Why is VisualEditor different?

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MediaWiki has issues

unique

MediaWiki presents some unique problems that nobody else is solving for.
People actually read diffs and care about source formatting: Most document editors (HTML or otherwise) don't care what the source code looks like, e.g. MS Word
Lucha libre

From Wikipedia, the free encyclopedia

For the comic book series, see Lucha Libre (comics).

Lucha libre (Spanish pronunciation: ['luʃa libɾe], meaning "free wrestling") is a term used in Mexico, and other Spanish-speaking countries, for a form of professional wrestling that has developed within those countries. Although the term nowadays refers exclusively to professional wrestling, it was originally used in the same style as the English term "freestyle wrestling" referring to an amateur wrestling style without the restrictions of Greco-Roman wrestling.

Mexican wrestling is characterized by colorful masks, rapid sequences of holds and maneuvers, as well as "high-flying" maneuvers, some of which have been adopted in the United States. The wearing of masks has developed special significance, and matches are sometimes contested in which the loser must permanently remove his mask, which is a wager with a high degree of weight attached. Tag team wrestling is especially prevalent in lucha libre, particularly matches with three-member teams, called trios.

Lucha libre wrestlers are known as luchadores (singular luchador) ("wrestler(s)"). They usually come from extended wrestling families who form their own stables. One such line integrated to the United States professional wrestling scene is Los Guerreros.

Lucha libre has also transcended the language barrier to some extent as evidenced by works such as Los Luchadores, Alina Luche, and Nacho Libre. It also appears in other pop culture such as mainstream advertising. In Canada Telus' Kodo Mobile Post Paid cell service uses a cartoon lucha libre wrestler as its spokesperson/mascot.

A lot of content is generated: Some things can’t be edited directly.
We have high standards

We are solving a lot of hard problems that other people gloss over, because we hold the product to a higher standard of quality.
Clean rich-text copy paste: You can put any HTML in the clipboard so we need some sanitization.
Mobile compatibility: Nobody does cross platform.
In building VisualEditor from scratch, we naturally did a few things differently.
Separate data model instead of the DOM:

- Everyone has access to the DOM. CE doesn't modify it predictably and browser plugins can corrupt it.
- We convert HTML to a linear model, basically a flat JSON array of every character and tag, with precise bi-directional conversion
ContentEditable on a very short leash:
- We need CE for native support
- We only use CE as view and for plain text input via careful observation
- Some places it doesn’t work so well, like selecting focusables (rendering is poor), or multiple selections, so we fake
- Sometimes this leads to it’s own problems like right click
General solutions: Registries
Functionality is linked together using symbolic names, allowing just about anything to be extended by subclassing and registering.

- HTML node handlers - Each node class defines conversion in both directions, helping build a linear model from HTML and vice-versa.
- Paste and drag & drop handlers
- Keyboard shortcuts
- Inspectors/dialogs for editing specific types
General solutions: Alienation

- There are about 10 files containing all the logic to handle images (block/inline), if I delete these files, VE would continue to work with no complaints:
- The insert image would disappear from the toolbar.
- Images would become un-editable aliens, but you could still cleanly edit a document.
- So not only can we add new features, but we can strip feature we don’t want.
Some examples of features this architecture has made possible: *(Live demo)*

- **Generated content:** Templates, images, references
  - Blocks of generated HTML are a single element in the linear model and can be modified and re-generated by changing parameters
- **Drag and drop:** CSV drop to table insertion
  - Linear model is generated from dropped data using MIME types provided by FileTransferHandler (file extensions as a fallback)
  - In this example we respond to onFileLoad, parse the CSV data, build a linear model for a table and then build and resolve the promise with that model data
- **Sequences:** Wikitext helpers and mention feature in flow
  - Events can be fired when specific key sequences are typed
Extensions

(Show VE components of the Math extension)
A general-purpose HTML editor

- Core is separate from MediaWiki
- Depends only on OOjs UI and jQuery
- MIT licensed
Long-term goals

- Real-time collaboration
- History playback
- Visual diff rendering
Gracias

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