## January 31, 2022

## **Assignment**

You have been asked to work on a page for an interactive kiosk used by visitors to a WWII exhibit. Much of the text and graphics pages have been supplied. You have to complete the job by working on the page layout.

The page you will work on provides an overview of the Normandy beach landings on June 6, 1944. Since this page will be displayed only on the kiosk monitor, whose screen dimensions are known, you will use a fixed layout based on a screen width of 1152 pixels.

You will include an interactive map of the Normandy coast where the user can hover a mouse pointer over location markers to view information associated with each map point. To create this effect, you will mark each map point as a hypertext link so that you can apply the hover pseudo- class to the location. In addition to the interactive map, you must create a drop cap for the first letter of the first paragraph in the article describing the Normandy invasion. The Figure below shows a preview of the page you will create.

- Using your editor, open the YourInitials\_dday.html and YourInitials\_layout\_txt.css files from the folder. Enter
  your name and the date in the comment section of each file, and save them using your initials dday.html and
  layout.css respectively.
- 2. Go to your dday.html file in your editor. Within the document head, create links to the styles.css and your layout.css style sheet files. Study the content and structure of the document. Note that within the aside element is an image for the battle map with the id mapImage. Also, note that there are six marker images enclosed within hypertext links with ids ranging from marker1 to maker6. After each marker image are div elements of the mapInfo class with IDs ranging from info1 to info6. Part of your style sheet will include style rules to display these div elements in response to the mouse pointer hovering over each of the six marker images.
- 3. Save your changes to the file and then go to your layout.css file in your edit
- 4. Go to the Article Styles section. Within this section, you will lay out the article describing the Normandy Invasion. Create a style rule to float the article element on the left margin and set its width to 384 pixels.
- 5. You want the first line from the article to be displayed in small capital letters. Go to the First Line and Drop Cap Styles section and create a style rule for the first paragraph of the article element and the first line of that paragraph, setting the font size to 1.25em and the font variant to small-caps.
- 6. You also want the first letter of the first line in the article's opening paragraph to be displayed as a drop cap. Create a style rule for the article's first paragraph and first letter that applies the following styles: a) sets the size of the first letter to 4em in a serif font and floats it on the left, b) sets the line height to 0.8em, and c) sets the right and bottom margins to 5 pixels.
- 7. The interactive map is placed within an aside element that should be displayed alongside the Normandy Invasion article. Go the Aside Styles section and create a style rule that sets the width of the aside element to 768 pixels and floats it on the left margin.
- 8. Next, you will lay out the interactive map. The interactive map is placed within a div element with the ID battleMap. Go to the Map Styles section and create a style rule for this element that sets its width to 688 pixels. Center the map by setting its top/bottom margins to 20 pixels and its left/right margins to auto. Place the map using relative positioning.
- 9. The actual map image is placed within an img element with the ID mapImage. Create a style rule for this element that displays it as a block with a width of 100%.
- 10. Go to the Interactive Map Styles section. Within this section, you will create style rules that position each of the six map markers onto the battle map. The markers are placed within hypertext links. Create a style rule for every a element of the battleMarkers class that places the hypertext link using absolute positioning.

11. Create style rules for the six a elements with IDs ranging from marker1 to marker6, placing them at the following (top, left) coordinates:

marker1	(220, 340)
marker2	(194, 358)
marker3	(202, 400)
marker4	(217, 452)
marker5	(229, 498)
marker6	(246, 544)

- 12. The information associated with each map marker has been placed in div elements belonging to the mapInfo class. Go to the Map Information Styles section and create a style rule that hides this class of elements so that this information is not initially visible on the page.
- 13. To display the information associated with each map marker, you need to create a style rule that changes the map information's display property in response to the mouse pointer hovering over the corresponding map marker. Since the map information follows the map marker in the HTML file (i.e. adjacent sibling), use the following selector to select the map information corresponding to the hovered mapmarker:

  a.battleMarkers:hover + div.mapInfo. Write a style rule for this selector that sets its display property to block.
- 14. Save your changes to the style sheet and then load your dday.html in your browser. Verify that a drop cap appears for the first letter of the Normandy Invasion article and the first line of the first paragraph is displayed in small caps. Test the interactive map by first verifying that none of the information about the six battle locations appears on the page unless you hover your mouse pointer over the marker on the battle map. Further verify that when you are not hovering over the battle marker, the information is once again not visible on the page
- 15. Upload your zipped folder to LearningHub.



## The Normandy Invasion

THE INVASION ON THE BEACHES of Normandy on June 6, 1944, was the largest air, land, and sea operation undertaken before or since June 6, 1944. Operation Overlord involved over 150,000 service men stationed on over 5,000 ships and 11,000 airplanes. The initial wave of soldiers on the beaches had to cover over 200 yards of small-arms fire and artillery before reaching any protection. Casualties were immense: 4000 men died on the beaches, 6000 were wounded.

The landing beaches were intended to provide footholds that would allow rapid reinforcement and expansion inland by joining the beach flanks to create a continuous perimeter before the enemy could mount a major counter-attack. Each beach would be assaulted by approximately one army division, with initial landings made from 6:30 a.m. to 7:30 a.m. Their beach landings followed bombardment by ships' guns and aircraft ordnance, kept brief to maintain as much as possible of the element of surprise. As a result, German shore defenses remained intact and a threat to the landing forces.

Supporting the beach landings, especially at Omaha Beach, the U.S. 82nd and 101st Airborne Divisions descended behind enemy lines in the early hours of D-Day. Though badly scattered and lacking much of their equipment, the paratroopers kept the Germans occupied and helped ensure that the beach assaults were successful. By nightfall on the sixth of June, the beaches were secured and the liberation of the European continent had begun.

## **Interactive Map**

Hover the pointer over the battle markers \*\* in the map to view more detailed information about each landing site.



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