**Introduction to Frames**

**What Is a Frame?**

A frame is a division of a browser window which displays a distinct HTML page. A browser window can be divided into multiple frames, with each frame displaying a different HTML page.

In this [example](http://fog.ccsf.edu/~srubin/snap.html), I have taken a screenshot of a sample frame page.

This frame page is actually FOUR HTML pages: one HTML page for the frame document, and three other HTML pages, one page per frame. Frame pages themselves display NO visible content; they merely lay out the frames, determining their dimensions and default pages. All the visible content is displayed with regular HTML pages, one page per frame.

**What Are Frames Used For?**

Frames are used to help users easily find their way through tangled or difficult-to-navigate content (i.e. multiple chapters in an online book with numerous hyper-referenced footnotes). Frames provide a means for a persistent navigation strip to be available to a user at all times, while providing additional areas for display of content, whether primary or ancillary.

Having said this, it is easiest to explain frames by showing you an example. Here, I have created a demonstration piece ([Frames Example](http://fog.ccsf.edu/~srubin/framain.html)) which exhibits primary frame characteristics. Frames can be useful when providing for some sort of persistent element, such as a navigation strip (as seen in the above example) or a flash/shockwave movie.

Here is an [example](http://fog.ccsf.cc.ca.us/~srubin/h7samp07.htm) of a web page using frames.

That said, frames are much maligned, by developers and users alike. Although frames sites have failings, many of these failings are caused by poor design, not by the frames themselves.

**Why Do People Hate Frames?**

Sub-pages within a frameset may not be bookmarked, a feature which many users find annoying. This is probably the number one complaint with users.

Due to the multiplicity of pages involved in a single frame site, the number of simultaneous hits received by a server for the first frame page is greatly increased, causing problems for sites with heavy usage. With a three-frame frames page, for instance, the server receives four hits, instead of one hit as with a regular HTML page, quadrupling traffic for that first page; subsequent pages called from within the frameset, of course, behave normally. This is only a problem with high-traffic web sites.

Search engines tend to catalog sub-pages within a frame site, bringing up sub-pages for users without a frameset or any context. There is a workaround for this problem, but it is an awkward one.

Many inexperienced web programmers (and some experienced ones) use frames to "keep" or "trap" their users within the confines of their frameset; this has become one of the biggest evils in contemporary web design. Marketing people, especially, wish to "brand" the web within a frame containing their company logo, forcing users to surf within this restricted web browser window space from which there is no escape. As users surf the web, they encounter more and more of these "branding" framesets, which they cannot erase or remove, until they have accumulated so many framesets in their browser window that the usable space left for browsing is the size of a postage stamp, forcing them to quit out of their browser altogether. This practice has become such a problem that many major web services will refuse to list or link to your web site if you use "branding" or unerasable framesets. Any link which leads out of your web site MUST erase any framesets in use.

**Conclusion**

Frames are part of the official HTML specifications. Frames have several technical drawbacks, however, and may be easily misused. One should use frames only when absolutely necessary and avoid using them whenever possible. I have observed that frames are rarely used anymore for developing web pages and with that in mind, I have omitted a full discussion of frames from this course except for a discussion of internal frames.