P1: Project Requirements

(10% of the project grade)

Keep in mind that these documents might be updated during the semester.
Last updated: 06.08.2023.

Due Date

Tuesday, September 26 at 23:59. We do not accept late submissions (i.e., they will not be graded).

Overview

P1 counts 10% towards the project grade and is about defining your project requirements. You will describe the functional and non-functional requirements for the website. Discuss the requirements with your client and make an appointment with the project advisor **before the deadline**. You still have to prepare the requirements even though you have an imaginary client. P1 should be delivered as a website, with a stylesheet (CSS-file) that styles up your HTML-file to a more readable and organized document. You should reuse this stylesheet in further project documents in this course.

Description

Requirements are necessary to define to fulfill the client's wishes, also in a real development project. There is always a risk to deliver something the client does not agree with, which will result in wasted time, money and effort. With good communication and a common understanding between the developers and the client, waste can be avoided.

Find a real client or imaginary client

The real and imaginary client can be anybody. Discuss this as a whole team and figure out who you are going to make a website for this semester.

Examples:

- Your aunt's bank company that needs a website
- An imaginary restaurant that provides online ordering (the data does not have to be saved in a database, just simply fake it with a text confirmation).

NOTE:** Some real clients may have high expectations for this school project. Make sure you inform the client that this is a school project with limitations, and all the client's requirements may not be successful. Examples are 100% working forms submission and communication with a database. Read and understand the restrictions in the Project overview document before talking with the client.* ***If you are unsure about the allowance of the requirements, please contact your project advisor.

Meeting with the real client or brainstorm with the imaginary client

The project team must meet and agree on the **web site's purpose, goals, audience, and final location of the website** with the client.

If your client is real:
The goal of the meeting with the client is to explain your project and the ground rules of your collaboration. Make sure they understand the project terminates at the end of the semester. During the meeting, ask your client to describe their perceived need for a web presence, the site's purpose and audience. Have a discussion and come with suggestions and remember to be specific. Do not hesitate to tell them when you are unsure whether something is possible or not. Just remember to scope the project to a decent size for the whole semester for the whole team. You won't be able to exercise your skills if the client just wants a short page. However, if they want an ambitious website with dozens of pages, that won't be feasible in a semester.

When a common understanding is accomplished, find out what your client has in mind regarding the goals of the site, its target audience, site organization, textual content, graphical content, navigation, links, and other aspects of the site. Bring your own ideas to the discussion as well; many clients will be hoping to hear from you on many of these topics. Looking at example sites is a good idea. Note that your client may also confuse design with requirements, so if they say it should have a menu on the left, find out if that is an absolute requirement or a design suggestion. Try to distinguish design from requirements from the very start.

If your client is imaginary:
If your client is imaginary, you should pretend the client is real. Collect the group and brainstorm possible needs a real client would have.

The meeting/brainstorming should result in a **draft** of the requirements for the website, which should be made **before** the meeting with your project advisor.

Defining requirements

Project requirements describe the problem to be solved, not the solution. This means requirements are about what's on the website, its contents, and organization, rather than what the website looks like.

Start describing the website with your client before jumping to write the requirements. Make sure you understand what the client really wants and make functional and non-functional requirements out of the client's wishes.

Before defining the project requirements, the team should learn the difference between functional requirements and non-functional requirements.

Definition:

- Functional requirements: Any requirement which specifies what the system should do.
- Non-Functional requirements: Any requirement which specifies how the system performs a certain function.

Considerations when making the requirements:

- What is the motivation for the target group to visit the website?
- How will they get what they seek?
- Is there more than one kind of user?
- Should two topics definitely be on the same page? Should there be a direct link between two things? Many times, these won't matter and should be left to design (P2), but sometimes there are particular requirements.
- How important is the appearance of the website, compared to the content? Is a particular color scheme required, or does the client have a preferred layout? Once you start talking about graphical design, it is easy to get ahead of yourself.

Remember, at this stage, you should be collecting the client's requirements, not making design decisions. Save that for P2.

Examples of requirements:

- Functional: "The website shall accept customer orders"
- Functional: "The user should be able to get to any reference page"
- Non-functional: "The user should be able to get to any reference page in three clicks or less."
- Non-functional: "Every page must load in less than 1 second."

Meeting with your Project Advisor

Each team must meet with their project advisor **before** the deadline of P1. Before the meeting, you must write a draft of a web page called P1_requirements_GROUPNUMBER.html and have it uploaded along with your stylesheet (CSS-file) into your team's NTNU server. Send the link to your server before the meeting. The project advisor will read it online, or print it out, so make sure it is readable.

During the meeting, the project advisor will discuss your team's website and the requirements document. Make sure to define your requirements for the website before meeting your project advisor.

NOTE: *After P0, every project group will be assigned a project advisor. This is usually one of the IT2805 teaching assistants. The project advisors for the project groups will be announced on Blackboard, and you will also get an email from your project advisor.*

Deliverables

Turn in a document, written as a web page, containing a structured essay covering the topics mentioned below. Additionally, to the document, you can create your own CSS style file that you can use throughout the semester to style these documents. This stylesheet will make the document more readable and well organized.

1. **Header:** A title, the authors' names, and date.
2. **Administrative Details:** The name of your client, and his or her position in the organization (or company), if applicable.
3. **Purpose and goals:** The site's purpose and goals and how they will be accomplished by the site. Try to draw a connection between the goals and specific content elements of the site.
4. **Audience:** Who is the intended audience or the typical user? Describe them and their needs for information and other content.
5. **The content of the site and how it is organized:** Think of this as the outline of a paper: it doesn't have to spell out the sentences or even paragraphs, but it should mention major sections and even a few salient subsections.
6. **Functional and Non-Functional Requirements:** Describe at least 3 functional and 3 non-functional requirements for your website.
7. **Final location:** If known, the server where the site will reside after the project and the names of who will be responsible for the site maintenance.

The document must be in essay form (paragraphs of text, not just a bullet list or set of bullet lists), although you may use bullet lists when they are appropriate. It must be written in HTML; not an MS Word document, PDF file, etc.

Example

The example is not perfect but will give you an idea of what is expected of you:
http://www.idi.ntnu.no/~michailg/IT2805/exampleproject/p1_requirementsexample.html

Grading

Here are the aspects that you will be considered for this assignment:

- The requirements document contains all the requested information.
- The site's purpose and goals are described clearly and in detail (as opposed to being vague and generic.)
- The intended audience is identified accurately. An excellent discussion will describe how its audience differs from a generic one and how those differences pose a challenge for web design.
- The site's content is covered properly. An excellent description will be comprehensive and detailed
- You come to the meeting with the instructor prepared (and as a team). Prior to the meeting you must have met with your real client (or imaginary client) and uploaded a draft of the requirements document into your team directory on the server.
- The document is well structured, easy to read, follows conventions, etc.
- **Your HTML code for the document page is valid.**

Delivery

Ensure to include all of the requested information in the file before delivering. Save the HTML file as P1_requirements_GROUPNUMBER.html and publish it on your website. It is recommended to save P1 to P4 files in the same folder called Documents to have a structured web-hierarchy. Make sure to include a link to your website in the blackboard delivery. If you are unsure about how to deliver properly, please contact your project advisor.

Deliver the HTML file on Blackboard by **Tuesday, September 26 at 23:59**. We do not accept late deliveries and you cannot change the file after the deadline.