

# Metamorphosis

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## Project ‘To Do’ List

### Iteration and Development Steps.

Much had changed as the project developed and some tidying up was needed.

I created a .zip backup before any making any big changes, just in case undo could not get me back to a previous usable state. I never needed it but if did give me some confidence that I could always just start a section over.

Sections that required changing before submission.

- The Image Background took a long time to load. It was formatted as long .png file and not the best solution.
- Fix the Contents page.
- Animate the H1 Header for the Animation Section.
- Check the colour contrast for accessibility.
- Review the text formatting.
- Check files for valid HTML
- Compare the initial design to the completed output, reflection.

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## Background Animation



*Background Image #1*



*Background Image #2*

I had a really long background image for the main body text (see left for the actual image). This took an age to load and was not suitable. I could have used a fade in on page load using opacity, but it was still a big file. I changed to the image below and added parallax using transforms animated by JavaScript.

Initially I tried CSS animation:

[https://www.w3schools.com/howto/howto\\_css\\_parallax.asp](https://www.w3schools.com/howto/howto_css_parallax.asp)

This was more suitable for multiple backgrounds and with one image scrolling past another foreground image.

After searching for another option I settled on modifying this animation:

<https://stackoverflow.com/questions/73880164/how-to-create-simple-parallax-on-scroll-using-html-css-js-limited>

The main issue I had with debugging it was getting the <div> containers correct in the page markup.

One div is the background, and one holds the rest of the page content.

Setting the height to 138% stopped the image from scrolling past the bottom of the container and leaving a gap.

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## Contents Navigation

The contents page had duplications because I had created a menu that was persistent across all of the pages, the current page was obsolete.



*Contents page showing two navigation menus.*

The simple fix was to remove the fixed menu on the bottom and leave the left hand side modal as the main solution.

I thought it would be good to have this animation load with the page load. This means that any confusion about opening the menu could be eliminated and the user could navigate easily.

I added an event listener that called the openNav function so now it loads the menu when the page opens.

To improve the site I would remove this page as it adds little value beyond having an additional image.

It would be better to have the landing page (index) as the contents/ menu page rather than having a transitional intermediate step.

The contents nav id selector for the list items is set to 2em on this page, it spaces out the elements more than any other menu instance.

I left it like this because it fills the page out better and it is a navigation page.

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## H1 Animation

I had turned off the H1 header on my animation page because it pushed everything down past the y-axis breakpoint and the page had to be scrolled to view the animation.

To add interest I decided to rotate it 90° and animate it to travel from the top of the page before the bug/man animation showed in its final state. The trigger was to be the “See Gregor” button.



Animation Page showing:  
H1 in final location and animation.

I set up the CSS so that the writing mode was ‘vertical-Lr.’ When I set the writing mode to ‘transform 90°’ the trigger would not work. I changed the existing JavaScript function and added a id selector that worked on the ‘classList.remove’ action. It would not trigger using ‘classList.add’ so I reversed the CSS so that the margins were the opposite of what my logic for this action would be.

```
/* Animation CSS*/
.animation h1.hiddenh1 {
  margin-top: -38%;
}
.animation h1 {
  position: absolute;
  margin-left: 35%;
  writing-mode: vertical-lr;
  margin-top: 8%;
  padding-bottom: 20%;
  transition: 3s;
}

function see_gregor() {
  //Header Animation
  console.log(document.getElementById("h1animation"));
  console.log('script ran')
  document.getElementById("h1animation").classList.remove('hiddenh1');
  // document.getElementById("h1animation").classList.remove('showh1');
}
```

CSS: Before state, and after state.  
JavaScript: Trigger and Debugging console logs, final code was ‘classList.remove(hiddenh1)’

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## Accessibility

In one of my informal critiques it was suggested that the colour contrast may be too close. I had chosen a palette based on the front cover image and used 3 grades of green.



#bdccfc  
*Background and Accents*



#0c8140  
*Text*



#44e6a1  
*Hover States*

A plugin to check the accessibility was available on the Firefox browser that I was most comfortable with using for my viewing and debugging. I installed *WCAG Contrast Checker* by “Rumoroso” after installing and uninstalling a couple of other ones that required a subscription before they would work.

The screenshot shows the WCAG Contrast checker interface with the 'Level' set to 'AA'. It displays a table of contrast ratios for different elements:

Contrast	Size	Elements
✗ 1.15	large	1 a
✓ 3.2	large	1 a
✓ 5.91	small	53 ▶[p, li, em, a]
✓ 5.91	large	32 ▶[div, span, a, h2]

AA Checking Elements.

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AAA Checking Elements.

AAA standard was too much for this particular design. The fail that showed on AA was for the hover state. This was an acceptable compromise to me.

The screenshot shows the AA check results for the foreground color #195026 and background color #BDD0D0. It includes a table of contrast ratios for different element sizes:

Size	Contrast	AA	AAA
small	5.91	✓	✗
Large	5.91	✓	✓

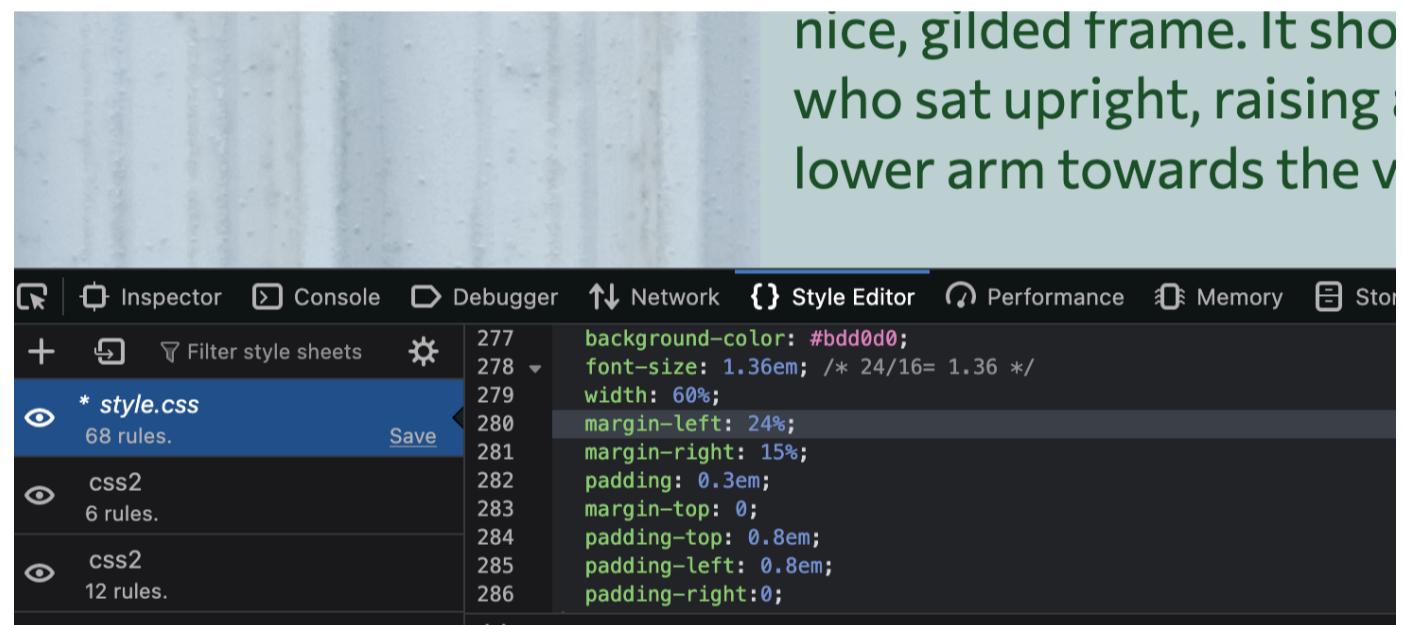
I manually added the foreground and background colours, and could see that the contrast was not acceptable for AAA rating. AA rating passed.

AA Check  
(Foreground and Background)

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## Text Formatting

Using the style editor in the browser was the easiest way to do this.

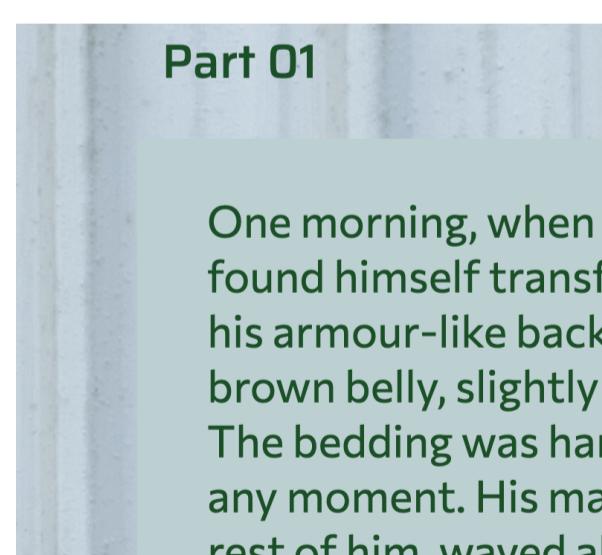


Using the browser to adjust the text formatting.

I edited the padding, left and right as well as the padding top. Once I was satisfied I transposed the numbers to Visual Studio.

The screenshot shows the "OPEN EDITORS" sidebar in Visual Studio with files like "metamorphosis\_abo...", "interaction.html cont...", "metamorphosis\_part...", and "# style.css". The "# style.css" file is open in the main editor area, showing the same CSS code as the browser screenshot:

```
background-color: #bdd0d0;
font-size: 1.36em; /* 24/16= 1.36 */
width: 60%;
margin-left: 24%;
margin-right: 15%;
padding: 0.3em;
margin-top: 0;
padding-top: 0.8em;
padding-left: 0.8em;
padding-right: 0;
```



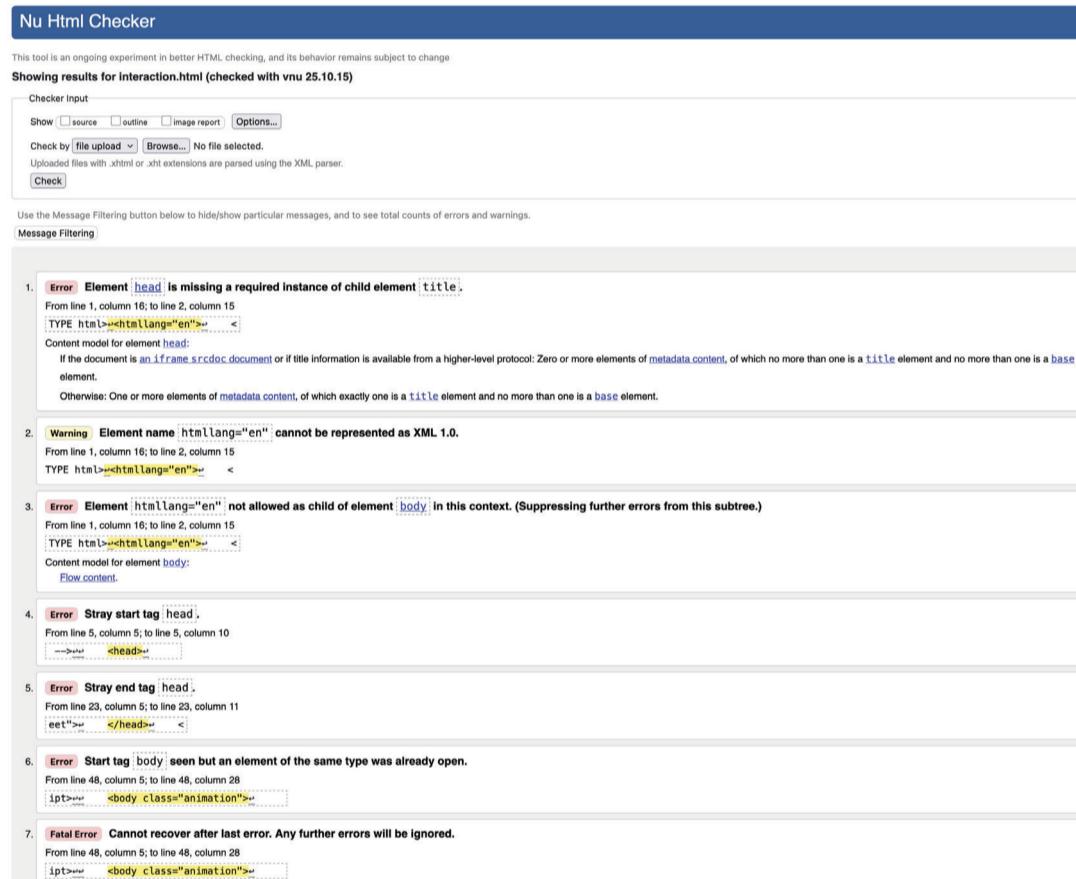
Visual Studio: Text formatting view (left); Page view (right).

I found a balance of size and spacing that was pleasing to me, and added 1em of padding left and right for the paragraph so that there was some colour background visible before the background image.

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## HTML Checking

HTML checks sometimes showed basic errors, and at other times more complicated ones. By working through the simple ones line by line often the “fatal” errors could be eliminated.



Some errors on a page, using Nu Html Checker.

```
◆ 
    
```

Finding an issue, and repairing it.

```
.man-head, .man-body, .man-limbs, .bug-
margin-left: 10%;
position: absolute;
opacity: 0;
transition: opacity 4s;
transition-delay: 3s;
width: 25%;
```

I had an issue formatting this image because I had specified “width and a percentage”.

The checker gave an error. I fixed it by adding “style” to the width parameter. This worked, but repeating the code over 6 images wasn't a great solution. By adding “width” to the style sheet, one line fixed all of this repetition.