

Functionalities	Web	API*
WEB		
0. Loading		
#0.0 Loading Screen		
As a user, I need to be able to see the loading screen so that I know the game is loading to open.	2	-
I must see the splash screen image for a few seconds when the game is launching.	-	-
1. Task Introduction		
#1.0.0 - 1.0.1 Introduction		
As a user, I need to be able to read the introduction so that I know the rules and all the other valuable information before starting with the missions.	8	-
I must be able to read the introduction.	-	-
I must be able to pause the mission.	-	-
1.1 - 1.7 Mission tasks		
#1.1.0 - 1.1.9 Task - Real or phishing		
As a user, I need to be able to choose whether the email is real or phishing, so I can answer the questions of a mission.	8	3
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-
I must be able to show and hide the sender's email address.	-	-
I must be able to view the hyperlink URL.	-	-
I must be able to select whether the email is real or phishing.	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-
#1.2.0 - 1.2.2 Task - Drag and drop words		
As a user, I need to be able to fill in the gaps of a text by drag and dropping the correct answers, so I can answer the questions of a mission.	21	5
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-
I must be able to choose from a set of possible answers.	-	-
I must be able to drag and drop an answer to an open position in the text.	-	-
I must be able to see the answers at all times.	-	-
I must be able to submit my answer.	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-
#1.3.0 - 1.3.1 Task - True or false		
As a user, I need to be able to choose the option true or false, so I can answer the questions of a mission.	8	3
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-

I must be able to view the source of the article.	-	-
I must be able to select whether the article is true or false.	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-

#1.4.0 - 1.4.4 Task - Single choice answer

As a user, I need to be able to select an answer out of a list of possible answers, so I can answer the questions of a mission.	8	3
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-
I must be able to navigate to a video and or image (external or in-game).	-	-
I must be able to select a text or picture as an answer.	-	-
I must be able to select one answer.	-	-
I must be able to submit my answer.	-	-
If I try to select a second answer, the first answer will be deselected.	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-

#1.5.0 - 1.5.2 Task - Multiple choice answer

As a user, I need to be able to select multiple answers out of a list of possible answers, so I can answer the questions of a mission.	13	5
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-
I must be able to navigate to a video and or image (external or in-game).	-	-
I must be able to select one or multiple answers.	-	-
I must be able to submit my answer(s).	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-

#1.6.0 - 1.6.2 Task - Spot stereotype

As a user, I need to be able to select a stereotype out of a list of possible answers, so I can answer the questions of a mission.	13	3
This is the same for almost all the mission tasks/screens:	-	-
I must be able to pause the mission.	-	-
I must be able to navigate back to previous questions.	-	-
If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
I must be able to see my progress within the mission.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to read the question and or description.	-	-
This is unique for these screens:	-	-
I must be able to select a picture as an answer.	-	-
I must be able to select one answer.	-	-

I must be able to submit my answer.	-	-
If I try to select a second answer, the first answer will be deselected.	-	-
This is the same for all mission tasks:	-	-
If I did not choose an answer, I must not be able to continue to the next question.	-	-
If I answer the question correctly, I must see a confirmation.	-	-
If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
If I answer the question correctly, I must receive bits as a reward.	-	-
If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
If I answer the question incorrectly, I must see the correct answer.	-	-
For every wrong or right answer, I must be able to hear a sound.	-	-

#1.7.0 - 1.7.1 Task - Online behavior - Chat

As a user, I need to be able to choose whether the online behavior is oke or not oke, so I can answer the questions of a mission.	8	3
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This is the same for almost all the mission tasks/screens:	-	-
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I must be able to pause the mission.	-	-
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I must be able to navigate back to previous questions.	-	-
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If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
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I must be able to see my progress within the mission.	-	-
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I must be able to see my current amount of bits.	-	-
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I must be able to read the question and or description.	-	-
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This is unique for these screens:	-	-
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I must be able to select whether the behavior is oke or not oke.	-	-
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I must be able to scroll through the chat.	-	-
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This is the same for all mission tasks:	-	-
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If I did not choose an answer, I must not be able to continue to the next question.	-	-
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If I answer the question correctly, I must see a confirmation.	-	-
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If I answer the question, I must be able to view feedback that in some cases could be accompanied by a video.	-	-
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If I answer the question correctly, I must receive bits as a reward.	-	-
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If I receive bits, I must be able to see them added to my current amount in an animation.	-	-
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If I answer the question incorrectly, I must see the correct answer.	-	-
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For every wrong or right answer, I must be able to hear a sound.	-	-
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1.8 - 1.13 Other screens

#1.8.0 - 1.8.2 Statement

As a user, I need to be able to give my opinion about a statement, so I can answer the questions of a mission.	13	5
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This is the same for almost all the mission tasks/screens:	-	-
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I must be able to pause the mission.	-	-
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I must be able to navigate back to previous questions.	-	-
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If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
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I must be able to see my progress within the mission.	-	-
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I must be able to see my current amount of bits.	-	-
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I must be able to read the question and or description.	-	-
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This is unique for these screens:	-	-
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I must be able to view a picture or video.	-	-
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I must be able to re-watch the video.	-	-
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#1.9.0 - 1.9.2 Slide

As a user, I need to see a picture or video slide, so that I can get context for the next tasks.	21	5
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This is the same for almost all the mission tasks/screens:	-	-
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I must be able to pause the mission.	-	-
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I must be able to navigate back to previous questions.	-	-
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If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-
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I must be able to see my progress within the mission.	-	-
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I must be able to see my current amount of bits.	-	-
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This is unique for this screen:	-	-
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I must be able to choose a storyline direction out of two options.	-	-
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#1.9.3 Slide - Question supported with picture

As a user, I need to be able to choose a direction in the storyline, so I can have an impact on how the storyline evolves.	8	3
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This is the same for almost all the mission tasks/screens:	-	-
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I must be able to pause the mission.	-	-
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I must be able to navigate back to previous questions.	-	-
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If I navigated to a previous question or screen, I must have options to navigate back to the current question or screen.	-	-

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Each option can be supported by an image (optional).	-	-
I must be able to submit my answer.	-	-
Based on my decision, the correct video needs to be started after I've submitted my answer.	-	-

#1.10.0 Mission paused

As a user, I should be able to pause the mission, so that I can choose to take a break or go back to the main menu.	13	5
When the pause button is pressed, the exercise should be paused.	-	-
I must be able to see my current amount of bits.	-	-
I must be able to resume the mission from where I left off after pausing.	-	-
I must be able to stop the exercise entirely and return to the exercise overview screen.	-	-

#1.11.0 Reward

As a user, I should be rewarded with bits for answering multiple questions correctly in a row, so that I stay motivated to give my best efforts.	5	5
I must be able to see the amount of bits rewarded to me.	-	-
I must be able to see the bits added to my current amount in an animation.	-	-
I must be able to continue to the next task/screen.	-	-

#1.12.0 - 1.12.2 Mission completed

As a user, I need to see a mission completed screen, so that I can get an overview of all my received bits and jokers, can be redirected to Media Masters Extra, and be able to go back to the menu.	13	3
I should be able to see the amount of bits I earned for this mission.	-	-
If I get rewarded with a joker, I should be able to see the earned joker type.	-	-
I must be able to navigate to MediaMasters extra.	-	-

#1.13.0 - 1.13.3 Joker

As a user, I need to be able to use a joker, so that I can increase my chances of answering the questions correctly.	8	3
When I have a joker available that I did not use for this question and selected an answer, I should be prompted with a reminder that I am able to use the joker.	-	-
If I'm in the final mission, available jokers should be displayed at all times.	-	-
I must be able to see the function of the joker.	-	-
I must be able to confirm using the joker or navigate back to the question.	-	-
I must be able to use a joker.	-	-

Enrichments		
Messages for the benefit of user-friendliness	2	-
Image optimiser*	-	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

Web/API/CMS development and staging environment setup	3	3
Web/API/CMS development and staging environment security and control	3	3
Database setup/composition	-	13
Crashlytics for the purpose of detecting bugs	1	-
Crash information pop-up mechanism	1	-
Technical documentation	5	8

Test driven development*		
Implementation of integration test for the core API(s)	-	8
Implementation of UI tests for the core web application(s)	13	-

Total hours development for each platform	218	89
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Total development **307**

Web development	218
API development	89

Design **8**

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

Project management* **48**

Quality assurance* **48**

Total hours	411
Total price	€55 074

Hourly rate **€134,00**

Estimate terms and conditions*



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.

Estimate terms and conditions*

All prices are excluding VAT. Our hourly rate is €134,- but might differ dependent on the complexity, volume and urgency of the project. This estimation is valid for a period of 14 days.

The hours estimated will be invoiced at the communicated rate. The provided price represents the minimum fee to be invoiced for the work as outlined in this offer document. Achieving a high-quality solution often necessitates multiple rounds of optimization. In cases where the hours required to realize the described and estimated work surpass the initial estimate, any additional necessary hours will be offered at a reduced rate of €99,- per hour. By providing this reduced rate for exceeded estimated hours, DTT aims to find a balance between the interests of our clients and those of the contractor. If additional hours become necessary, DTT will proactively communicate the status of the hours spent and required. It's worth noting that the same functionality may be mentioned multiple times in the estimate. The initial mention of a functionality will carry a higher estimate, while subsequent mentions will receive discounted hours.

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.