There will be three primary site formats:

* MAIN PAGE, or “Index”;
* INDIVIDUAL HIKE SITE – without Google map indicating hike taken;
* INDIVIDUAL HIKE SITE – with Google map indicating hike taken.

WEBSITE DIRECTORY STRUCTURE:

The website implementation will be placed into a single top-level directory, (option: named “ktesa”)

The following sub-directories are defined:

* *gpsv*: contains GPSVinput.tsv files for hikes with Google geo-maps; each file shall have a name indicating the corresponding hike. These will be used by javascript to extract Flickr names, descriptions, dates, etc. for photos used on site pages.
* *images*: any images not provided by the Flickr website, e.g.
  + *main page picture (Tom & Ken on Deception Peak)*
  + .jpg maps for things other than google geo-maps
  + .jpg Elevation charts
  + icons (.jpg & .png)
* *scripts*: all site javascript files, including jQuery library
* *json*: holds json data (typically converted GPX files)
* *pages*: this directory holds all the ‘pages’ html code (but not index.html, the main page)
* *styles*: all site style sheets;
* *maps*: all .html geo-map files with names indicating the corresponding hike and whether or not track/marker lists are provided
* *tools*: place where tools which help in the process of making site pages are placed.
* *docs*: location for all relevant site and process documentation
* *test*: contains test tools and notes for regression testing

USER EXPERIENCE:

When the user first encounters the website, a modal window will appear with the site banner and minimum information instructing the user about the site and how to interact with it. After closing the modal window, the screen will essentially be filled with a Google map, including the items listed below. Below the map, when scrolled, the user will see a table of hikes listing all of the sites indicated on the map. The table structure is also detailed below. Below the table will be other disclaimers, notes, and a means of contacting the authors.

MAP:

* Initial map type selection: TERRAIN
* Initial zoom level set to view the entire state of New Mexico
* Markers locating the site hikes and National Parks Visitor Centers
* Info windows when markers are clicked, presenting hike data (further specified later in this document)
* GPX tracks, where available, of hikes taken

TABLE:

* Location of nearest city or town
* Popular name of hike
* “WOW” factor – quick indicator of outstanding feature(s)
* A link to the hike web page (detailed later)
* The round trip distance (initially in miles) from the trailhead
* The overall elevation change
* Relative difficulty of the hike (exertion, steepness, trail conditions, etc.)
* Exposure to sun
* A link to directions
* A link to the corresponding Flickr album where hike photos reside

MAIN PAGE BEHAVIORS:

* The table will have sort capability when a column header is clicked
* The sort will invert with each successive click on the column header
* The row currently indicated by the cursor will be highlighted
* A conversion button will allow switching between English and Metric units
* The map will have pan and zoom capability, with standard google zoom panel
* The map will have full page mode using standard google control
* The map will have a drop-down panel for selecting map type
* A geolocation icon, of different style than the markers, will automatically appear, if geolocation is enabled by the user.
* Colors may be used to differentiate between types of markers (Visitor Center, trailheads that overlap, other)
* Colors may be used to differentiate overlapping trails

MAIN PAGE HTML

The following sections will appear in the order given:

The <head> element shall contain (at a minimum) the following:

1. Window frame title or tab title: New Mexico Hikes

a. <title>New Mexico Hikes</title>

b . The following <meta> information shall be supplied:

* *charset*=”utf-8”
* *name=”*language” *content=*”EN”
* *name*=”description” *content* =”Listing of hikes the authors have undertaken in New Mexico”
* *name*=”author” *content*=”Tom Sandberg and Ken Cowles”
* *name*=”robots” *content*=”nofollow”

1. Links to style sheets, including 960-grid style: *960\_16\_col.*css; main page style: *main.css; ppages.css* (pages with no geomaps*); wppages.css* (pages w/geomaps); *subindx.css* (pages that are indices of multiple hikes at a park/site)

A <div> element for the modal window:

1. Logo (or Image) and Banner, where the <p> element containing the banner has *id*=”banner”;
2. A <div> element containing introductory text
3. A <div> element briefly describing important features
4. A <div> element describing map/table behavior
5. A <div> element with license attribution for icons used
6. A “close” button (implementation in javascript)

The <body> element shall contain the following:

1. A container <div> to control page opacity while modal window is up
2. An empty <div id=”map”> to contain the NM google map;
   1. The google map will be a standard google map produced from the google maps API.
   2. The map will display markers (small colored pins) denoting the map location for the corresponding hike.
   3. Hikes with very-close or overlaying trailheads will be spread out on the map but connected to the trailhead by (blue) lines. In order to reduce map congestion, these lines will only be visible when sufficiently zoomed in. Markers for these close-together hikes will be of a different color than the other standard hikes.
   4. When a location has a Visitor Center (e.g. Chaco Canyon), that location will be denoted by yet a different colored marker.
   5. When the user pans or zooms, the Table of Hikes will appear below the map, and will only list hikes visible in the current viewport of the google map. Below the map will appear a “button” to convert between English and Metric units.
   6. Any marker (above) clicked will display an info window with hike name, highlights and a link to the web page
3. A <div id=”usrTbl”> to hold the table of hikes corresponding to the viewport of the google map;
   1. The table will list hikes visible in the current google maps viewport.
   2. The table will sort alphabetically or numerically when a column header is clicked. The sort will invert with each further click.
   3. The column headers will be highlighted for visibility, and the cursor will change to indicate an active location.
   4. When the mouse is placed in the table, the corresponding row will be highlighted.
4. The entire list of hikes, in table format, in a <div id=”wholeTbl”>
5. An div with id=”disclaimers” describing caveats
6. A <p> element describing link behavior to pages.
7. A <p> element with *id*=”closer” to serve as a footer with contact information

HIKE WITHOUT GOOGLE GEOMAP :

1. The <head> element shall contain the following:
   1. <title>“SHORT HIKE REF HERE”</title>
   2. Meta info as in the index, except for the description which will reference the featured hike.
   3. Links to style sheets for “partial” hike sites: *ppages.css*
2. The page logo (low opacity outdoor scene with name of hike and logo: “Hike New Mexico” “w/Tom & Ken” (see HIKE WITH GOOGLE GEOMAP, below)
3. Summary table of hike features
4. The body will be the same as below (HIKE WITH GOOGLE GEOMAP) except in lieu of a geomap, a .jpg of an online map may appear.

HIKE WITH GOOGLE GEOMAP:

1. The <head> element shall contain the following:
   1. <title>“SHORT HIKE REF HERE”</title>
   2. Meta info as in the index, except for the description, which will reference the featured hike.
   3. Links to style sheets for “whole” hike sites: *wpages.css*
2. The body element shall contain the following:
   1. A div element with a *class*=”container\_16 clearfix” to define body’s containing box characteristics (in CSS) using 960\_16\_col grid system.
   2. The page logo (low opacity outdoor scene with the name of hike and logo: “Hike New Mexico” “w/Tom & Ken”
   3. Summary table of hike features
   4. The rows of pictures, w/captions, derived by the page creation tools and pasted into the html. This will consist of one or more div’s with id=”rowX”, where X=row no., followed by a div containing class=”captionList”, followed by a div containing class=”lnkList” – this containing links to the Flickr album for the corresponding hike. The caption list will include a date in the form Mon day, year corresponding to the picture-taken date.
   5. The final row will contain an iframe with the src html for the geomap of the hike, followed by an elevation chart, if available. A link will appear below the map to open a full-size page of the map and hike track and photo markers.
   6. A <p> element with an *id*=”hikeInfo” which will provide the author’s description and other attributes about the hike, including references to other books or websites pertinent to the hike.