Build a Business Application from Scratch

- Cheatsheet -

Before starting to work on the coming tasks, make sure to have these information available. They do not necessarily need to be complete, but should give an idea of the customer's demand. Here goes right after the credo: **First, solve the problem, then write the code.**

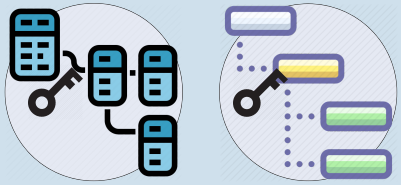
Have an understanding of the customer's business goal
Make sure to understand the goal that is to be achieved with the new development. Also, understand whether this requirement is limited to not processual, but also demands for organizational change in the big picture
Suggested Tools: Design Thinking, e.g. Customer Journey Mapping or Story Boards, User Stories, etc.

Understand who is involved, who is planning and who is actually using the application when it's ready
The person driving the initial idea is not always necessarily the person later going through the process. It is not absolutely necessary to involve a user right away, but make sure to keep them in mind.
Suggested Tools: Stakeholder Mapping and / or at least a Communication Platform.

Make sure to get the process right
If a process is supported by technology systems, it is crucial to understand where these two spheres touch. Get a grip on the interfaces at the start, especially if you intend to partially automate a process
Suggested Tools: BMPN 2.0 Process tools (XML support, if [partial] automation is defined as a goal)

2. Get to know the Information structure needed to accompolish the client's goal

If you are responsible to develop a bigger software that handles a lot of data, it is crucial to understand its structure and the relationship between different entities. If you build a solid foundation for your data, mapping them into your app later will be much easier to accompolish and less prone to errors.



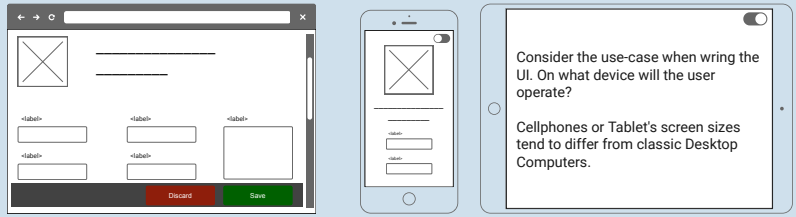
Try to understand what information objects will be used- and flow within the software. Then, build meaningful relations between them.

Suggested Tools:
Schema Designer, DB Designer
Table - Like structures

A classic approach to data structures are tables. These often contain values that refer to values in other tables. The structure holding such relationships is often called **Key-Value-Store.**

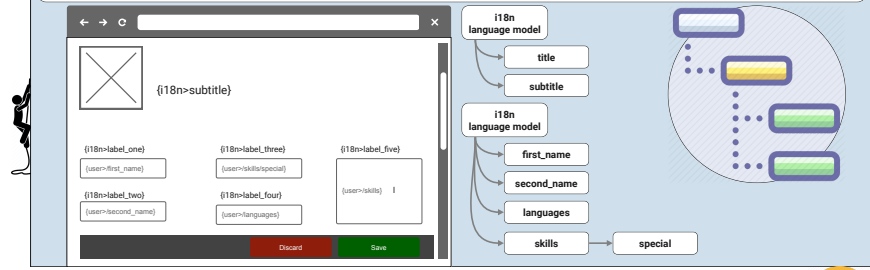
3. Wire the user interface (View)

There are several techniques to build user interfaces. The one most senseful to get started with, however, is to build a wireframe. That is, some very generic elements that represent the UI elements and their looks. **Here, the customer journey map or user stories come in handy as helper tools**



4. Map the data into the Views

As soon as you have created all necessary screens, place the data inside of them.
Give each UI element that accepts or displays user input a piece of data.



5. Map business logic and navigation

Now is the time to include the fibre into the app. For each UI element that is not an input, a functionality should be defined. This can include, but is not restricted, to **navigation to another screen, sending and receiving data from | to a server, opening a popup or a dialog, activate or disactivate other UI elements, ...**