Overview

One aspect of Design Day is the Design Day booklet, which is a professional, full-color, glossy publication. Each team will have one full page in describing their project in the booklet.

As with all such publications, in order for the booklet to be designed, laid out, edited, proofed and printed well before Design Day (which is on Friday, December 7, 2018), you will need to submit your team’s copy and artwork to Dr. D. much earlier, in particular, by 12:01 a.m. Friday, October 5. (Note that this is effectively the night of Thursday, October 4.)

So, here’s what you need to do...

There is a Microsoft Word template for each team on the course web site on the Downloads page. Click on your team name to download your template. The template on the Downloads page is the same as the one that was emailed to each team.

Read these instructions carefully and repeatedly...

The Template

The template is intended solely to help you visualize how your page will appear. It is not camera-ready copy. A graphic designer will transfer the content that we provide to them into their system. Your task is to fill in the missing content and email the required things (see below) in a zipped folder to me.

The Project Sponsor Name and Project Title

The project sponsor name and the project title must fit in the space provided using the given point size. You’ll see that the company name and project title have already been entered.

Do not change either the project sponsor name or the project title, but do check the spelling of your project sponsor name and your project title.

The official project title is on the web site and should not be changed. Do not change your project title unless you get approval from Dr. D first.

If, after obtaining permission from Dr. D., you do make any changes to the project sponsor name or project title, highlight the changes in yellow.

The Project Description

Your project description should, as expected, describe your project. The target audience should be on the level of a high school student. You will face at least two challenges. One challenge will be to describe something that is very complicated and technical using terms that are relatively simple and non-technical. The second challenge will be to make it fit in the very limited space provided, which allows for about 225 words.
The project description should begin with a sentence or two that gives an overview of your project sponsor. See the most recent edition of *The Capstone Experience* for examples.

Next, your project description should explain the motivation for the project. What’s the problem? Do not use phrases like “Our project was to make...” or “For our project, we...” or “Our client asked us to make...”.

After describing the problem, explain your solution.

Use a “newspaper” style of writing. Sentences and paragraphs should tend to be short and snappy. It’s even okay to have a paragraph with only one sentence as long as you don’t have too many of them.

Avoid writing anything that might be construed as negative about your client. For example, projects often involve designing and building a software system to improve a client’s particular business process. So, do *not* write things like “Currently the way that our client does this-and-that is dumb, backwards and stupid. Our great system will replace their crappy system with something much better.”

Write in the present tense throughout. So, even though your project is not complete do *not* write things like “The basketball timer software will keep track of...” but rather *do* write things like “The basketball timer software keeps track of...” Do *not* write things like “When a user presses the button, the results will appear.” Will appear? When? *Do* write things like “When a user presses the button, the results appear.” Get it?

Use 10-point, Californian FB font. Use single space lines. Justify both margins. Do not double space between paragraphs. Use one blank between sentences within a paragraph.

If you have a list of items separated by commas, in general do not use a comma before the “and” if the list is a list of simple items and there would be no confusion without the comma. Consider the following example: “The letters in the acronym RGB stand for red, green and blue.” Do not use a comma in such a case. However, consider the following example: “Before you can play video games, you must do your homework, wash your clothes, and clean your room.” In that case, use a comma.

The size of the project description textbox is 3.375” (wide) by 5.2” (high). Do not change the size of the textbox. Your text must fit exactly within this textbox within these dimensions. This means you should have enough text to fill the entire textbox but no more.

If space permits, you might want to reference your screenshot or screenshots at the right.

The last sentence or two should include some technical information about your project. See previous examples.

After you have a draft, send the project description to your client for feedback and approval.

Look at The Capstone Experience booklets scattered around the Capstone Lab for ideas on how to write project descriptions. The same content can be found online in the project page for past teams. Just start
at our Archives Projects by Semester page and click on links to previous semesters’ projects. Feel free to borrow and then update introductory sentences about your project sponsor.

Also, you can look at the previous Design Day booklets. Design Day booklets from previous semesters are available on-line by following links from the Design Day booklet page.

As one more example, read the project description that Dr. D wrote for the Spartan Basketball Player Timer. A link to it appears on the Downloads page under MSU Men’s Basketball.

Artwork

Your team should provide appropriate artwork that best represents your project for the space in the upper right. Artwork should include at least one or more screenshots. In general, the artwork should be actual screenshots of your software. The artwork should be something that is eye-catching.

If your project involves devices with voice input, look at the web page of a former Team MSUFCU or their Design Day booklet (page 36) to see how they illustrated their apps.

Naturally, your projects are still in the alpha or beta stages. Pick the best screenshot or screenshots that you can as of now. It’s possible that your final product will look different and possibly better.

The template includes two textboxes reserved for artwork. You may change the size and locations of these textboxes to accommodate and lay out your artwork. You are welcome to add a third textbox for a third piece of artwork if appropriate. Each piece of artwork should be in its own separate textbox.

The text boxes have black outlines. For our drafts, leave the black outlines. They make it easier to manipulate the text boxes. The final booklet layout will not have the outlines. The outlines of the text boxes are merely handles for moving the text boxes. Do not use these outlines to outline your artwork.

Look at the most recent edition of The Capstone Experience to see examples of artwork and layouts.

After selecting some possible candidate images, insert them into the textbox templates, resize them to fit, and arrange them. Do not change the size of your client’s logo.

The textboxes can overlap. Right click on a textbox and select Order to bring a textbox to the front or send it to the back.

You may use as many images as you like (but probably not more than three) as long as they fit within the existing textbox and they are viewable once scaled to fit and printed.

Some things to consider as you make our artwork.

- Add enough data to your software system to make your artwork interesting. Do not use “cute” usernames like “Superman” or obviously fake data like “123 Main Street.” Eliminate all alpha or debug labels.
- Check the spelling of all of your screenshots.
• Use very high resolution screen captures and scale.
• When you resize an image, make sure that you preserve its aspect ratio.
• Ensure that your artwork is readable (as possible). After inserting your artwork, print it to test how readable it is.
• Web apps should be displayed in a web browser (of your choice). Eliminate extra buttons from the web browser. Change the desktop background to a solid color so that the desktop does not bleed through in the window title bar (because of glass). If your app is not responsive, resize the browser window to match the size of your app. Eliminate “black bars” of empty space from the sides and bottom of the browser window before you capture it.
• When doing a screen capture, enlarge the text if you can. On an iPhone go to Settings > General > Accessibility > Larger Text. On Android devices, this varies by manufacturer, but you can do it on most Android phones.
• Mobile device software screen captures should be superimposed over the appropriate device.
• Ensure that your artwork has a transparent background.
• The transparent background surrounding your artwork should be as small as possible. Crop your artwork’s transparent background as closely as possible to the artwork itself. Eliminate all unnecessary whitespace.
• If your artwork has curved corners (i.e., an iPhone or iPad), ensure that your artwork does as well. (Hint: Make the corners transparent.)
• To include multiple pieces of artwork, duplicate the original text-box intended for artwork. Make sure that you duplicate the text box and not just the png image.
  If you’re having problems “finding” the text-box, click on the embedded png image and type enter. Remember to delete the superfluous newline.
• As expected, multiple textboxes can be layered from “front to back”. Right-click on a textbox and select “Bring to Front” for “Send to Back.”
• If you need to edit your artwork, you can use the freeware paint.net, which is excellent free software that was a computer science capstone project at the University of Washington.
• If the borders of your artwork are white or light gray, they will “disappear” into the white background of the page. For example, the following artwork needs a border.

![Image of artwork needing a border]

In such a case, use PowerPoint to add a suitably colored border to the artwork.
Launch PowerPoint. Create a new presentation with a blank slide. Copy and paste the artwork into PowerPoint. Don’t resize it, even if it’s huge and doesn’t fit on a slide.
Use Picture Border to add a thin border of the appropriate color (i.e., black or gray or light gray) and of the appropriate weight (i.e. ¾ point).
Right mouse-click on the artwork and select Save as Picture...
With a border, the artwork will look something like the following.

In addition to inserting your artwork into your template, you must provide the original high resolution versions of the source file. You must provide very high resolution PNG images with transparent background, eliminating any surrounding whitespace. For the format of your images, name your artwork files using “team-[team-name]-artwork-1.png” and “team-[team-name]-artwork-2.png” if you have a second piece of artwork. As always with filenames, use all lower case and replace blanks with dashes.

As with the project description, look at previous Design Day booklets to see what kind of artwork previous capstone teams have used.

Your Project Sponsors’ Names and Locations

At the lower right is the name of your project sponsors (aka clients).

The format of the project sponsor company or organization name at the bottom of the page is the same as your team name and not the same as the formal corporate name in the title at the top of the page. So, for example, for Team Auto-Owners, the title at the top reads “Auto-Owners Insurance” whereas the Corporate Sponsor below is simply “Auto-Owners”.

This list of names should include not only your sponsor contacts but also any other names from your client company that your contacts feel would be appropriate even if somewhat “honorable”. For example, with Auto-Owners Insurance, we normally list the name of Jim Schumacher who is the CIO. Even though Mr. Schumacher does not interact directly with the capstone team, it’s very appropriate to list him in the Design Day booklet.

You’ll see that the list of project sponsors has already been entered. You’ll see that these names are listed in alphabetical order. Along with each person’s name, we include the location where they work. In some cases, it may be all the same city and state. That’s okay. We do have some cases where we have people in different cities and even in different countries.
Ask your corporate sponsors to approve their list of project sponsor names.

Do not delete any names without my permission. You may add names. Check and correct the locations.

If you make any changes to the list of Project Sponsors, highlight the changes in yellow.

**Team Photos**

Your team photo is in the lower left corner. If your official team photo has not yet been taken, the current “informal” photo is there as a placeholder. The official photo will be inserted and submitted as soon as it is taken. In any case, check that the names and hometowns are correct and that they correspond (left to right) to the team members in the photo.

To the right of the team picture is list of team names and hometowns. The names and hometowns are as you requested on the first day. Check everything for typos.

Edit the list so that your team members’ names appear exactly as they wish.

If you make any changes to the list of team members, highlight the changes in yellow.

**Getting Approval from Your Corporate Client**

It’s your responsibility to get approval from your client on the final version of your template. You’ll have to send them your final version in advance of when it’s due to me to give them sufficient time to review it.

In the past, there have two non-CSE situations where student teams included confidential information in their Design Day page, which made it into print. Every one of the thousands of booklets had to be recalled with an edited page pasted over the original. We do not want this to happen to us.

**What do you need to send to Dr. D. and when?**

When you have completed everything, create a folder with the name “team-[team-name]-design-day-booklet-page”.

For file names use all lower case and replace any blanks by dashes.

Your contribution to the project page template should be your project description and your artwork. However, you should carefully proof read the rest and obtain approval for everything from your project sponsor. If you make any other changes to anything in the project template other than the project description or artwork, highlight the changes in yellow.

In the folder, place a copy of your team’s Word template; keep the name of your template exactly as downloaded in the form “team-[team-name]-design-day-booklet-page.docx”.

Also place in the folder the original, very high resolution originals for your all of your artwork. Each piece of artwork should be in a separate file in PNG format with a transparent background. Name your
artwork files “team-[team-name]-artwork-1.png” and “team-[team-name]-artwork-2.png” if you have a second piece of artwork. When you name your artwork files, number your artwork from top to bottom or left to right.

Zip up this folder and email it to Dr. D. by 12:01 a.m. Friday, October 5. (Note that this is effectively the night of Thursday, October 4.)

For email subject, use “Team [Team Name]: Design Day Booklet Project Page”.

This is a very short deadline since you need to get feedback from your client. You should send a draft to your client as soon as possible to give them enough time to provide meaningful feedback that you can incorporate into your draft.