

Lab 6 – Multimedia, Image Maps and WAI

Server: **csunix.mohawkcollege.ca**

Location: **/home/students/<student#>/public_html/private/lab06**

or an alternate location as specified by your professor

Create the following Web page:

Create an apartment rental Web using best practices for HTML5 and Web design in general. This is a multi-page solution. All Web pages must satisfy the following WCAG 2.0 conformance rules to Level 1 (basic) compliance. (<http://www.w3.org/TR/2006/WD-WCAG20-20060427/appendixB.html>).

Guideline 1.1: Provide text alternatives for all non-text content

Guideline 1.2: Provide synchronized alternatives for multimedia

1.2.7 For prerecorded multimedia, a full multimedia text alternative including any interaction is provided.

Guideline 1.3: Ensure that information and structure can be separated from presentation.

Guideline 1.4 Make it easy to distinguish foreground information from its background.

Guideline 2.1: Make all functionality operable via a keyboard interface.

Guideline 2.2: Allow users to control time limits on their reading or interaction.

Guideline 2.3: Allow users to avoid content that could cause seizures due to photosensitivity.

Guideline 2.4: Provide mechanisms to help users find content, orient themselves within it, and navigate through it.

Guideline 2.5: Help users avoid mistakes and make it easy to correct mistakes that do occur.

Guideline 3.1: Make text content readable and understandable.

Guideline 3.2: Make the placement and functionality of content predictable.

Guideline 4.1: Support compatibility with current and future user agents (including assistive technologies).

Guideline 4.1: Ensure that the content is accessible or provide an accessible alternative.

The top level apartment page, named **apartment.html**, should contain the image map, text navigation, table and audio file with transcript.

Sandy and Leslie's Apartment

Click a room for a detailed view.



[Apartment](#) [Bedroom](#) [Dining Room](#) [Kitchen](#) [Living Room](#) [Office](#)

Survey

How did you find out about this apartment? Check any that apply:

☐ Web search ☐ Friend ☐ Newspaper

Welcome Message

▶ 0:00 / 0:13

Transcript: Hello. Welcome to our apartment. You'll really enjoy living here. The rooms are spacious and the apartment building amenities are fantastic. We look forward to hearing from you!

Apartment services:

Service	Day/Hours
Gym	Monday-Friday 6am - 10pm Saturday 8am - 8pm Sunday 8am - 5pm
Pool	
Laundry	24/7
Please do not allow people you do not know to use these facilities.	

Location



Gallery

Balcony



Bathroom



Bedroom



Dining Room



Kitchen



Living Room




For more information contact: SandyAndLeslie@example.com

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The layout uses a Grid and Flexbox. The Grid Items are indicated by different coloured backgrounds in the image below. The Gallery is a Grid Item that contains a Flexbox with Flex Items. A Flex Item contains the room name and room image. The Flex Items realign when the browser width is larger or smaller. Note: Grid currently not well supported in Microsoft Edge and IE. Please make this work in Chrome and Firefox, and don't worry about Edge and IE.

Sandy and Leslie's Apartment

Click a room for a detailed view.



[Apartment](#) [Bedroom](#) [Dining Room](#) [Kitchen](#) [Living Room](#) [Office](#)

Survey

How did you find out about this apartment? Check any that apply:

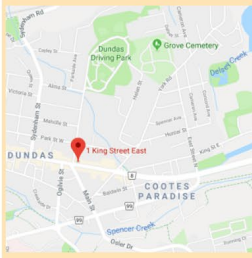
☐ Web search ☐ Friend ☐ Newspaper

Apartment services:

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Gym	Monday-Friday 6am - 10pm
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Welcome Message

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Gallery

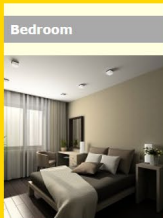
Balcony



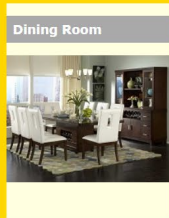
Bathroom



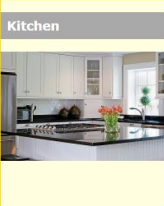
Bedroom



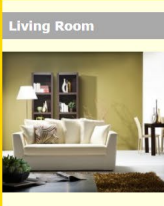
Dining Room



Kitchen



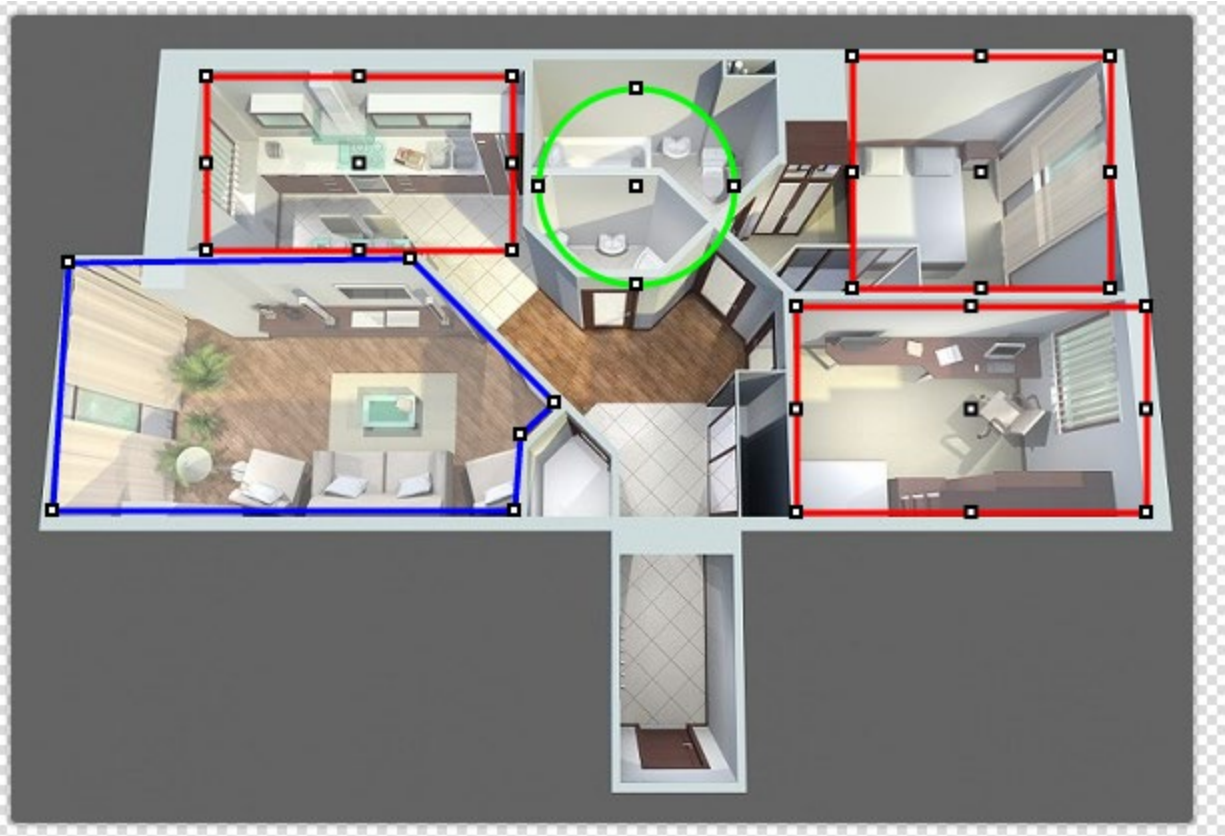
Living Room



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The floor plan is a client-side image map. The image below shows the hotspots in the floor plan:



- Include a text menu below the image map with links to appropriate Web pages as follows:

[Apartment](#) | [Bedroom](#) | [Dining Room](#) | [Kitchen](#) | [Living Room](#) | [Office](#)

- Create an image map using the floorplan.jpg image. Create the hotspots shown above. Pay attention to the shapes (rectangle, circle, poly). For the hotspot for the lower right room (office), use only "#" for the link and alternate text and title with the value "Detail view is not available". Other rooms should link to the following pages, as appropriate: diningroom.htm, bedroom.htm, livingroom.htm, kitchen.htm. The image should link to apartment.html (outside the hotspots).

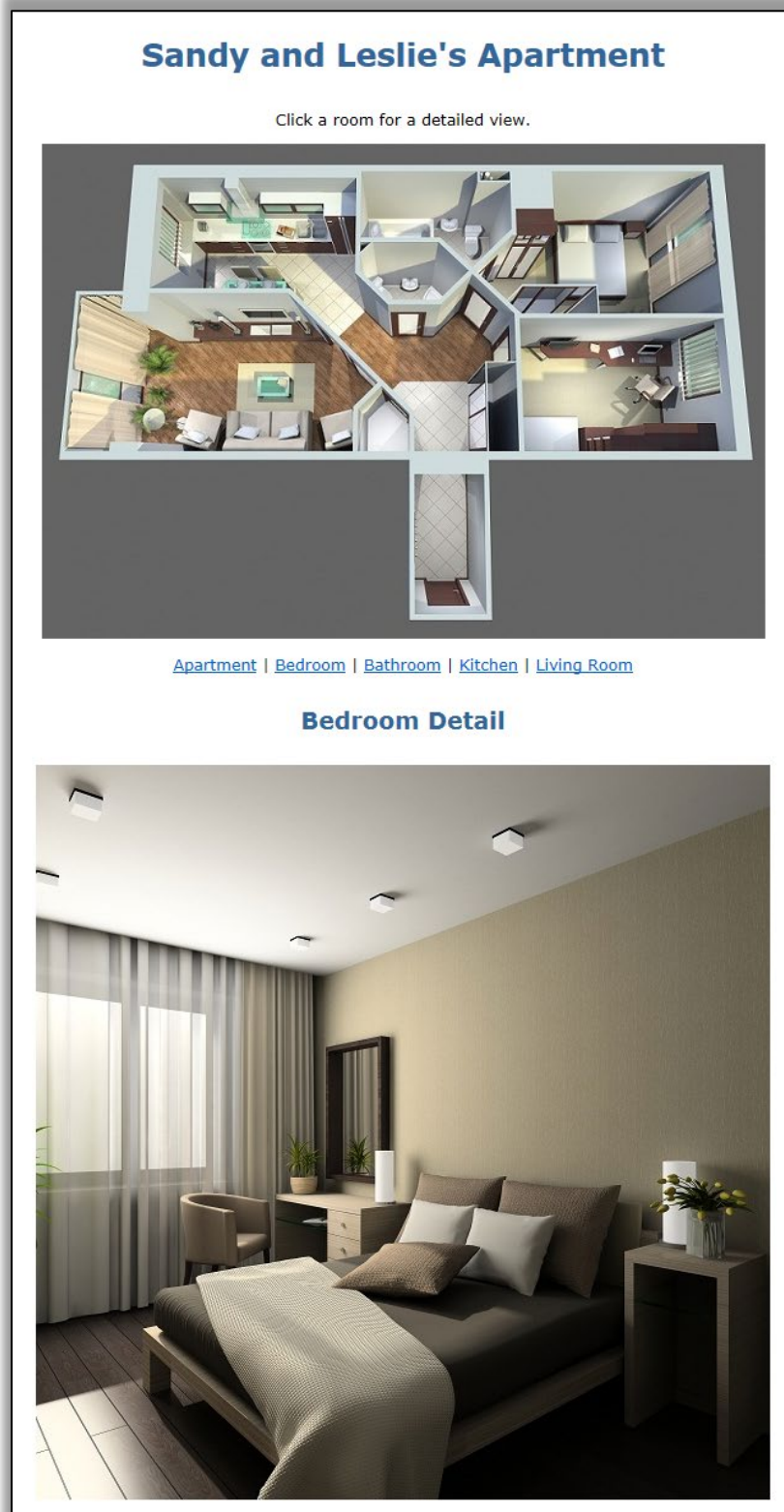
You may use one of the free image map creation tools or you may code the image map by hand, finding the coordinates using Paint. You should have the following shaped hotspots:

Bedroom, Kitchen, Office - rectangles

Bathroom - circle

Living Room - polygon

- Create an HTML file for each room that is linked from the image map and menu. An example of the Detail View of one of the rooms is shown below:



- Each of the room pages should include a heading and image for each room (bedroom.html, diningroom.html, kitchen.html, livingroom.html). The apartment.html web page should not contain a heading and image for a room.
- Ensure all Web pages are compliant with WCAG 2.0 Level A conformance.
- Use the <audio> element to include the audio description **apartment.mp3** on the **apartment.html** Web page. Also include the transcript of the audio file, shown in the images and below:

Hello. Welcome to our apartment. You'll really enjoy living here. The rooms are spacious and the apartment building amenities are fantastic. We look forward to hearing from you!

- Use a suitable organization of external and embedded stylesheets.
- Include CSS that will print the **apartment.html** page without the image and image map
- When the main page is in a browser that has a width of 700 pixels or less, the layout should become vertical, as shown below. The image map should not be displayed, and the menu items should position vertically.

Sandy and Leslie's Apartment

Click a room for a detailed view.

[Apartment](#)

[Bedroom](#)

[Dining Room](#)

[Kitchen](#)

[Living Room](#)

[Office](#)

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Location

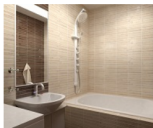


Gallery

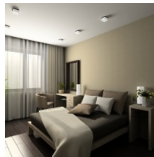
Balcony



Bathroom



Bedroom



Dining Room



Kitchen



Living Room



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Submitting the Lab

1. Upload your new files and images to the appropriate directories on the CSUNIX server.
2. Also, create a .zip file containing all of the files and folders for the lab and submit it to the dropbox on eLearn.

This page should be placed into a directory on csunix under the public_html/private directory called **lab06**.

Testing your Web pages

The lab Web pages you created must be HTML5 compliant. Use the validator at <http://validator.w3.org/> to test your code. Warnings are fine, errors must be fixed.

ALSO UPDATE your index.html web page as follows:

- **Lab 1 - Link to lab01/peaches.html**
- **Lab 2 - Link to lab02/resume.html**
- **Lab 3 - Link to lab03/recycle.html**
- **Lab 4 - Link to lab04/aboutus.html**
- **Lab 5 - Link to lab05/askus.html**
- **Lab 5 - Link to lab05/seminars.html**
- **Lab 6 - Link to lab06/apartment.html**

ALL web pages MUST be created using **NotePad++** (or another simple text editor), and include ALL of the following components:

Proper HTML5 structure including both the HEAD and BODY sections, proper <tag> and </tag> syntax, and proper paragraphing.

1. A local **relative** hypertext link back to the index.html web page.
2. The index.html page must have a **local relative hypertext link** to each lab Web page.
3. Statement of Authorship. Copying other people's work and claiming it as your own is a serious breach of ethics. If copied work is found, all parties involved will be processed through the Academic Dishonesty procedures as per the corresponding policy. Read more about the Academic Honesty Policy at <http://studentpolicies.mohawkcollege.ca/AssetFactory.aspx?did=4362>

Although helping each other to troubleshoot code is encouraged, it is expected that you actually do your own work. If you do, you will learn the material and feel better for it. Since

all work submitted to your professor is assumed to be your own original work, you must include the following “Statement of Authorship” in EVERY file you submit for grading:

All labs must contain the authorship in the HTML source code.

<!-- Author: *John Doe*, 000123456 -->

Replace *John Doe* with your name and the number 000123456 with your student ID

Place this text as a comment at the top of the code for each submitted web page

Failure to include this statement means your work **may receive a deduction of a maximum of 10% of the Lab grade.**