MVP < Handbook/>

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Minimal Viable Product 4 the important one!!

I have an idea for my project

A MVP is nothing but the miniature operational model of any software product that holds models of all the core features of the original product. And so, before you start it's important to understand how complex your idea is and how you can simplify it the most to have your first MVP. After thinking about the core functionalities, do a quick research on the internet about the theme and similar Apps. Choose a main functionality and focus on it - do you think it's possible to do it with the knowledge you have? If you're not sure, try to simplify even more, until you feel 100% comfortable with your App idea.



I don't have an idea for my project

Ask yourself the following questions:

- What apps do I enjoy using the most?
- What are my hobbies?
- What apps can't I live without?
- Is there a topic that I care deeply about?

Some ideas that might give you inspiration:

- If you like cooking, maybe you can think of building an app for people to showcase their homemade recipes.
- If you're a forgetful person who relies on task managers, try building one yourself.
- If you have a favourite game, you can create an app about it.
- If you're addicted to League of Legends, you can try looking through Riot's API and build a site that can obtain & display game information. This last option can be a bit more complex.

Here's a list of project ideas if you need more inspiration.

Hands-on

Motivation and Description

Here's the moment where you should describe your App and your motivation. Try to use simple words as much as possible and explain how you would explain it to a 10 year old child. Choose a name, think about design, how it would look like in a screen, basic functionalities and how this will be used for.

Features

- To be able to do ...
- To be able to edit, remove, add ...
- This App will display ...
- What information do I need? Ex: images, videos, text, user information etc...

Technologies

- React
- Tailwind CSS
- MySql
- (...)

Nice to have

- In the future this app should be able to do ...
- In the future this app should be able to display ...

API's List

At this point, maybe you already have an idea of one specific API or maybe not. There are loads of options on the internet and so how can you choose the best fit for your project then? What is the best option?

Here a list of useful API's (in case you want to explore):

- https://www.programmableweb.com
- https://apilist.fun
- https://rapidapi.com/marketplace
- https://github.com/public-apis/public-apis

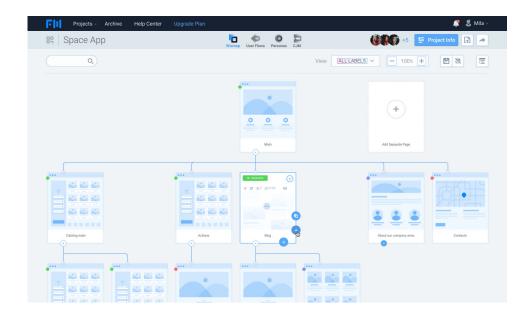
When I find more than one option for what I need, my criteria for choosing is: documentation. Search for the documentation, read it and check if it's well documented. This is really important. After that, I always look if there are more people using it and also I search for projects using it on github. Last but not least, make sure it's a free API.

Databases

In case you're thinking about a backend for your app. you're going to need a database. First, you need to design it. Think about the data you will store and draw your schema with tables and relationships between them (ERM). This platform is really useful for this. In addition, watch the classes about databases if it stills has some doubts about the theme, and of course, you can always ask the instructors, TA's and #tech-support.

UI Flow

Now it's time to figure out how it will be the flow of your App, meaning how the user will interact with it from the beginning until the end. Try to take in account every step, the cases of success (completing a task, for example) and failures (cancelling a task). Here's a good website to help you with your UI flow. And If possible, look at some simple examples online. The image below represents a UI flow using the website I recommended.



UX Wireframes

At this point, you probably know what are the core functionalities of your App, API's and/or database tables, every case scenario the user might encounter. Now, the only thing you need is to know where to display all the buttons, forms, images on the screen. Luckily, we have available a big list of online free platforms. Here it is my favorite ones:

- https://www.adobe.com/products/xd.html
- https://www.figma.com/ -> The best one but more complex.
- https://draw.io
- https://www.canva.com/ -> The easiest one and also really useful.

Setup environment

Step-to-step on how to setup your project

Code!

Everything is ready to start rock and roll! It doesn't matter if you don't know the end, just start. :)

