

## CSCI 3350 Project

### “Ricardo Construction”

Learning by doing is an important strategy to retain knowledge. This course helps the students to acquire the ability to develop a real-world web user interface mock-up/prototype. In the development process, the students are required to apply the theories learnt in class. This is an individual project.

The project is incremental. The deliverables are as follows:

Part #1. Content report, client requests, visual research, 2 sketches, color scheme (palette)	5%
Part #2. Photoshop (psd) mock-up file	5%
Part #3. Sliced Photoshop (psd) file, working static website (html, css, images) with content	5%
Part #4. Presentation (in class only), website portfolio (screen captures)	20%
<b>Total</b>	<b>35%</b>

When you see “Richard Ricardo” in the descriptions, change it to <your name>.

When you see “Richard” in the descriptions, change it to <your first name>.

When you see “Ricardo” in the descriptions, change it to <your last name>.

If you do not put <your name> / <your first name> / <your last name> in the mentioned fields, you will get **0 points** for the project submissions.

In this project, you are to apply the basic web design principles and employ the appropriate web design methodology to create a web site for your (**imaginary**) company “**Ricardo Construction**”.

**Ricardo Construction** is an (imaginary) building company based in Clarksville, Tennessee, USA.

- It has been in home building and construction industry for the past 10 years.
- The main business is to build new residential homes (from small starter homes to luxury custom homes).
- It also does remodel jobs, and other construction jobs upon request.
- Like most home construction companies in Clarksville, it has a small team of core permanent staff members, and engages teams of contractors when need arises.

To help you to design the site structure and content, please refer to the following (real) construction company websites. These reference websites belong to real construction companies in Clarksville, TN.

- <https://clarksvilleprovidencebuilders.com/>
- <https://byardconstructionllc.com/>
- <https://hawkinshomes-llc.com/>
- <http://www.clarksvillebuilder.com/>
- <https://www.cblackwellconstruction.net/>
- You should aim to come out with better designs (than the above sites). Please only use the above sites for ideas on site structure and content. Do NOT use them for visual research.

All students need to come out with different designs.

Your final product must be coded using **Bootstrap 5** (front-end framework), from <http://getbootstrap.com/>

- **0 points** if not.

You need high-quality high-resolution photos for the design. Try to acquire free stock photos from the Internet. Do NOT use photos from the above reference websites (copyright issue, **-50 points**).

- Acquire photos that are under “Public Domain” License (You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission), or some similar license.
- Download the photos with the highest resolution possible.
- Suggestion 1: go to <https://unsplash.com/>
  - Search for, say “House”.
- Suggestion 2: go to <http://all-free-download.com/free-photos/>
  - Search for, say “House Public Domain License”. Download the high resolution file.
- Your photo’s license must be similar to “public domain license”. You will receive **0 points** for this (entire) project if you violate the following:
  - Photo license: Photo can be used for commercial purposes.
  - Photo license: You do not need to ask permission from or provide credit to the photographer.
- You can use your own photos (photos taken by you, without violating any copyright license).

### Final Project - Part 1 submission instructions

You need to submit a **project part 1 report** to the D2L digital dropbox.

Name your report file **lastname\_firstname\_part1.pdf**.

The report should have **at least 5 pages**, include the following...

1. Student name, course name
2. Website title
3. Introduction, aims and objectives of website - 1 to 2 paragraphs
4. Target audience - age, education level and other group demographics, things to consider
5. Sections - description for each section (you may use visual tools such as navigation diagram to help with the description, but not necessary)
6. Visual research - links and **screen captures** of at least 4 websites with good interface design (all 4 for visual research and design concepts, do NOT use the reference websites above)
7. color palette - for your website

You need to search/choose and submit 10 photos (images) you are going to use for your website design (banners, logos etc.) There should be high resolution photos (images), and you cannot use photos (images) from the reference websites above (0 Points if you do).

- Zip the images in a file **lastname\_firstname\_part1\_images.zip**.
  - If the zip file size exceeds d2l dropbox size limit, you may upload low-resolution images. Please state the reason of uploading low-resolution images in submission comments.
- Make sure there are no copyright issues with these images.

You also need to submit **2 different** website design sketches (designed by you, on paper, similar to what is produced after **video 20\_002**). You will need to choose one design for your part 2 submission.

- Bootstrap sketch paper template (use the Bootstrap wireframe templates below):
  - <https://cdn.dribbble.com/users/12721/screenshots/873373/attachments/93764/bootstrap.pdf>
  - A copy of the paper template is also available in d2l.

- An example sketch is available in d2l. It is for a church, not for your construction company.
- Please **print the template** on a letter-size paper, and draw over it. Do NOT use sketch book.
- Please note that the website will be coded in **Bootstrap** framework, sketch accordingly.
- Scan the sketches, save as a pdf file **lastname\_firstname\_part1\_sketches.pdf**.

**Submission:** submit 3 files to d2l.

- lastname\_firstname\_part1.pdf: at least 5 pages
- lastname\_firstname\_part1\_images.zip: 10 photos
- lastname\_firstname\_part1\_sketches.pdf: 2 design sketches

### Final Project - Part 2 submission instructions

You need to submit the following 2 files (index.psd & index.jpg) to the D2L digital dropbox.

1. Photoshop psd file for your site mock-up, name your file **index.psd** (you do NOT need to slice, similar to what is produced after **video 20\_013**).
  - a. Download Bootstrap 4 Grid PSD template (use it for Bootstrap 5 design) from
    - [https://hackerthemes.com/files/bootstrap-v4-grid\\_hackerthemes.zip](https://hackerthemes.com/files/bootstrap-v4-grid_hackerthemes.zip)
    - Use “bootstrap-v4-grid-artboards.psd” file.
  - b. A copy of the psd template is also available in d2l.
  - c. Save the psd template as index.psd.
  - d. **Select one of your two sketches** of project part 1. Use the selected sketch as your website design.
  - e. Following your sketch, draw your design in Adobe Photoshop (index.psd). You only need to produce Photoshop work for “xl” screen resolution, as shown in example index.psd.
  - f. An example index.psd file is available in d2l. It is for a church, not for your company.
  - g. Note that you are designing for Bootstrap 12 column layout. **0 points** if you are not designing for Bootstrap framework.
  - h. Your submitted **index.psd** file should have **multiple layers**, to show your work!
2. Jpg file: **index.jpg**. Remember to export the file to 95% jpg.
  - a. Produce (export) index.jpg file, from index.psd file. Only export the portion you designed for “xl” screen resolution.
  - b. An example index.jpg file is available in d2l. It is for a church, not for your constructor company.

### Final Project - Part 3 submission instructions

You must use **Bootstrap 5** framework, **0 points** if you are not coding with Bootstrap 5 framework.

Now your project should be almost complete with html files and image files.

- Slice your Photoshop psd file, export it to create multiple image files.
- Build your website in folder /lastname\_firstname\_project/
- Your home page should be index.htm, give meaningful names (all lower case, no space, no special character) to other html pages.
- Put in content (no dummy text), for at least **2 pages** (home page index.htm and another page)
- 2-level dropdown navigation menu (**-10 points** if the navigation menu is not 2-level)
- Put downloaded Bootstrap framework files in /lastname\_firstname\_project/bootstrap\_dist/
- Put images in sub folder /lastname\_firstname\_project/images/

You need to submit the following 2 files (for project part 3) to the D2L digital dropbox.

1. Photoshop psd file for your site mock-up, name your file **index.psd** (you need to **slice** it)
2. your website: a zipped file **lastname\_firstname\_project.zip**

What to expect for project part 4 submission (later)

1. any improvement you want to make
2. any change request from me
3. screen capture submission

### Final Project - Part 4 (final) submission

All instructions from the Part 3 submission still apply.

You must use **Bootstrap** framework, **0 points** if you are not coding with Bootstrap framework.

You need to submit the following 4 files (for project part 4) to the D2L digital dropbox (NO late submission allowed, grading system will close):

1. Photoshop psd file for your site mock-up (final sliced version), name your file **index.psd**
2. your website: a zipped file **lastname\_firstname\_project.zip**
3. screen captures of 2 different web pages (no dummy text, correct spelling / content ) : **lastname\_firstname\_screen.pdf**
4. a pdf file containing the screen capture(s) of all html validation results (from <http://validator.w3.org/>) and css validation results (from <http://jigsaw.w3.org/css-validator/>), name the file **lastname\_firstname\_validation.pdf** (a sample file can be found under "content > assignments")

Validations

- When you view page source in a web browser, **<!DOCTYPE html>** must be at the top of every page. In other words, all pages must be written in HTML5. (-20 points if not)
- All html files must pass html validation at <http://validator.w3.org/> without any **error/warning** (with only 2 warnings). (-2 points for each error/warning, 2 warnings allowed)
- All css code must pass css validation at <http://jigsaw.w3.org/css-validator/> without any **error/warning**. (-2 points for each error, warnings are acceptable)

Presentation (**Inclass section only**):

Each student needs to give a 5 minutes presentation on:

1. Project content
2. How your design makes use of Bootstrap framework
3. index.psd layout, how you did it, step by step
4. Slicing, how you did it
5. html/css editing, how you did it, step by step
6. Difficulties encountered
7. If you are to do it differently all over again, how would you do it?