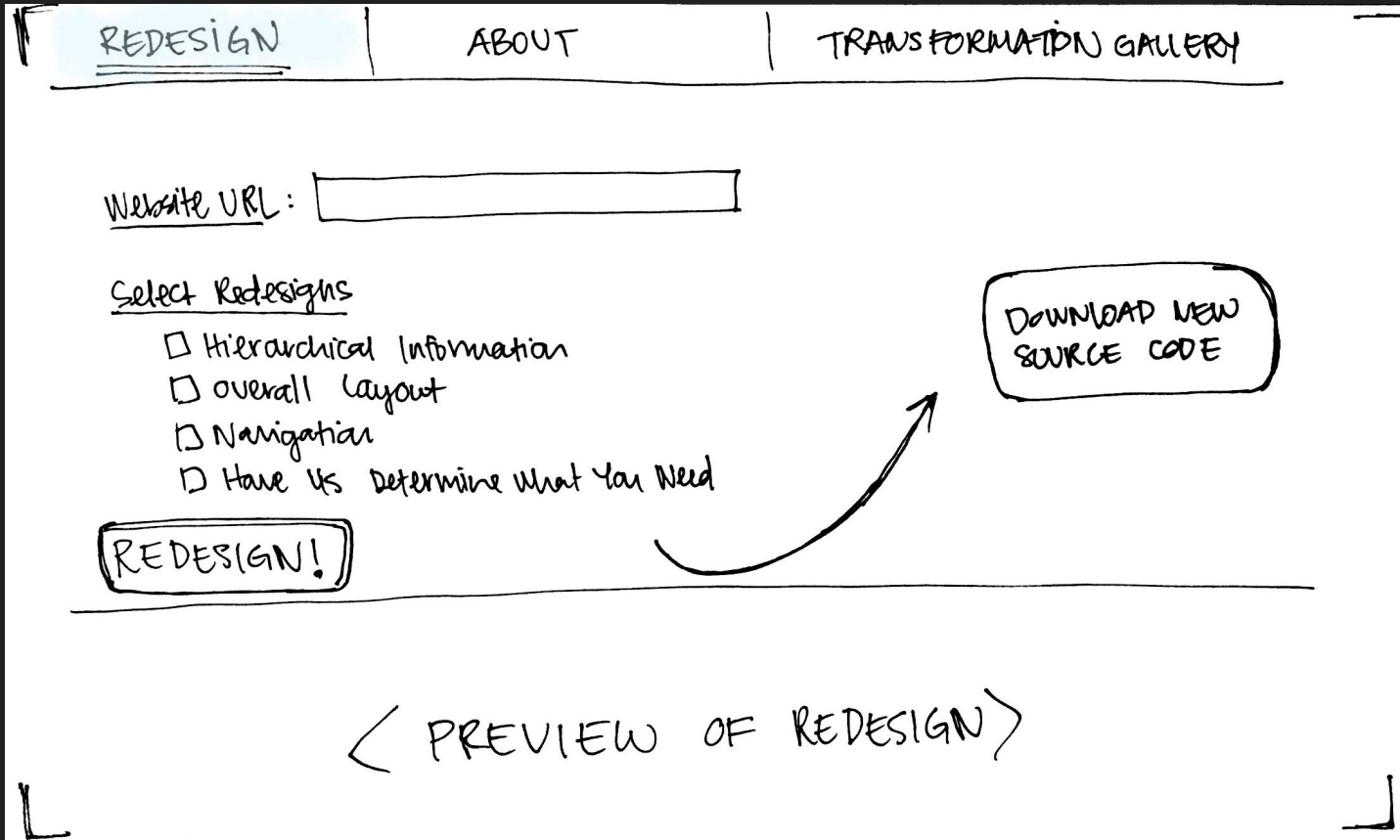
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# Implementation

- Extract semantic information and website content using web page parser
- Implementation of auto-layout techniques (i.e. abstract and spatial constraints)
- Application of style guidelines to transform web page into a better version

# UI Storyboard



# Questions

1. Are there more important principles than the ones we're focusing on? What really bothers you about websites?
2. What other information could you want from either the original or redesigned website?