

Holly Harmon  
CS 419  
Wolford  
OSUID: 932456676

## Assignment 2: Dynamic Pages

**URL:** <http://dynamicpage-holly.appspot.com/>

**Site Description:** My site keeps track of bike workouts/trips. First the user must choose whether they were ride a real bike on the street or a stationary workout bike. Then they can enter the date of the ride, how many minutes they rode, how far they went, and the level (for use with a stationary bike when appropriate). The bike type is a mandatory radio button, so that field cannot be left blank. The date is a date input field. The minutes and distance would typically be integer values, but are set as string values, so the user can actually enter whatever they would like. The distance is default set to miles and the kilometers checkbox can be clicked if the user would rather record kilometers than miles. The level can be saved as none (for riding a regular bike) or as an integer level (it goes 1 through 12, because my personal stationary bike goes up to level 12). Each entry can be edited by clicking on the edit link at the end of its field.

### Test Plan:

Input: All fields left blank/at default

Expected result: A new entry should be added with blank date and time fields, the distance field should only say "mi", bike should be "Road", and the level should be N/A. (All fields set to empty or default).

Input: All fields left blank/at default, but set bike type to "Stationary Bike"

Expected result: Everything should be the same as the above result, but bike field should read "Stationary"

Input: Date set to a year ago (1/18/2014)

Expected result: Should set date correctly, there is no limit on dates past or future.

Input: Date set to incorrect value (ex: 31/33/2014)

Expected result: The date input field should not allow the user to enter invalid month or day input

Input: Minute and distance fields set to very large numbers (ex: 2453259785465985)

Expected result: Input should be processed normally and appear readable in the data table

Input: Distance field set to 5 with the "ki" box checked

Expected result: The distance entry in the table should read "5 ki"

Input: Clicking the “edit” link next to an entry

Expected result: Should redirect to the /edit page with all of the input fields prepopulated with the data of that entity

Input: Making no changes to the entry from above and clicking the “Update” button.

Expected result: Should redirect to a page showing the entry’s information in original, unchanged form.

Input: Clicking the “Done Editing” link below the entry table from the page in the above test.

Expected result: Should redirect back to the main site page and the entry in the table should appear unchanged.

Input: Add a new entry with bike: Road Bike date: 01/01/2015, time: 0, distance: 0, “ki” unchecked, level: none. Once it has been added, click the edit link for the entry just created.

Expected result: Should create an entry with date: 2015-01-01, time: 0, distance: 0 mi, bike: Road, and level: N/A. Clicking the edit link should redirect to the edit page with the fields prepopulated with the data from above.

Input: After completing the above test while still on the edit page, input minutes: 60, distance: 10, and check the “ki” box. Click the “Update” button.

Expected result: Upon redirect to the edit display page, the entry should read date: 2015-01-01, time: 60, distance: 10 ki, bike: Road, and level: N/A.

Input: After the above steps, click the “Done Editing” link to return to the man page.

Expected result: Upon redirect to the main page, the entry should still read date: 2015-01-01, time: 60, distance: 10 ki, bike: Road, and level: N/A.

**Test Results:** All of the tests had the expected result.

Note: I use Google Chrome as my regular browser and trying my site on Firefox I noticed some layout errors (the form box is squished over to the right next to the header). I’m not very familiar with adapting sites so that they work correctly on different browsers, so that is definitely something I’ll need to learn more about and work on.

**Templating:** The templating system I used was Jinja2. I had separate html files for the main page (index.html), the edit page (edit.html) and the page that displays the edited entry (edit\_display.html). The main page passes all of the datastore entities with the appropriate parent key to the template being rendered. The html page can then populate the appropriate values. Index.html uses the entry values passed to it to populate the table with all of the

appropriate data. The editing page only needs the data from one entity, so the template for that page is only passed a single entry/entity.

**What I Would Change:** There are quite a few things I would change if I did this page over again. It does not have any input verification, which I chose to leave out since I wanted it to be more of a simple tool that users could use to enter whatever they like. However, if I were to use the data for any other purpose (for example, showing progress or in some way calculating a user's data) it would be better to keep integers as integers and save the date data in a more date appropriate variable form instead of just a string. The data table is sorted by date, so having the date be a mandatory field or setting it to the current date as a default would be a good idea.

The other major change I would make is to have data for separate users. Right now it shows all entered data on one table, but it would be more useful if the data could be entered and saved for more than one user. It would be very simple to assign different parent keys to different users and wouldn't even require any signing in feature (although that would also be a good addition). As I'm writing this I also realized I didn't provide a way to delete unwanted entries.