



Project proposal

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Name of the Course:

Software Engineering

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Introduction

What is website development?

The process of creating a new website or making changes to one already in use is called website development or website design. Website development will include the site design, content development (copy/words), client liaison, a server and network security, and possibly, e-commerce development. The project can be for creating a single page for a site or developing complex internet applications. Whatever the project is for development, a website requirements document will be useful.

What is a website requirements document?

A website requirements document is a specification that clearly outlines the project's purpose, its goals and objectives, functions, budget, deadlines, and technical restraints. In short, it articulates what the website is for, what it will do, and how it will accomplish this.

A good specification document means a smoother, more precise implementation and project estimation.

Despite the document, there is still room to make changes to the project because it is usually done in iterations. The document isn't intended to restrict or limit the project. Instead, it should provide an exact way forward.

Overview/Purpose

This section is about the overall purpose of the my website. I say a little about the organization or individuals behind it and why the website is being created. Is

there a problem I am solving? and also I describe my overall vision for the project and what I envisage the website accomplishing.

If I want to talk about the requirements that existed and made us start this project and start implementing it, I have to say that in fact, the subject of the project that was given to us for this course this semester is that instead of an editor To make it simple and unique to display the set of datasets we have selected, we need to create a platform for better and faster display of these datasets.

And considering that the environment we want to implement must also have the ability to process databases, so I thought that the platform we choose to display this database is better than a website.

As we know, the main goal of all the teams in our project for this lesson is to show our data better and easier; In other words, the user-friendly nature of the app we are creating and, consequently, my main goal in this project is the same.

Business case

But if I want to talk about Business case or the same case in this project, I can talk about things like reducing costs and saving the amount of money that needs to be spent to see the data better, or that the datasets can be grouped. Displayed various categories so that the user can easily use them, I mention.

Approximate cost that I want to estimate for this project: I invoice the financial costs of this project and do not enter it, but about an important cost such as when it should be put on this project, I must say that: our project will be delivered almost according to the deadline, in fact This project will be tested and launched on the 8th of Bahman this winter.

User description and stories

As we know the overview should include a description of the target audience. Who are we hoping to attract? The site must meet the users' needs, so we need to have a clear idea of who they are and what they need.

User stories (or features) are descriptions of the site's features from the potential user's point of view. These will help to envision how we target audience will interact with our site and how it will respond to them. There should also be testable criteria to show when those objectives are reached.

All users who visit the website will be able to view the programs, as well as people who have become members of the website, will be able to use all the facilities provided. User interfaces should be designed in such a way that users can easily meet their needs without the need to know additional information. In this regard, by entering the website, all the information entered will be visible.

In fact, this website meets the needs of the user in the form of the following:

- The user can enter all the related programs as a list by entering the desired word and clicking on the search button.
- The user can view the most downloaded programs on the main page.
- The user can also view the most rated apps on the home screen.
- By clicking on the desired program, the user can see the details of the program such as name, topic, volume, rating, number of installations and comments.
- The user clicks on the categories button in the menu; Can view categories.
- View related programs: The user can view related programs in the details section.
- By clicking on the button, the user can see about us about the site designers and programmers.
- By clicking on the help button, the user can learn how to use the website in a simple and simple way.

About Datasets

Mobile App Statistics (Apple iOS app store)

The ever-changing mobile landscape is a challenging space to navigate. . The percentage of mobile over desktop is only increasing.

Android holds about 53.2% of the smartphone market, while iOS is 43%. To get more people to download your app, you need to make sure they can easily find your app. Mobile app analytics is a great way to understand the existing strategy to drive growth and retention of future user.

With millions of apps around nowadays, the following data set has become very key to getting top trending apps in iOS app store. This data set contains more than 7000 Apple iOS mobile application details.

From: <https://www.kaggle.com/ramamet4/app-store-apple-data-set-10k-apps>

Contents:

appleStore.csv

1. "id" : App ID
2. "track_name": App Name
3. "size_bytes": Size (in Bytes)
4. "currency": Currency Type
5. "price": Price amount
6. "ratingcounttot": User Rating counts (for all version)
7. "ratingcountver": User Rating counts (for current version)
8. "user_rating" : Average User Rating value (for all version)
9. "userratingver": Average User Rating value (for current version)
- 10."ver" : Latest version code
- 11."cont_rating": Content Rating
- 12."prime_genre": Primary Genre
- 13."sup_devices.num": Number of supporting devices
- 14."ipadSc_urls.num": Number of screenshots showed for display
- 15."lang.num": Number of supported languages
- 16."vpp_lic": Vpp Device Based Licensing Enabled

appleStore_description.csv

1. id : App ID

2. track_name: Application name
3. size_bytes: Memory size (in Bytes)
4. app_desc: Application description
- 5.

Team

Here have a list of the people who are involved in this project. I.e., the decision-makers and contributors. As we know their job titles, project roles, and contact information should also be included.

- Mahdiye Rashidi - Project Lead - mahdiye5818@gmail.com
- Mahdiye Rashidi - Back-End developer - mahdiye5818@gmail.com
- Mahdiye Rashidi - Front-End developer - mahdiye5818@gmail.com

Goals

As we know we should describe our goals for the website. This description should be more detailed than in the overview. The developers need to know, specifically, what we expect to achieve.

We've all heard this, but it bears repeating. Use SMART as a template for how you describe the project's goals:

- Specific - What are the objectives, and who are the stakeholders?
- Measurable - How will we know when we accomplished the goals?
- Assignable - Who is doing what?
- Realistic - Can it be done?
- Time-Related - What are the time allowances?

So we should say today, the number of smartphone users is innumerable. Of course, many applications have been built. Users of the Android operating system to download the programs they need, access to a platform that has a coherent range of applications and through which the program can be easily downloaded and installed; did not have .

The group plans to design a platform on the web that focuses on data processing and visualization, making it possible to search and install applications extensively and easily.

In this system, our data from the Google Play Store database, which contains this data, contains information about 10,000 applications published in the Google Play Store, including the ranking and price of applications, as well as the top 100 comments for all applications.

Phases

As we mentioned, the work is often done in iterations – especially if it is a large project. It is helpful for everyone involved to know what is being worked on in any given phase. This ensures that the team puts its efforts into the right part of the project.

Here's our phases:

- Phase 1 – project proposal
- Phase 2 – start to work
- Phase 3 – project finalization

Content

This is where we can explain the content structure, otherwise known as the Information Architecture (IA). There are a few parts to this, depending on how complicated and broad the project.

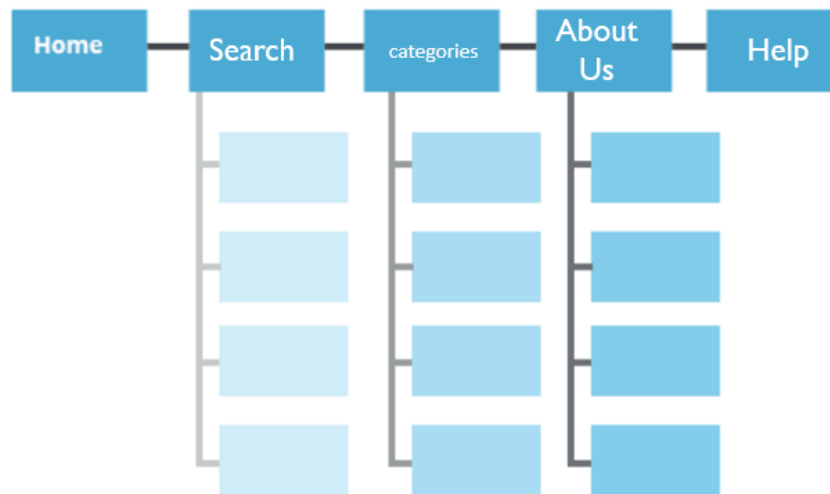
As we know website contains several kinds of content:

- News/Blog
- Products
- Testimonial
- People

A site map

This is a diagram that looks like a tree with branches in a hierarchical structure. It demonstrates how and where the website pages will be located.

Here is an example of a basic of our site map:



Page templates

This section can include page templates for the kinds of content to be used on each page.

For instance, the 'Home' page will look different from the 'About Us' page.

Here are a few examples of page templates:

- Home
- categories
- Contact Us
- About Us
- Help

Taxonomies

Website taxonomy, also called URL taxonomy, is key to the structure of a website. Your content is classified into subfolders in our URLs. And having well-optimized URLs will make all the difference to our site.

Because we have a database of websites, we need to categorize "categories", under which we may have classification terms such as music, sports and health, books, and so on. We may also classify "language teaching" with terms such as French, Hindi, or Mexican.

The two main taxonomies are 'Tags' and 'Categories.' These are non-hierarchical and hierarchical - respectively.

Design

The web development team needs guidance on the design style. For example, if there are brand guidelines, they will include:

Brand guidelines - colors, logos, fonts, etc.

Analysis of competition - What aspects of their sites do you like and don't like?

Print Material - business cards, brochures, etc.

Functionality

This is just how our website will work. For example, if there is to be a signup page, describe what fields are required? What happens after someone fills out the form?

Some sites have integrations with third-party APIs. These should be outlined in terms of how they'll work and whatever other information is needed. An example of an integration is the site owner's Twitter feed showing on the page.

- Multi-lingual functionalities
- User roles and capabilities

- Payment gateways for e-commerce platforms
- Search functionality
- Analytics and tracking
- Performance requirements

The design of user interfaces should be such that users can easily meet their needs without the need to know additional information.

In this regard, by entering the website, all the information entered will be visible. Servers must be reliable. Have a good speed so that by sending a request and using the API, the information will be displayed to the user as fast as possible.

The user interface in this system is provided in English.

The language programming

Python + html +CSS + JavaScript

The language I chose to implement my site is the Python server-side programming language.

Maybe you are familiar with this programming language or even fluent in the programming language:

Python can help us in these areas if we want to build a website, or if we want to develop a video game, or even if we want to create an artificial intelligence.

Python is a high-level programming language that has many applications. And seriously flexible and accessible, which is what makes it popular among some of the world's largest (and most interesting) organizations.

That's why I told myself that this language might be a good choice for implementing the site I want to launch.

If I want to say about the reason for using html, CSS and JavaScript, I must say that:

The ability to code using HTML is essential for any web professional, and acquiring this skill should be a starting point for anyone learning how to create content for the web.

Actually:

- HTML: Structure
- CSS: Presentation
- JavaScript: Behavior

I also use SQLite software for the database because it is free first.

A database is a simple database that stores all data in one file. This database is included in Python by default, and communication with it is very simple and has 2 to 3 lines of coding.

The remarkable thing about this database is that anyone who has access to the file can use our information, and as a result we have to use encryption and methods to protect our information.

However, due to the file structure of this database, it is not suitable for systems that can be used by several users at the same time.

Accessibility

As we know the Web Content Accessibility Guidelines (WCAG) ensure that web developers build accessible websites for everyone regardless of location, technology, or ability.

Browser Support

In the middle of the project, it becomes clear that outline technical requirements to ensure all browsers and devices are supported. Supporting older browsers like Internet Explorer, will add to the expenses of the project.

This section of the document will show on which browsers and devices the website should be tested.

Milestones

Milestones are phases of the project where the team will be working on different aspects of it. The addition of timescales or deadlines is an excellent idea to keep things moving at a productive pace.

An example could be designs or testing and feedback.

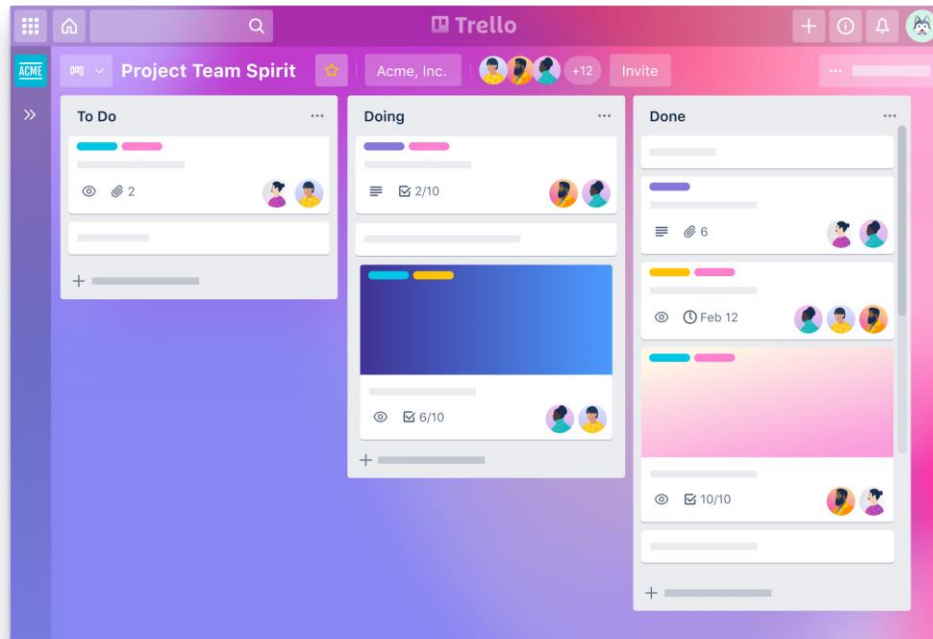
Deadlines

Even if we choose not to establish milestones, deadlines will help everyone work more efficiently toward the goal. So we should ensure that our document includes any relevant deadlines.

- 1400/07/14 Sprint 1 :registration
- 1400/07/30 Sprint 2 :project proposal
- 1400/08/21 Sprint 3 :start to work
- 1400/10/08 Sprint 4 :project finalization

My Plan Board

To list the tasks that should be prioritized during the project timeline, I use the Trello app and the features that GitHub has.



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