

3. Be sure to test your page at different browser widths. To test mobile widths, you may need to make use of the browser's device toolbar.

### PROJECT 2: Difficulty Level: Intermediate

#### DIFFICULTY LEVEL: Intermediate

##### Overview

Use grid layout mode and media queries to create the complex layout shown in Figure 7.48. Read the Guidance and Testing section first before starting this project.

##### Instructions

1. Examine `ch07-proj2.html` in the browser.
2. Begin modifying `ch07-proj2.css` by setting up the grid so that it appears similar to that shown in Figure 7.48. Notice that it uses a 10-column grid with a constant grid size of `1fr`. It has four rows with the heights indicated in the figure. The grid gap is 25px. Some of the cells span multiple columns or multiple rows. You can achieve this using grid areas or using `span` with the `grid-row` and `grid-column` properties. If using the later approach, you can specify the grid position for each individual cell, or set up styles for spanning rows and columns and then assign them to the cells as needed, as shown in the following:

```
.widthDouble { grid-column: span 2; }
...
<div class="widthDouble" id="a">
```

3. Now you need to set the styling for the grid cells (i.e., the top-level `<div>` elements within the container). Grid cells B, C, E, F, H, L, M, O, P, and Q have `background-images` set via CSS. Cells D, I, J, and K have background colors: two with buttons and two with icons from the font-awesome icon library. Each cell should use flex layout for its contents.
4. The images within cells A, G, and N are not set via `background-image` but are `<img>` elements. The other text will need to be added to the different elements in the HTML.
5. Add media queries for tablet widths and for mobile widths. You can use 850px and 1100px as your device settings. For tablet and mobile widths, reduce the font size of your text. For mobile widths only, switch to single column and multiple rows (thus each grid row will contain a single cell); each row can have the same height as the non-mobile version, or you can create custom heights for each row.

##### Guidance and Testing

1. Break this problem down into smaller steps. Begin by constructing the grid structure, as shown in the first screen capture in Figure 7.48 (and described in

step 2 above). Then start adding in background images and colors. Finally add in the text content and the relevant styling.

2. Be sure to test at different browser widths. Some developers like beginning with mobile first; others like doing the media queries last.

Create a 10 column grid: each column with a width of 1fr.

Use a grid gap of 25px.

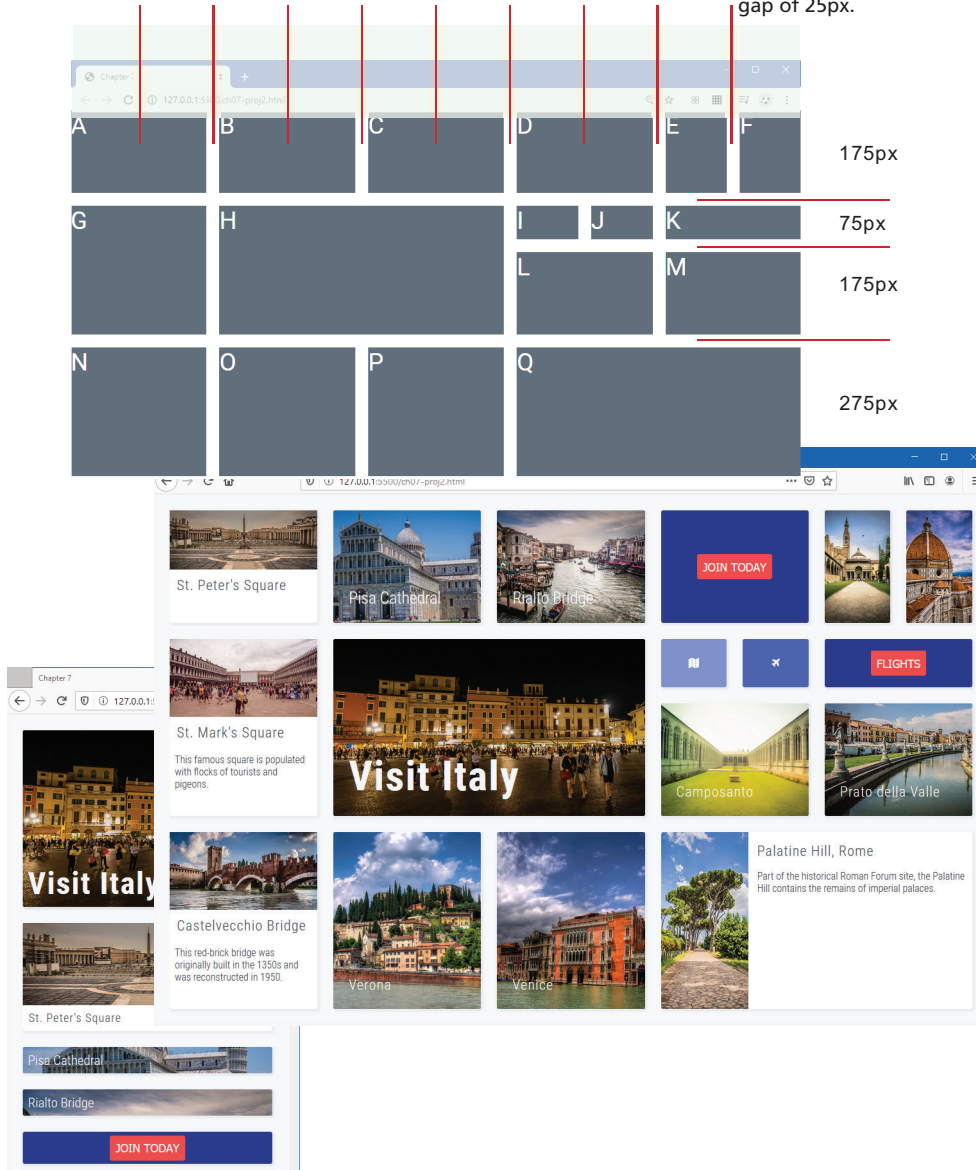


FIGURE 7.48 Completed Project 2