Company name

Project name

Company and contact name Location & date

This document is a template for drafting your specifications for the development of a web/mobile application. You can freely distribute and adapt it, but don't forget to mention the credits below.

Introduction	3
About you	3
Project objectives	3
Users	4
Competitors	4
Business model	4
Appendices	5
Confidentiality	5
Functional specifications	6
Features and content	6
Notifications	7
Administration	7
Technical specifications	8
Technological choices	8
Hosting and servers	8
Authentication and security	9
Publishing (mobile application)	9
Data	9
Maintenance and support	10
Supported Hardware	10
Non-functional specifications	11
Usability	11
Compatibility	11
Languages	12
Security	12
Legal and Regulatory	13
Budget	14
Deadlines	15
Terms and conditions of the offer	16

Introduction

1.1. About you

You are launching your own mobile application or web platform project with an agency. This is a new working relationship you are starting to build, so it is important to get to know each other and validate your interlocutor's interest in your project.

Who are you? Tell us about yourself, your background / career, your expertise, your vision as an entrepreneur. Tell us about your (future) company. What does it do? Services, products, history, size and its specialties. What are your skills or those of your team? It is important for the team to understand the context of the project in order to best meet your expectations.

1.2. Project objectives

Why to make a web or mobile application? What are the objectives, more or less long term, of this project? What is the short and long term vision of this project? What are your expectations? Both from a usage and financial point of view.

It is essential to understand your goals and vision in order to envision your project and propose the best solution for your objectives.

For example :

- Generate 10'000 turnover per month
- Digitize a current business process and halve the time spent on it
- Create 5 full-time jobs

1.3. Users

Who is your project for? Who is the audience that will use your application or platform? Have you identified your market? Who will be a customer, who will be a user?

This is an important question because it will determine the content of the following sections. Functionality, design, legal aspects and behaviors will be different depending on whether you are addressing employees of your own company, or teenagers from all over the world for example.

1.4. Competitors

Are there similar projects already in existence in Switzerland or abroad? Who are your competitors? What are they doing better or worse? What do you like about them? What are their business models? Are there any concepts that you would like to take over?

And if your competitors are not directly identifiable, how are the target users currently doing without an adequate solution?

The competition can be a real source of inspiration and a real source of analysis on the functionalities offered or missing. We are not implying about flatly copying here.

1.5. Business model

How do you plan to monetize your solution? What would be the business model? What is the price of the product or service? Do you already have quantified expectations? Have you identified partners?

1.6. Appendices

You may wish to attach certain documents that you feel will be helpful in understanding your needs. Too much information is better than not enough!

- Business model
- Benchmark
- Company presentation
- Graphic charter
- Diagram and processes
- Etc...

1.7. Confidentiality

All information and documents you share will remain strictly confidential and limited to the scope of your project.

However, if you wish, a confidentiality and non-disclosure agreement can also be signed. Do not hesitate to mention it.

2. Functional specifications

2.1. Features and content

To offer a service or product to your user, it is necessary to implement a number of key activities on your application or platform. For example, for a home delivery service, the customer will have to at least choose a product and provide a delivery address.

What are the key activities? What is their priority order to make the service minimum, desirable or even dreamed of?

From these activities, the different functionalities of the digital product are identified. This is the most important part of your specifications. It describes the expected functionalities as precisely as possible. You can describe your features in different ways. In our delivery example, for the user activity of choosing a product, you will have to consider at least the following functionalities:

- Display the product to the user and its characteristics
- Display a list of products (if applicable)
- Allow the administrator (you!) to provide information about its products

This is the bare minimum for this example, but obviously, we will be tempted to go much further in this project with other examples of features such as :

- Allow user to sort/filter products
- Allow the user to compare two products
- Suggest similar products to the user
- Importing a large number of products from an Excel spreadsheet
- Notify users about new products added

2.2. Notifications

Whether in the form of emails, SMS or push notifications... Notifications are part of the functional elements to be mentioned in a specifications document. It is convenient to dedicate a separate section to them because they often use third party services such as Mandrill, Twilio or Parse.

ID	Description	Туре	Condition
1	Registration confirmation	Email	Valid registration
2	Order confirmation	SMS	Payment accepted
3			

2.3. Administration

For the different contents and features you have listed, which parts do you plan to be administrable? By this we mean the contents to be directly modifiable by you or by administrators using a dedicated interface, often protected by a password or a unique access right.

We often tend to want to make everything modifiable, however this flexibility comes at a cost. List here only the elements that you consider essential.

For example :

• News publication (text, image)

3. Technical specifications

At this stage of the project, you may not have technical preferences or enough background to articulate them. This is to be expected and we can help you compare the different options available to you in order to make an informed choice.

3.1. Technological choices

In case you have specific preferences or constraints with respect to technological choices: what are these? If your project is already in progress, which technologies are currently deployed? (frontend, backend, database...).

3.2. Hosting and servers

Your project will certainly need a hosting solution if it needs database, messaging management, video streaming and many more. Hosting services can be shared or dedicated. Shared hosting is accessible to the most reasonable budgets but does not allow the choice or configuration of hardware, software and network equipment. Conversely, dedicated hosting allows the entire hosting environment to be configured exactly as needed but is often more expensive.

If you currently have hosting, or if you know some server architecture constraints, do not hesitate to describe them.

3.3. Authentication and security

Does your organization already use an authentication system such as LDAP, MS Active Directory or G Suite? What are the security aspects specific to this project that need to be taken into account? Do you want to deploy your project in your infrastructure (On Premise) or on a cloud service (SaaS)?

3.4. Publishing (mobile application)

Has your organization ever published an App on the Apple or Android Stores? Do you have access to digital signature certificates from previous projects? Who manages this in your organization? What is the process for submitting a new application?

Which Stores would you like to appear in? Is your App reserved for a restricted group of users (≠ all public) and therefore potentially prohibited by Apple?

3.5. Data

What input data is required to commission your project? Do you have this data and the rights to it? If you are migrating a solution, what is the current data model and the amount of information to be transferred? Are you considering purchasing data for certain cases, which data is it?

3.6. Maintenance and support

Who will update your project over time (security, update, patch, etc.) and who will be on standby to answer technical questions and intervene if necessary? Is your organization qualified to provide this service? Do you need assistance?

4. Non-functional specifications

A mobile application or web platform project is far more than just technology and code. It is important to take into account and express your non-functional expectations for your project.

How will your users have access to your web or mobile application? In which language(s) should your project be provided? Does your project require specific certifications or security systems? Have you thought about the legal aspects of your project? Does your system need to meet certain regulatory criteria?

4.1. Usability

How will your users access your web or mobile application? Web browser, smartphone (which ones?), tablets (which ones?), portrait, landscape, both? Do your users need a particular interface in terms of accessibility (visually impaired, elderly, children, etc.)?

This information will clarify the estimation for the interface design and development part. "An ergonomic and easy-to-use interface" is implicit for the development of a modern application. If you have a doubt about your providers, add this precision.

4.2. Compatibility

Web browsers, operating systems and smartphones evolve very quickly. You need to identify which systems your application must respond to.

In 99% of the cases, it is useless to cover them all, it takes a lot of time (and resources) to satisfy a few die-hard Windows XP or iPhone 3 users.

The question is always "Who are your users and how do most of them navigate? ». There are several statistics sites on the question. The site of the W3C consortium gives general (worldwide) information on these browsing habits: <u>https://www.w3schools.com/browsers/default.asp</u>

A good old Google search will bring clarity, for example "Swiss smartphone market share". Remember to filter results that are less than a year old.

4.3. Languages

In which language(s) should your project be provided? Remember to mention the language(s) for the first version, and possibly for the following versions.

4.4. Security

Apart from classic security flaws (SQL injection, clear passwords...) that must be covered in any development of a modern application, does your project require specific certifications or security mechanisms?

- The most common ones :
- Online payment
- SSL Certificate
- PCI-DSS certification (bank data hosting)
- Medical System IEC62 304 Certification
- Security level ISO27 001 certified server
- Must sensitive data remain in Switzerland? See "US Patriot Act" for example.

4.5. Legal and Regulatory

Have you thought about the legal aspects of your project? Does your system have to meet certain regulatory criteria?

If you are planning to collect customer data for example, you must comply with the LDP (Federal Data Protection Act) :

https://www.admin.ch/opc/fr/classified-compilation/19920153/index.html

Apple, for example, requires a disclosure statement on personal data management before it can publish an App on its Store.

In the medical field, there are several standards and certifications to follow, so be sure to ask about them as they can prove onerous.

5. Budget

Certainly the most sensitive part of your specifications. It is common to meet people who do not wish to reveal their actual budget. This is however counterproductive for both parties. A decent agency will always try to determine the best solution for your needs and according to your budget, as long as your bracket is realistic.

You don't go to a restaurant (in Switzerland) with 5.- CHF in your pocket... Likewise when you are looking for an apartment or a new car: you always have a price bracket in mind. If you truly have no idea, here are some rough orders of magnitude (non-binding eh! :):

- Mobile application between 50'000 and 150'000
- Web platform between 50'000 and 150'000
- Interactive prototype and interface design between 10'000 and 20'000

If your budget is particularly limited, do not hesitate to indicate it. There are certainly simplifications that can be identified together without straying away from the goals of your project. It is also worthwhile to consider versioning and to reassess the order of priorities in your specifications.

Also, if you are fundraising or if your budget is not yet secured (i.e. not in a bank account), an agency may be able to help you in this process. With an interactive prototype for example; a number of Startups often go through this step to validate initial hypotheses, conduct a market study or reinforce their business plan with a first concrete deliverable.

6. Deadlines

What are your deadlines and do you have certain imperatives, for example, an upcoming event? This is a very important question as there is always a tendency to want "as soon as possible" or even "for yesterday". However, you simply have to be realistic: quality requires time and deadlines can also become a parameter that has an influence on the overall budget. Realistically, determine how long can you afford to invest in this collaborative process?

At the beginning of the project, it is common to conduct different participative workshops to define and model the functional and graphical aspects of the project. This is a time when you should definitely take time to ponder and iterate. Expect at least 1 month for this phase and even more depending on your availability (and your team's) as well as the complexity of your project.

At the final stage of the project, the testing phase is crucial and may extend for over a month. It is at this point that you will be able to validate the handing-over of your product and its warranty. Here again, we strongly advise that you take enough time to make sure you don't miss anything.

- Mobile application between 3 and 6 months
- Web platform between 3 and 6 months
- Interactive prototype and interface design between 1 and 2 months

"Mobilize more resources to accelerate development "Yeah but... not really...

If your project is spread over more than 3 months then it is advisable to put more than 2 developers on your project. In a smaller scale project having more than 2 developers can increase the hours of coordination, meetings, and bug fixes. As Brooks once wrote: *"The bearing of a child takes nine months, no matter how many women are assigned"*.

7. Terms and conditions of the offer

Requesting 2 to 4 offers from various providers is quite common. However, like any game, it is always fair to have a clear understanding of the rules. Therefore, we encourage you to outline the conditions of your request for proposals and offers.

- Number of participants
- Type of service providers (independent, agency, large company, nearshore/offshore)
- Contact person
- The time limit for questions/answers
- Decision criteria
- Date of the selection of provider
- Start Date

Congratulations!

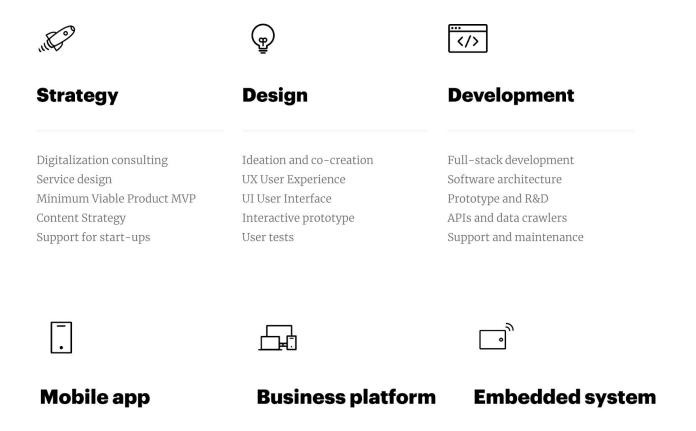
If you completed all the previous sections, your specifications are ready! By sharing it with development providers, you will receive a complete and detailed offer that best meets your expectations.

Do you have any questions about this document? Or would you like to share your specifications with us and receive an offer for development?

Contact us at: info@apptitude.ch

We will propose an appointment to meet with you and discuss your needs in person before submitting an offer. See you soon!

We translate your ideas into beautiful & efficient digital products.



iOS and Android Apps Smartphone, tablet and watch Publication on stores Hybrid or native app Process digitization Dashboard and reporting Secure back office Collaborative tool Industrial interface Medical device Home automation Internet of Things IoT