



NewMediaArts
Kapi'olani Community College, University of Hawai'i

INTERFACE PROGRAMMING 1

CSS FOR LAYOUT

SEPARATING STYLE FROM CONTENT

LESSON: CSS POSITIONING

- » Static vs. Absolute vs. Relative
- » Floats
- » Margins
- » Grid Systems

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ACCORDING TO THE CSS2 SPEC, AN ABSOLUTE-POSITIONED ELEMENT IS POSITIONED ACCORDING TO ITS CONTAINING BLOCK. ANY ELEMENT IS CONSIDERED “POSITIONED” IF IT HAS A POSITION VALUE OF RELATIVE, ABSOLUTE, OR FIXED (ANYTHING OTHER THAN STATIC). “STATIC” IS ONE OF THE POSSIBLE VALUES FOR THE POSITION PROPERTY. IT’S ALSO THE DEFAULT VALUE FOR ANY ELEMENT IF NO OTHER POSITION IS SPECIFIED. STATIC BASICALLY MEANS AN ELEMENT’S POSITION IS NOT MODIFIED, AND THE ELEMENT WILL APPEAR IN THE EXPECTED NORMAL FLOW OF THE DOCUMENT IN CONTEXT WITH OTHER SIBLING ELEMENTS AND CONTAINING BLOCKS.*

<http://www.stopdesign.com/articles/absolute/>

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STATIC VS. ABSOLUTE VS. RELATIVE POSITIONING

- » what is the difference b/w the 3?
- » when do we use one vs. another?
 - » We generally use static positioning (the default). It honors and preserves normal flow.
 - » We may sometimes use absolute positioning when the majority or all of the content has fixed sizes and positions on the page (ie. known “fixed height” situations within a design).
 - » *WARNING: Absolute positioning breaks normal flow.*
 - » We generally use a combination of static and relative positioning when content is stacked (i.e. normal flow) will vary in size and position (i.e. varying height) based upon the content. In other words, we use static and relative positioning when the content is variable and the layout needs to be flexible enough to adapt to the content. For instance, if the length of the text may change and the page length may grow, then we need that particular block level element to be either static or relative.
 - » Only use relative positioning on an element *when you want to position other elements inside of it*, and you want it to be its parent (a new X,Y of 0,0). *Do not use relative positioning on an element to position itself.*

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PRESERVING NORMAL FLOW

- » Always maintain (or return to, when broken) Normal Flow
 - » You can use a combination of static, relative, and absolute positioned elements, so long as you understand the impact that each has on its neighbors and ultimately return back to normal flow.

LESSON ON ABSOLUTE POSITIONING

- » When we use absolute positioning we break normal flow.
 - » *This is not always a recommended practice – so be careful and use cautiously (and sparingly).*
 - » Keep in mind that this is an exercise for understanding the power of absolute positioning.

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WHEN TO *PRESERVE NORMAL FLOW* (USE STATIC/RELATIVE POSITIONING)?

You should try to preserve normal flow most of the time.

By default all `<div>`'s are set to static.

Most `<div>` tags, especially:

Container

Header

Main body/content sections

Footer

We often use a *relative* positioning value on a parent `<div>` when we need to absolutely position a nested div according to its immediate parent. In this case the parent div would need to be set to “relative.”

WHEN TO *BREAK NORMAL FLOW* (USE ABSOLUTE POSITIONING)?

Sparingly (or never, if not needed).

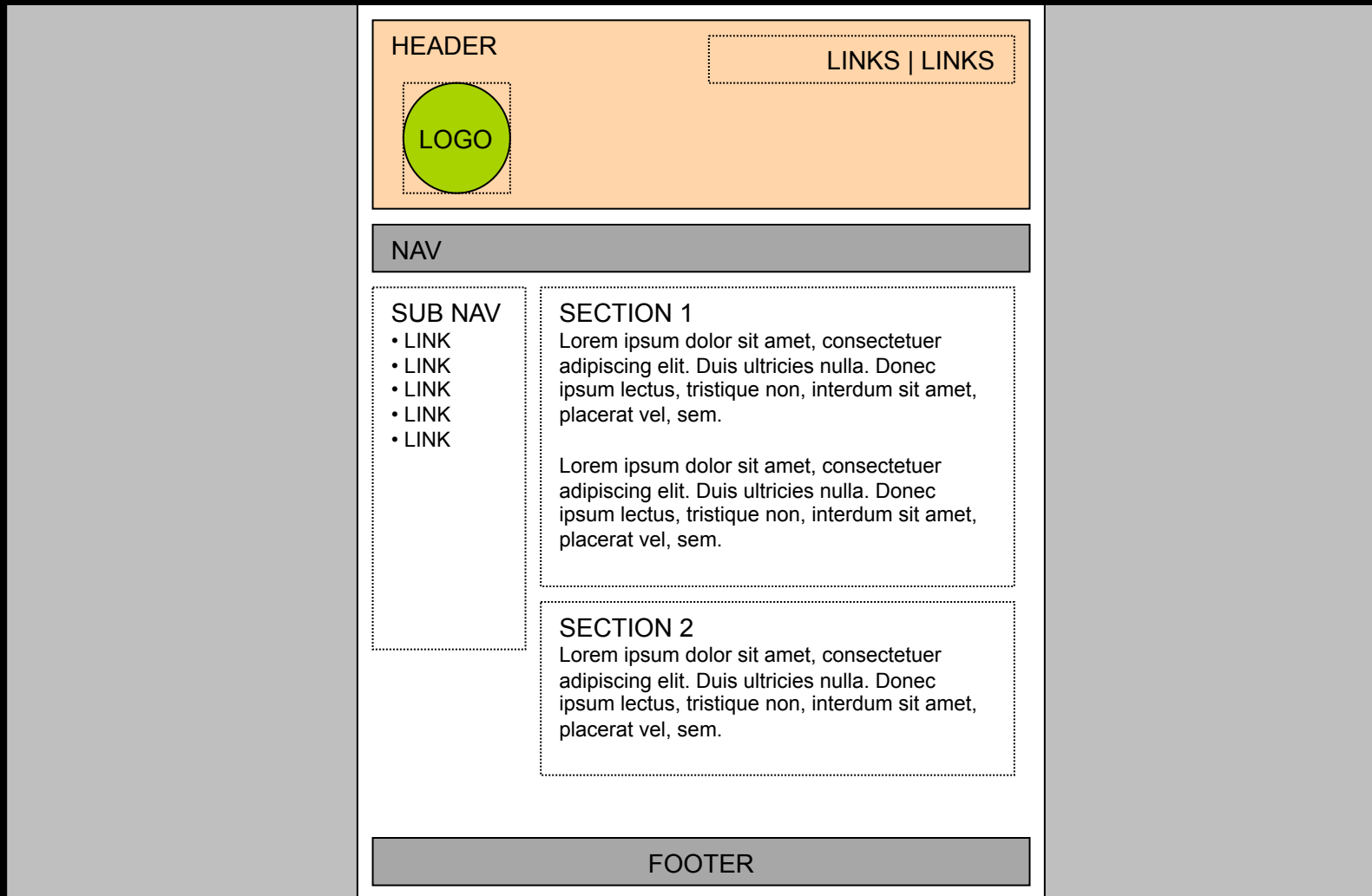
Only with designs within fixed height areas.

Only when a `<div>` needs to be placed at an exact location

A common use is to use absolute positioning with nested `<div>`'s, or `<div>`'s that are inside of another. For example: the location of a logo inside of a header. The header will have a *fixed height*, thus enabling the logo to be positioned inside of it using absolute positioning.

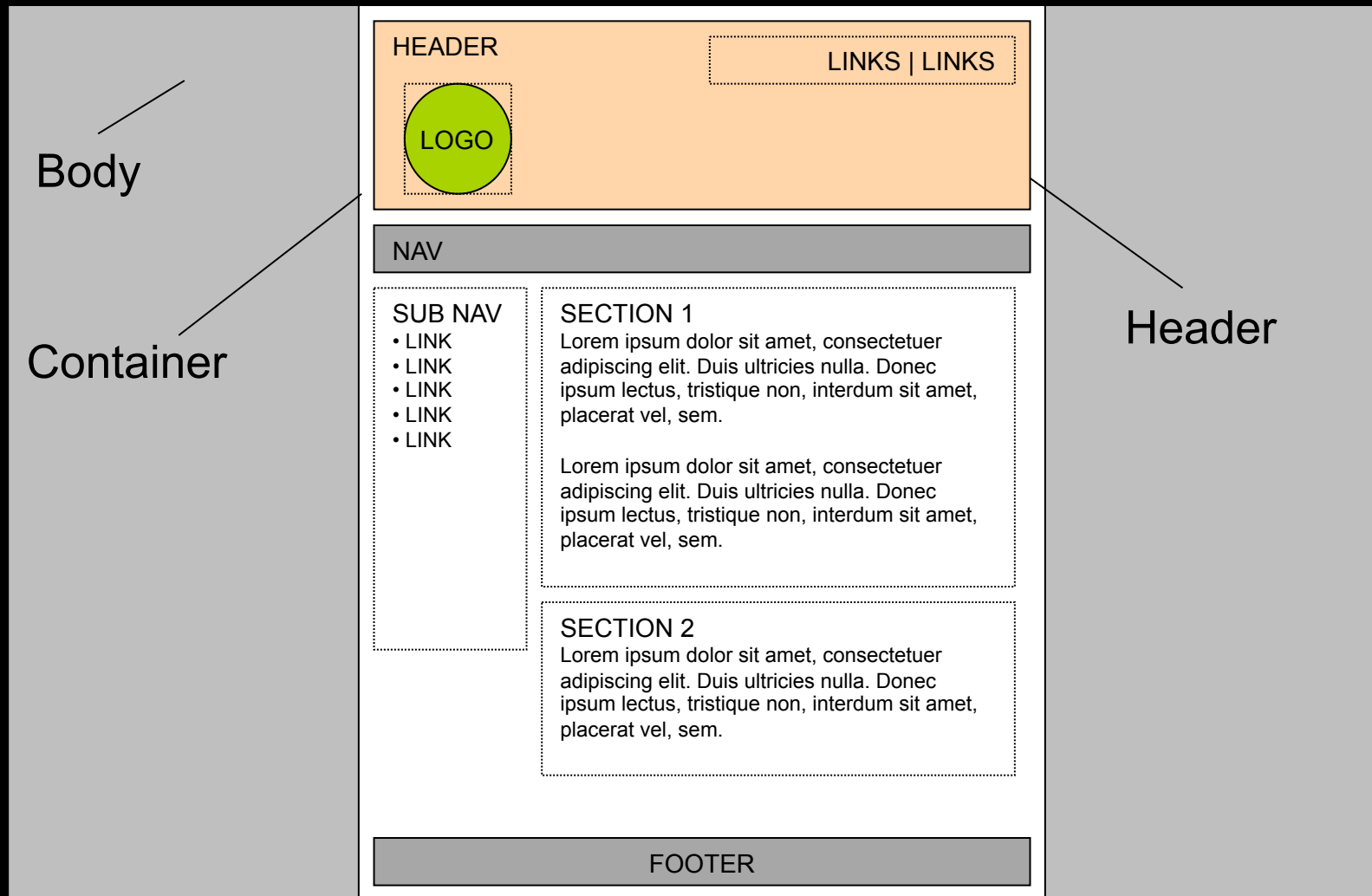
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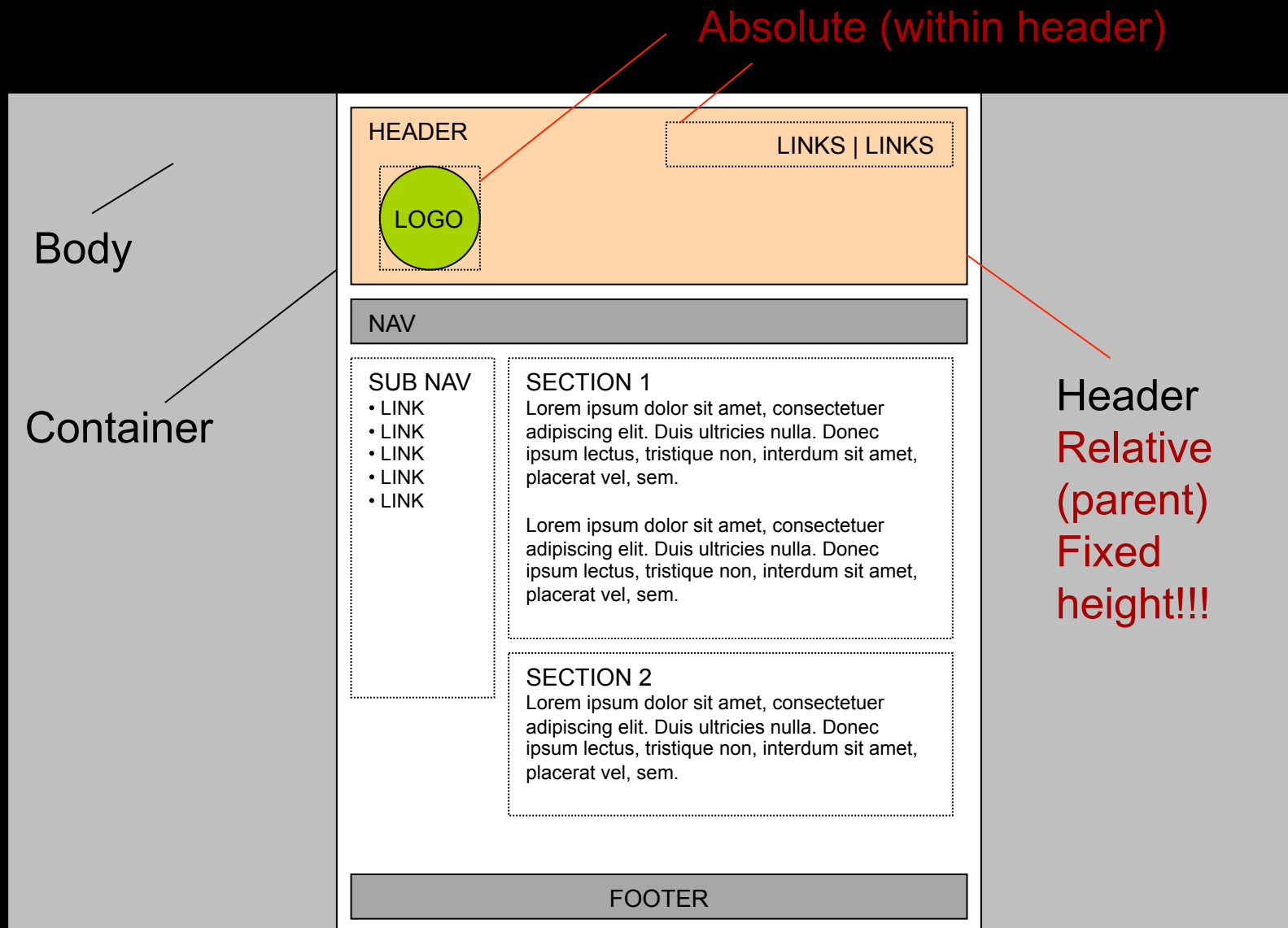
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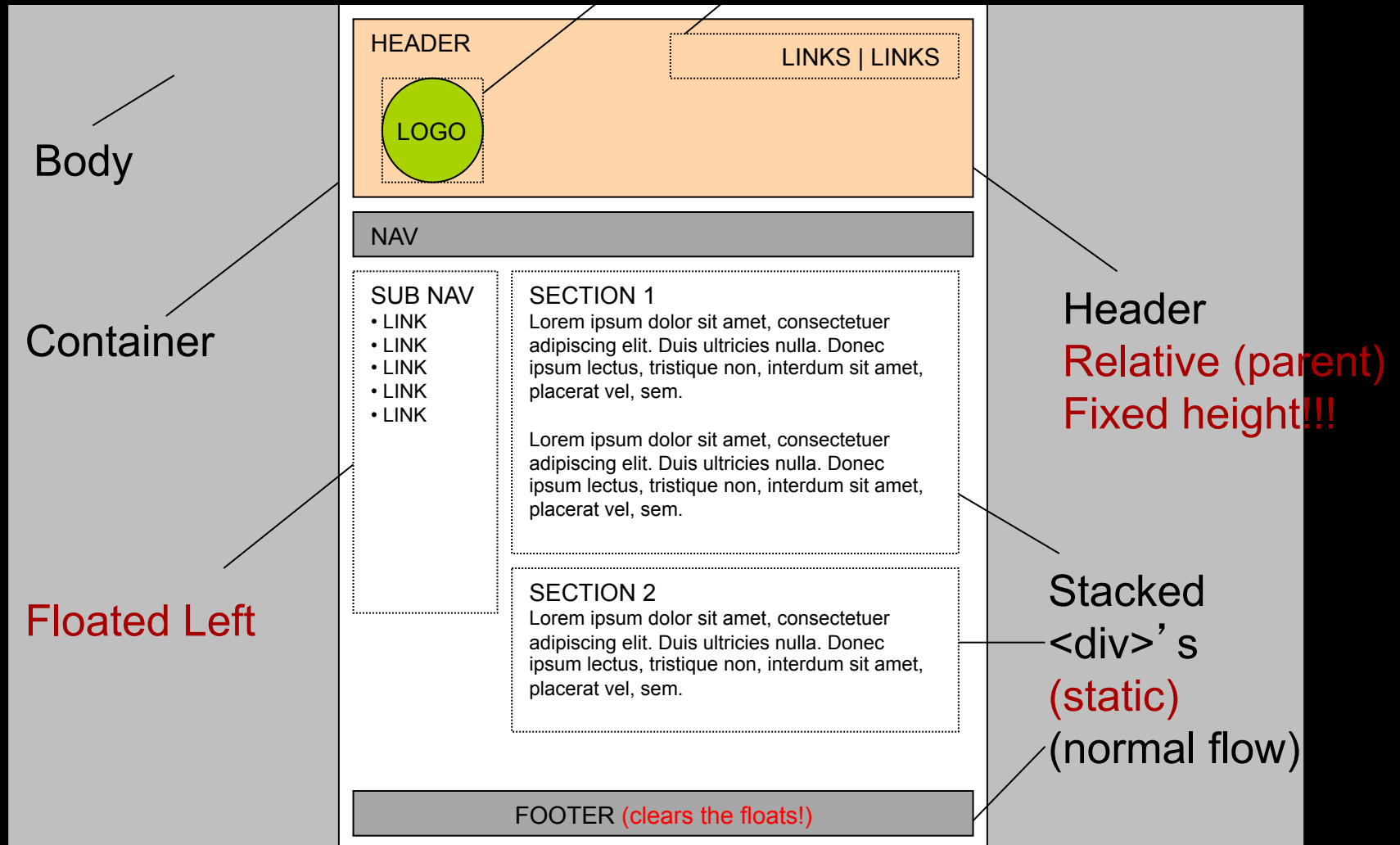
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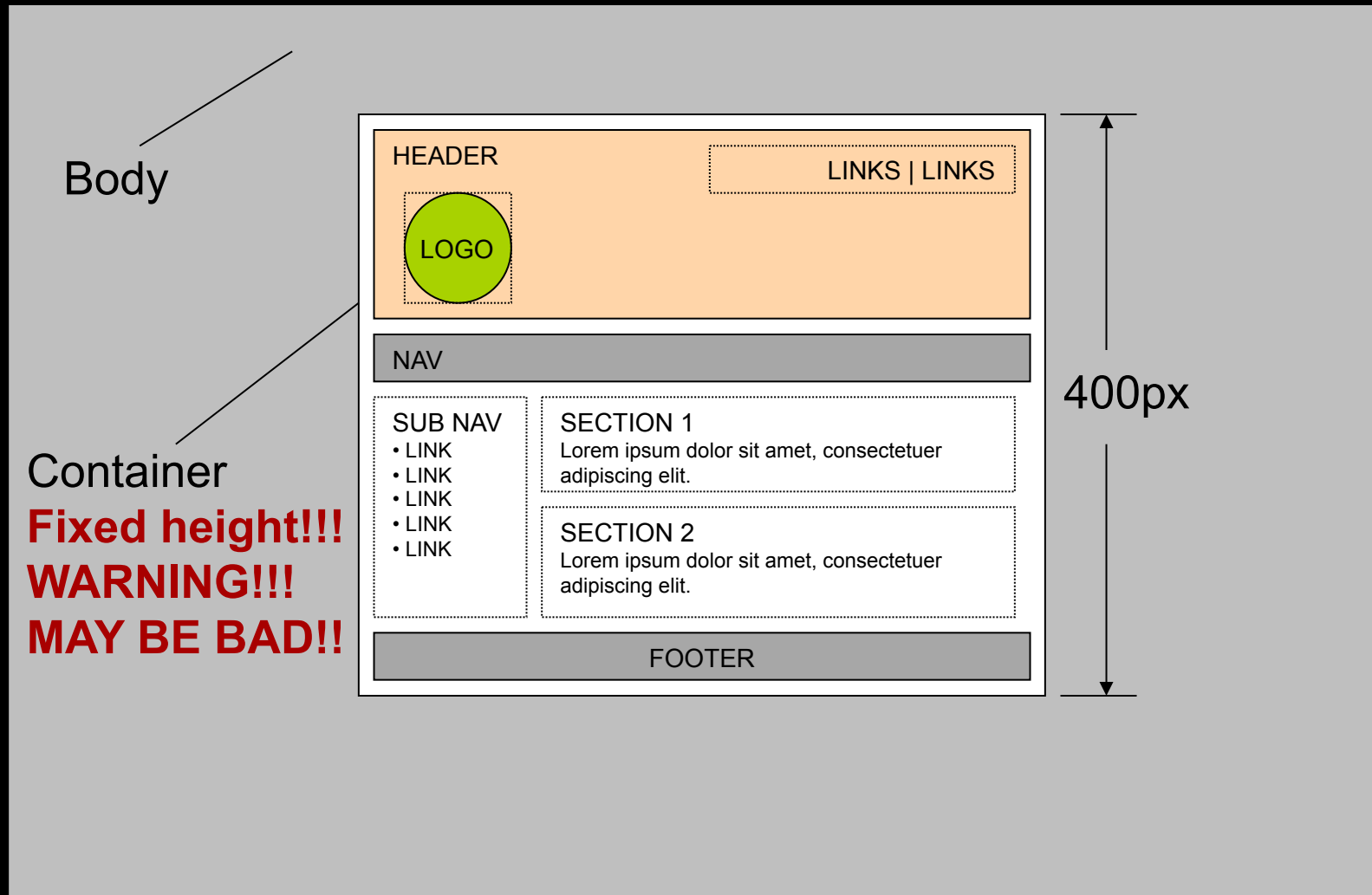
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Absolute (within header)



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