

## Homework Assignment 2: DD the Debug Dragon

**Due Date:** Wed. April 11th: 11pm

### Overview

This assignment tests your understanding of HTML and advanced CSS style and layouts. You will create a webpage using the provided `profile.html` and the specification below. We have also provided three alternative screenshots (varying in screen size and device type) to use as references while developing the webpage.

### Learning Objectives

- Continue to practice all of the learning objectives from Homework 1, including:
  - Carefully reading a specification.
  - Choosing semantically appropriate HTML tags to set the structure of a page and appropriate CSS rules to style a page.
  - Separating the content from the presentation with your HTML and CSS.
  - Reducing redundancy in your CSS while producing expected output.
  - Producing quality readable and maintainable code.
- Use CSS positioning and Flexbox to determine page layout.
- Use additional CSS properties to style a webpage.
- Use ids and classes appropriately.
- Use CSS context and/or psuedo selectors to reduce redundancy in your code.

### Files to Submit

1. `profile.html`: The file containing the HTML for the profile page of DD the Debug Dragon.
2. `profile.css`: The stylesheet for `profile.html`.

### Files Provided

1. `profile.html`: A skeleton HTML file of the webpage you are required to create.
2. `profile-screenshot.png`: A sample screenshot of the website you are creating. This was taken on a 15" Macbook Pro using the Chrome browser.
3. `profile-screenshot-large.png`: Another screenshot of the website, taken on a 27" Macbook Pro screen (Chrome).
4. `profile-screenshot-mobile.png`: Another screenshot of the website, taken on an iPhone6 (Chrome).

**Important note:** You will not be able to reproduce these screenshots pixel-by-pixel, as the images depend on the machine, screen resolution, browser, etc.

### Images Provided

Most of the images needed for this assignment are included in the HTML for you. Other images you'll need are:

- <https://webster.cs.washington.edu/images/hw02/background.png>
- <https://webster.cs.washington.edu/images/hw02/banner.png>
- <https://webster.cs.washington.edu/images/hw02/clouds.png>

## External Requirements

Your webpage *should match the overall appearance of the provided screenshots* and it *must match the appearance specified in this document*. We do not expect you to produce a pixel-perfect page that exactly matches the expected output image. However, your page should follow the specific style guidelines specified in this document and match the look, layout, and behavior shown here as closely as possible.

We have provided you with a `profile.html` file that contains the page contents, but no semantic tags or styles. You are to modify the provided file to use HTML5 semantic tags and add id and class attributes where appropriate. You also must replace the two “Add your own endorsement here!” reviews with appropriate (PG-13) text of your choice. You should not modify the links to the images in the `img` tags (these already contain correct links to the image sources).

## Overall HTML Page and Body

- The title of the webpage should be “DD the Debug Dragon”.
- The background of the entire page (`background.png`) should be fixed to and repeated across the page.
- The font for text content on the page should be the Google Font “Bree Serif”, otherwise defaulting to the serif font available on the user’s machine.
- There should be a centered main section which contains all the content of the page (a top banner, various content blocks, and a footer). It should be 80% wide with a white background. It should have a 3% margin on both the top and bottom. The main section of the page should have a horizontal shadow of 0px, a vertical shadow of 10px, a blur-radius of 10px, a spread-radius of 10px, and a color that is black with an alpha channel of .2.

## Banner

- You are to use relative and absolute positioning to achieve the layout as described below and as seen in the screenshot. The “Banner” section of the webpage is denoted in the provided `profile.html` using comments. Inside this section you will find an image tag inside a block tag inside a block tag. Do NOT change this arrangement of tags, instead use proper CSS positioning to achieve the desired layout below.

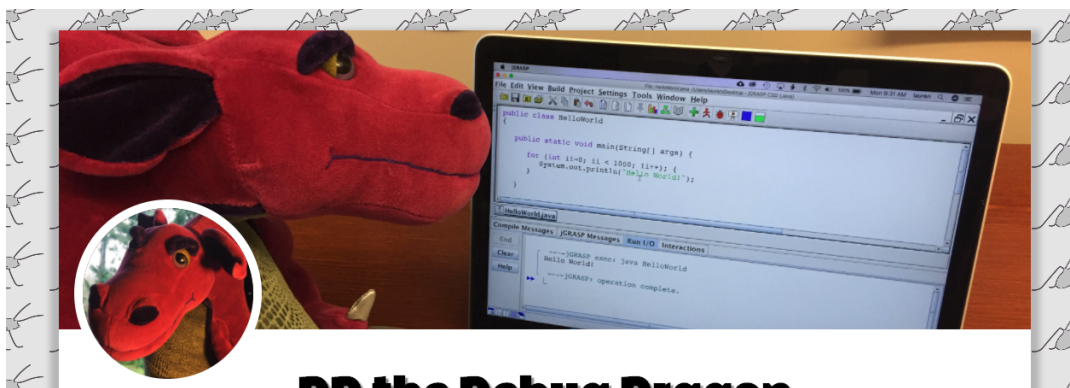


Figure 1: DD profile banner


- The outer container should have a height of 350px with a non-repeating centered background image, `banner.png`. The background should be sized at 100% relative to the size of the container.
- The inner container should have its left position set to 2% of its size.
- The image inside the inner container (`profile.png`) should have a solid white border of 10px width. This image should be styled such that it renders as a circle with height/width of 200px. It should also have a top margin of 90% and a left margin of -2%.

## DD the Debug Dragon

Many a programmer have heard of [Rubber Duck Debugging](#). But they do not know the invincible power of a Debug Dragon.

[Dragons](#) are known to many cultures as large, flying, snake-like creatures that breath fire. Most cultures rate these mythical creatures as above average intelligence, making them especially good at helping to debug those tough problems in your code.

Real Name	Royal Renaissance Dante Dragon by <a href="#">Manhattan Toy Company</a>
Birthdate/"Gotcha Day"	Born © 2001 in China, but found at a rummage sale in Seattle, WA in March of 2012.
Powers	As Douglas Adams once said "One is never alone with a rubber duck." DD, the Debug Dragon is a patient listener, able to help you solve your debugging woes. Unlike a rubber duck, DD is also soft and cuddly, doubling as a pillow for those occasional times you need to just close your eyes for a 5 minute power nap.
Stats	Real name:Dante Dragon (Light Purple) Preferred pronouns:They/Them Size:12" x 14" x 12" Weight:2 lbs
Siblings	<ul style="list-style-type: none"> <li>• Francesca (Dark Purple)</li> <li>• Bartholomew (Light Green)</li> <li>• Marcello (Blue)</li> <li>• Cordelia (Dark Green)</li> <li>• Guinevier (Gold)</li> </ul>



### ENDORSEMENTS

I remember the first time I met DD the Debug Dragon. DD looked so fierce as they stared at the code with me. I slowly explained everything and they listened to my every word. The pauses were uncomfortable, but then I SAW it. I saw the error. DD saved me hours of anguish.

*Sofia H, AP CS student.*

DD KNOWS THE WAE

*Manesh J, Software Engineer, Imaginarium.*

DD has been an amazing help to me, someone who listens to every problem and is never judgemental.

*Chris L, Programming Club Participant.*









Add your own endorsement here!

With your name here

Add your friend's endorsement here!

With your friend's name here

### MEET THE WHOLE DEBUGGING SQUAD


Powered By 

Figure 2: Layout of content area

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## Content

- Below the banner, there should be a centered heading with the text, “DD the Debug Dragon”. This should be the biggest heading on the webpage, and the text should have a font size of 3vw. The text should be of the font family ‘Rammetto One’ (imported from Google Fonts), otherwise defaulting to the cursive font available on the users machine. This main heading should have a top padding of 10px and a text shadow of the color #999999 with a horizontal shadow and vertical shadow as 3px, and the blur-radius as 1px.
- The content area should contain three different content blocks (see yellow borders in Figure 2): **Info**, **Endorsement**, and **Friends**.
- All of the content blocks should have a 5% padding on the left and right sides and a 2% padding on the bottom.
- All of the content blocks should be divided into two sections, text block (see red borders in Figure 2) and an image block (see the green borders in Figure 2). The first two sections (**Info** and **Endorsement**) should be aligned side by side, with the text coming before the image in the first content block and the order reversed in the second content block. The last section should be aligned in a column manner where its text block is stacked above its image block.
- The text block and the image block should each take up half the width of their parent element for the **Info** and **Endorsement** sections. For the **Friends** section, the text and image blocks should take the entire width of their parent element.
- For the first two content blocks, the images in the respective image block should be centered both vertically and horizontally - you should be using Flexbox to achieve this. These images should have a max-height of 600px, max-width of 400px and the width should be 30vw.

## Info Section

- The contents of this section are text on the left and image on the right with the proportions listed above.
- Following the first two introductory paragraphs, there should be sections that contain information about DD. Each of these information sections should be a Flexbox, with the content arranged with space around. The content inside these sections should be 40% of the width of their parent element.

## Endorsement Section

- The contents of this section are reversed in order from the **Info** section, i.e. the image is to the left of the text.
- The text has a centered heading which says, “ENDORSEMENTS” which is smaller in size than the **Info** section’s main heading. It should have the same font as the main heading, but its size should be 2.5vw.
- It has a background picture clouds.png (repeated in all directions) with a background color of skyblue.
- The text contains endorsement quotes by people whom DD has helped. You are to fill in the last two endorsements. All the text in this section is centered.
- All of the endorsement quotes have a solid left border of width 10px and color #cccaca. They have a white background, a 15px bottom margin, and 10px of padding on all sides.
- The endorsement quotes should have a horizontal divider after the quote and before the name of the person (which has 40% width of its parent element). The name of the person should be italicized.

## Friends Section

- The text of this section has a centered heading which says, “MEET THE DEBUGGING SQUAD”. The text size should be 2.5vw.
- The images should be placed in rows and they should be spaced around. The images should also wrap around the bottom part of the **Friends** section.
- The images should have a padding of 10px on all sides, heights of 300px and widths of 200px.

## Footer

- The footer has a background color of #5f5b5b.
- It has the validator icons and the image pixel.png. These are all spaced around in the footer.
- The spacing between letters is 5px.
- All the images are aligned vertically (in the middle) along with the text “Powered by” and have a height of 40px.
- The footer should have a padding of 10px on all sides.

## Internal Requirements

- For full credit, your page must use valid HTML5 and CSS3 and successfully pass both the W3C HTML5 and W3C CSS3 validators with no errors.
- Do not express style information in the HTML, such as inline styles or presentational HTML tags such as `b` or `font`.
- Do not use any deprecated HTML tags.
- Use organizational tags such as `header`, `footer`, `aside`, `article`, `div`, `section`, and `nav` for dividing your page into sections and give them semantic meaning.
- Prefer organizational tags over ids and classes when appropriate.
- Use `h1`–`h6` tags as appropriate.
- Express all stylistic information on the page using CSS defined in `profile.css`. The majority of the points for this assignment will be for the `profile.css` file.
- Part of your grade comes from expressing your CSS concisely and without unnecessary or redundant styles. For example, the content block shares many (if not all) styles in common, so you should not specify those styles twice in your CSS file.
- Use context selectors to avoid needing to apply classes and ids to large numbers of elements.
- Format your HTML and CSS to be as readable as possible, similarly to the examples from class:
  - Place a comment header in each file with your name, section, a brief description of the assignment, and the files contents.
  - Properly use whitespace and indent your HTML and CSS code as shown in class.
  - To keep line lengths manageable, do not place more than one block element on the same line or begin a block element past the 100th character on a line.

## Academic Integrity

As with any CS homework assignment, you may not place your solution to a publicly-accessible web site, neither during nor after the school quarter is over. Doing so is considered a violation of our course academic integrity policy. As a reminder: The University of Washington has an entire page on [Academic Misconduct](#) on their Community Standards and Student Conduct Page. Please acquaint yourself with the University of Washington's resources on academic honesty, and in particular how academic misconduct will be reported (which has been changed for 2017).