DTT
APPS WEB GAMES

Legend

Advised by DTT

Items with an asterisk**(*)** are explained on the glossary tab

Functionalities	Flutter	Web	API*
APP			
0. Splash screen			
# 0.0 Splash			
As a client, I need to be able to see the splash screen so that I know the app is loading to open.	1	-	-
I must see the splash screen image for a few seconds when the app is launching.	-	-	-
1. Tutorial			
#1.0 Tutorial			
As a user, I need to be able to read the tutorial so that I can understand how the app works.	5	-	-
I must be able to read how the different functionalities of how the app works.	-	-	-
I must be able to swipe between the different screens or press the next button of the tutorial.	-	-	-
I must be able to skip the whole tutorial.	-	-	-
If I skip the tutorial, then I must be directed to the login screen.	-	-	-
When I completed the tutorial, then I must be directed to the login screen	-	-	-
2. Login			
#4.0 Login			
As a user, I need to be able to log in so that I can gain access to the app.	3	-	3
I must be able to login with my account email address and password.	-	-	-
I must be able to accept the terms & conditions and privacy policy before logging in.	-	-	-
I must be able to read the terms & conditions and privacy policy.	-	-	-
If I do not have an account yet, I must be able to sign up for one.	-	-	-
After a successful login, I must be directed to the homescreen of the app.	-	-	-
If my entered email address and password combination are wrong or invalid, then I must receive an error message.	-	-	-
2.1 Forgot password			
#5.0 Forgot password			
As a user, I need to be able to reset my password so that I can still gain access to the platform even when I forget my password.	3	3	3
I must enter my registered email address.	-	-	-
Once I enter my email address, I must receive a confirmation message in the app and password reset link via email.	-	-	-
When I click the link in the email, then I must be directed to the reset password screen, where I must enter a new password.	-	-	-
If I enter passwords that do not match, then my new password cannot be confirmed.	-	-	-
When my password is updated, I must be directed to the login page.	-	-	-
3. Register			
#3.0 Welcome screen			
As a user, I need to be able to create a new account so that I can gain access to the platform.	34	-	13
I must be able to select whether I already have a loyalty card or not.	-	-	-
If I have a loyalty card already, I must additionally enter my loyalty card number.	-	-	-
I must be able to scan the barcode of the loyalty card with the camera.	-	-	-
When I've successfully created an account, I must receive a success message.	-	-	-
If I did not have a loyalty yet, it will be created after the registration.	-	-	-
I must be able to complete my profile to receive 160 points or do it at a later stage.	-	-	-
If I want to complete my profile, I have to select if I have a garden (yes/no), a pet (yes/no), kind of pet (if applicable) and select some favorite categories.	-	-	-
If I have completed my profile, I must receive 160 points.	-	-	-
After registration, I must be directed to the homepage.	-	-	-
4. Home			
#6.0 Home			
As a user, I need to be able to access the homepage so that I can see a clear overview of the functionalities.	34	-	13
I must be able to see my amount of loyalty points.	-	-	-
I must be able to access the product scanner, rewards and promotions.	-	-	-
I must be able to see discounts in a carrousel.	-	-	-
If I have enough points, I must be able to see the most expensive item that I can buy.	-	-	-
If I have invited a friend, I must be able to see a pop-up message telling me that I've earned 5 loyalty points.	-	-	-
If I have received a gift from a friend, I must be able to see a pop-up message telling me my reward.	-	-	-
If a reward is no longer available, I must be able to see a pop-up message telling me that it has already been redeemed.	-	-	-
I must be able to receive 10 loyalty points or a discount voucher as a gift on my birthday.	-	-	-
5. Balance			
#7.0 Balance			
As a user, I need to be able to access the balance page so that I can view my transactions.	21	-	5
I must be able to see my amount of loyalty points.	-	-	-
I must be able to see my loyalty card barcode.	-	-	-
I must be able to invite a friend to earn loyalty points.	-	-	-
I must be able to see my purchase history.	-	-	-
If I've earned loyalty points, I must be able to see this in a pop-up message.	-	-	-
6. Rewards			
#8.0 Reward list			
As a user, I need to be able to access the rewards page so that I can redeem my points.	55	-	21
I must be able to see my amount of loyalty points.	-	-	-
I must be able to see my received and potential rewards.	-	-	-
I must be able to be directed to the detailpage of a reward where I can send the item as a gift to a friend or redeem it myself.	-	-	-
If I want to redeem the item myself I must be able to see an explanation.	-	-	-
If I have redeemed the item, I must be able to see a confirmation in a pop-up message.	-	-	-
If I send the item to a friend, I must be able to see a confirmation in a pop-up message.	-	-	-
If I have received an item as a gift, I must be able to share it.	-	-	-
If I want to close the item received screen, I must be able to see a pop-up message.	-	-	-
If I want to share the item, I must be able to do so via native share.	-	-	-
I must be able to see an overview of my received awards divided into active and redeemed sections.	-	-	-
If I do not have any awards yet, then I must be able to see an empty state.	-	-	-

I must be able to see the detailpage of a received award.	-	-	-

7. Promotion list
#9.0 Promotion list

As a user, I need to be able to access the promotions so that I can be up-to-date with new deals.	2	-	-
I must be able to see the promotions in an in-app browser.	-	-	-

8. Product scanner
#10.0 Product scanner

As a user, I need to be able to scan items so that I can find additional information.	21	-	5
I must be able to scan an item using the camera.	-	-	-
If a product is not found, I must receive an error message.	-	-	-
If a product is found, I must be able to see the detailpage of that product.	-	-	-
I must be able to scan again on the detailpage of the product.	-	-	-
If no image is provided for the product, I must be able to see an empty state.	-	-	-

9. Profile
#11.0 Profile

As a user, I need to be able to access my profile so that I can keep my preferences up-to-date.	21	-	5
I must be able to my name, email address, profile completion, address, telephone number(s), birthday and gender.	-	-	-
If my profile is not 100% complete, I must be able to see a button to complete it.	-	-	-
If my profile is 100% completed, I must see this message.	-	-	-
If I've selected pets or favorite categories, I must be able to see these.	-	-	-
I must be able to edit my profile.	-	-	-

10. Store information
#12.0 Famiflora store information

As a user, I need to be able to see the different stores so that I can find more information for them.	8	-	3
I must be able to see an overview of the stores.	-	-	-
On the detailpage of a store, I must be able to view the address, phone number, email address, socials and opening hours.	-	-	-
I must be able to see a button that opens Google maps with the directions to the store.	-	-	-

11. Settings
#13.0 Settings

As a user, I need to be able to access the settings so that I can keep my preferences up-to-date.	13	-	5
I must be able manage my push notification settings (reminders, promotions and new earned points).	-	-	-
I must be able to update my language preferences (English, French), read more information about the app, read the terms & conditions and privacy policy.	-	-	-
I must be able to invite friends to the platform with a unique code.	-	-	-
I can share the app via native share.	-	-	-
If I want to log out, I must be able to confirm this in a pop-up message.	-	-	-

Enrichments			
Messages for the benefit of user-friendliness	2	-	-
Image optimiser*	-	-	0
Auto review pop-up mechanism*	0	-	-
Caching logic to limit network data usage and improve the user experience*	2	-	-

Data driven development*			
Firebase Analytics - page tracking	2	-	-
Firebase Analytics - KPI research	16	-	-

Fundamentals

APP/PWA/API/CMS development and staging environment setup	3	1	3
APP/PWA/API/CMS development and staging environment security and control	3	1	3
Database setup/composition	-	-	8
Crashlytics for the purpose of detecting bugs	1	-	-
Crash information pop-up mechanism	1	-	-
Technical documentation	5	1	8

Test driven development*

Implementation of unit tests for the core functionality of the mobile application(s)	13	-	-
Implementation of integration test for the core API('s)	-	-	8
Implementation of UI tests for the core web application(s)	-	1	-

Total hours development for each platform	**269**	**7**	**106**

Total development	**382**	
Flutter development	269	
Web development	7	
API development	106	

Design	**8**	
Design documentation for development	5	
Writing or updating the user stories	3	

Project management*	59	
Quality assurance*	59	

Total hours	**508**	
Total price	**€64 516,00**	

Hourly rate	€127,00	

All prices are excluding VAT. Our hourly rate is €127,- but might differ dependent on the complexity, volume and urgency of the project. This estimation is valid for a period of 14 days.

The estimated hours are charged at the communicated rate, the indicated price concerns the minimal to be invoiced fee for the works as described in this offer document. Any surplus of hours after a succesful completion of the described works will not be reimbursed or reserved as a credit. Realising a high-quality solution often requires multiple rounds of optimisation. When the hours for realising the described and estimated works exceed the initial estimate, additionally required hours will be offered at a reduced rate of €87,- per hour. By offering this reduced rate when the estimated hours are exceeded, DTT strives to compromise between the interests of our Clients and the interests of the Contractor. When additional hours are required, DTT will proactively communicate the status of spent and required hours. The described additionally required hours will be invoiced at the start of each month. Additional wishes and functionalities which have not been specified or estimated, fall outside of the scope of this estimate. In the estimation the same functionality can be mentioned multiple times. The first time a functionality is mentioned in the estimation it will be estimated higher, a functionality will receive discounted hours when mentioned again.

The required hours for realisation can deviate from the provided estimation when the completion is depended upon a third-party, this includes when DTT; i. works with a third-party API, ii. works with an unfamiliar hosting environment, iii. has to rely on third-party hardware or software.

Glossary

Agile ceremonies

Agile ceremonies are meetings that allow us to plan, analyse and track the development status and progress. Our ceremonies include a sprint planning, a sprint review, a retrospective, and daily stand-ups with the entire team.

Project management

It is the responsibility of the project manager (or, 'PM') to ensure that all team members work together in an effective and efficient manner. The PM's daily tasks include setting priorities for the team, performing resource allocation, initiating agile ceremonies, communicating with the client, and ensuring everyone is working towards the same goal with the same information and priorities.

Quality assurance

DTT has a dedicated team for Quality Assurance (or, 'QA'). It is the responsibility of this team to continuously test the deliveries of our development teams. Our QA engineers employ unit tests, integration tests and automated user testing to assist them in assuring the quality of our solutions. Additionally, they also ensure the solution adheres to guidelines and best practices. Before a solution is delivered to our clients, it must first be approved by our QA engineers.

Bug fixing and revising

Bugs are issues in software that cause incorrect or unexpected behaviour. These issues can be introduced during software development, but can also occur due to changes in third-party dependencies or other external influences. When a bug is fixed, we redesign the functionality to prevent it from happening again - this is called 'revising'. Fixing bugs and revising the codebase are an integral part of software development.

CMS (Content Management System)

CMS stands for 'Content Management System'. The CMS is an (often web based) environment which provides an administrator with tools to manage content in a solution.

API

API stands for 'Application Programming Interface'. An API connects the mobile and/or web application with the back-end solution, often to facilitate communication with the database.

Caching logic

Caching is a technique where data is stored after it is retrieved for the first time. This allows for a faster retrieval of this data every next time it is required, which significantly reduces load times and improves the overall user experience.

Image optimiser

This tool optimises the resolution of (downloaded/uploaded) images to ensure a higher image quality at a lower file size. This results in better looking images, faster loading times, and reduced upload/download bandwidth. DTT implements this tool by default in all her projects.

Technical documentation

Technical documentation refers to any form of documentation that describes the use, functionality, or architecture of a solution. It helps to increase the maintainability, resource scalability and technical communication of all members involved. DTT designs extensive technical documentation for her solutions, including functional design, user stories, code architecture, class diagrams, flowcharts, and API documentation.

Test Driven Development

Test Driven Development (or, 'TDD') is a development methodology that puts an emphasis on the automated testing of code. Often, the test is even written before the code. The test is then used as a 'check' to verify that the code is both complete and functional. If something 'breaks' in this code, the developer will be notified by the failing test and prevent unneeded test cycles by the QA team and the client. TDD results in highly tested and stable code, which improves the quality of the codebase and the stability of the solution.

Auto review mechanism

This UI/UX mechanism is designed to receive feedback from users in an effective and non-intrusive manner. Users are asked if they are happy about the solution. Based on their answer, the users are kindly requested to provide additional feedback via email, or as a rating/review in the app store.

Data Driven Development (analytics)

User feedback and analytics provide insight into how a solution is used by its users. When we shape new features and optimisations based on these insights, we speak of 'data driven development'. Measuring user behaviour is essential for focussing the development phases of a solution after its publication, as it allows us to make informed decisions on improvements, priorities, and optimisations. To measure user behaviour, we advise the implementation of Google Analytics for Firebase, which additionally tracks a wide variety of standard KPI's and user information, including demographics, countries of origin, session duration, growth and retention.

Funnels

A funnel is a measurement technique that tracks user behaviour according to a predetermined process (or, customer journey). Google Analytics for Firebase allows you to track: i). how often a process is started, ii). how often a process has been completed, and iii). at which point a process has been stopped. To illustrate the insights provided by a funnel, let's imagine a funnel for a web shop which tracks: i). when a product has been selected, ii). when the selected product has been added to the shopping cart, iii). when the user proceeds to the payment step, and, finally, iv). when the user has confirmed their purchase. In this example, knowing the amount of users that reach each step of the purchasing process, and knowing the percentage of users that proceed to the next step, provides us with valuable insight into where users drop off during this customer journey. These insights can be used to prioritise which parts of the purchasing process need to be optimised first.