User Guide
How to create Gamified Geolocalised activities

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Beaconing User Guide

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CREATE Geolocalised gamified quests

Accessing the creation tool
To access the Beaconing geolocalised gamified quests tool, you should go using Chrome browser to that url:

https://atcc.beaconing.eu/

Your login and password are: (see details in the email you’ve received)

This login and password couple is shared with other participants to enable the creation of shared activities among you.

Connection, you will see the screen below

The first step to do is to DUPLICATE one of the geolocalised quest that is relevant for you,
Search it by its name: press CTRL and F and type-in : “Scientix”

An example geolocalised quest is named: “Scientix Save the World”

Once found, DUPLICATE it clicking on icon
You’ll now see on the first position in the list a new COPY of the quest named « Copy of Copy of Scientix Save the world » as shown below:

Click on the Edit Icon:

(If you don’t see the Blue Pins on the Map, you’re not maybe located in Barcelona…., Move the map using the ZOOM (+ - ) or the mouse wheel.

Rename the quest with your name (your city):
Example « Discovery of Istanbul... »

You can set a Description that will help to find it and know what it is about.

On the right panel, you can see the list of POIs (Point Of Interests) located on the map that constitute your geolocalised paths to follow.

Click on 🗗 to center the Map on that POI

Click on 🖼️ to modify the challenge to be achieved reaching that location (POI)

Click on �糁 to duplicate the information for that POI : allow you to duplicate data easily.

Click on 🗑️ to delete a POI from the MAP. Do not delete all POIs as they already contain existing data that will be reused...

Click on 🍭 to edit the challenge to be achieved reaching that location (POI)

You can label a POI to later better understand what it is about....update the number of points gained reaching that location.

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You can **Edit the screen Before challenge** (Screen that will help finding the place or will provide a clue to go to that POI....)

![Edit button for updating the screen](image)

**The Edit button will help you updating the screen before challenge**

You can update the Title, the description, change the image....
The Screen for Challenge will help you setting/updating the challenge to achieve reaching the location.

Select the challenge type among the 3 possible types:

- **Check-In**: « I’ve been reaching that place... »
- **Upload Content**: « Will ask you to take a picture and upload it to the server »
- **MiniGame**: Will ask you to play a minigame activity: (We’ll see below how to create new activities)

Here, you need to enter the minigame URL created using the Beaconing authoring tool: `teacher.beaconing.eu` to create minigames such as the one shown below:

You can also edit the **SCREEN after challenge** (Screen that will summarize the points gained, and will give the clue to reach the next POI ....)
You can update the Title, Text, and the clue to the next POI…. To update the Picture, you’ve to click on the Browse button on the upper right side and assign a name to that picture.

Adding a POI is very easy (just click on the MAP and a new POI will be created) or type-in an address and the proposed addresses as shown below will be displayed and you’ll be able to pick it up from that list:

MOVING a POI is just a drag and drop operation...

You can order the POIs that constitute the learning paths just by Drag/Drop in the list of POIs;
Quest: Start and END Screen

The Start Screen of the quest can be edited.

Click on Edit and update the data.

Title of the quest

A picture or a video (Youtube ou Vimeo) to illustrate your quest

The text that explains the objective of the quest

And… the first clue to find the first POI.

The END Screen (Last Screen of the quest)

Click on Edit and update the data.
Title that will be displayed on the top

A picture or a video (Youtube or Vimeo) to illustrate your quest

The text that explains that the student has reached the objective of the quest

Also the score, the time spent...will be automatically displayed on that screen
RUNNING a Gamified Geolocalised quest

Test
I’ve just finished editing my quest (either by duplicating one existing or by creating a new one pressing the ‘NEW GAME’ button and I would like to try it.

I need with my smartphone with an internet connection and a localization activated: (see below)

I now click on Finish Game Edition

And clicking on the icon it opens a new tab in which the quest URL is displayed

Example: https://atcc.beaconing.eu/app.php?game=799 that is the url that needs to be given to the students to run the quest on their mobiles

Nota : You can generate a QRCode (using Qrcode Generator on google) or send an email with the url....

Activate localization on your smartphone
If you’ve disabled the localization, the quest will not be able to run...this you need to activate it :


On IPhone: https://support.apple.com/fr-fr/HT207092 (and also verify in the settings that « Safari » localization is On)
If for any reason, you can’t go outside with your students to run the quest, you still have the possibility for each POI to generate a QRCode.

For that, Click on each POI, EDIT it and Click on the Generate QR Code button.

The POI QRCode will be automatically generated and displayed on the screen, print-it out ....Send it.....this will allow you also to simulate the fact that you’ve reached the relative POI.

This can be useful to discover places that you’re not able to go ....
CREATING Minigames and Gamified Lesson Paths

Accessing the Teacher UI

We’ve just seen that for POI we can as challenge set the URL of a minigame created by the Beaconing tool. For that you will now access to:

(Using Chrome or Firefox browser) https://teacher.beaconing.eu/

The login and password are the same as the other tool (refer to the email received for your credentials).

Once in the teacher UI, you will click on ‘LESSON MANAGER’ then on ‘NEW PLAN’.

This will display the GLPs (Gamified Lesson Path) related to your account. Those GLPs are displayed giving you their names, descriptions, ....

Now click on EDIT to edit the GLP.
Editing a GLP

1/ Start by clicking **NEW GLP** to create a new pedagogical learning path

2/ Modify the title as necessary
   Edit the description box
   To finalize, click on **CREATE**

Once this is done, you can begin selecting mini-games to populate your learning path. There is a mini-games list in the middle of the screen (scroll with your mouse to see them all) from which you can drag and drop the desired activity into one of the challenges boxes.

Once a mini-game has been selected and set in a challenge, it needs to be customized by clicking on it and then clicking on the **EDIT** button.
Existing Mini-games

WARNING: in the game editor, all the fields marked by a small red star ⚫ are mandatory and need to be filled to make the mini-game functional.

Swipe and Seek: find the answer in a grid

The Swipe and Seek game allows to create playful quizzes where the players look for the answer to the question in a grid of letter (and sometimes numbers). It adds a bit of fun to the usual quiz mechanisms and also helps a little bit the students on the right path as they know the answer is hidden somewhere in the grid.

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (*Game Title*)
- The preferred language (*Select Language*)
- A quick summary of the game (*Game Description*)
- The total time allotted to the students to finish this mini-game, indicated in seconds (*Game timeout (seconds]*)
• The general theme of the mini-game (fields Select the topic and Subtopic Name)
• The amount of hints available (Number of hints). Each used hint highlights a new letter of the correct answer.
• The amount of pauses allowed (Select the number of freezes). Each pause freezes the game clock for a few seconds.
• The total size of the grid, expressed in number of columns and rows (fields Select the number of grid columns and Select the number of grid rows)
• The minimum amount of points to be scored for the exercise to be passed (Minimum Success Points)
• The message to be displayed when the students pass the mini-game (Custom 'passed' message)
• The message to be displayed when the students fail the mini-game (Custom 'failed' message)

Once all the fields filled (remember that only the ones marked by a red star are mandatory), the questions (and their answers) given to the students have to be written down.

Click on the Questions field and start filling in the body of the question. A time limit for this specific question can be set and the question can be deemed skippable or mandatory.

To input the answers, click on Answers and fill the filed with the right answer. Don’t forget to tick the Correct Answer box and to fill in the amount of points earned for a correct answer (Points added for a correct answer).

The mini-game will be displayed for the students in the following fashion:
SolveIt: a game based on the 4 basic arithmetic operations

SolveIt can generate automatically a series of questions for the students pertaining to the 4 basic arithmetic operations.

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (*Game Title*)
- The preferred language (*Select Language*)
- A quick summary of the game (*Game Description*)
- The total time allotted to the students to finish this mini-game, indicated in seconds (*Game timeout (seconds]*)
- The general theme of the mini-game (*Select the topic and Subtopic Name*)
- The game difficulty level (*Select the level*). The difficulty of resolving the operations is directly dependent on the difficulty level which affects the size of operands and the presence of decimal numbers.
- The type of operation presented among the four available (*Select the operation*): addition, subtraction, multiplication, division.
- The typing direction of the answer given by the player (*Select the answer typing direction*), to determine if the answer is inputted from right to left or left to right.
- The number of operands in the operation to solve (*Select the number of operands*).
- The total amount of operations to be solved (*Select the number of total operations*).
- The minimum amount of points to be scored for the exercise to be passed *(Minimum Success Points)*
- The message to be displayed when the students pass the mini-game *(Custom ‘passed’ message)*
- The message to be displayed when the students fail the mini-game *(Custom ‘failed’ message)*

As all the questions are generated automatically, there are no questions or answers to be filled by the teacher.

The mini-game will be displayed for the students in the following fashion:
Checkers Game: a game where the quiz is hidden in a game of checkers

Checkers is a game where the students have to play a game of checkers against the IA while at the same time answering questions. The game can be stopped either at the end of the checkers game or when all the questions have been answered.

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (Game Title)
- The preferred language (Select Language)
- A quick summary of the game (Game Description)
- The total time allotted to the students to finish this mini-game, indicated in seconds (Game timeout (seconds))
- The general theme of the mini-game (fields Select the topic and Subtopic Name)
- The game difficulty level (Select the level). This parameter influences the AI mastery of the game of checkers.
- The minimum amount of points to be scored for the exercise to be passed (Minimum Success Points)
- The message to be displayed when the students pass the mini-game (Custom 'passed' message)
- The message to be displayed when the students fail the mini-game (Custom 'failed' message)
- The display mode of the moveable pieces, highlighted or not (Highlight moveable pieces).
- The display mode of the possible square where to move a piece, highlighted or not (*Highlight possible squares*).

Once all the fields filled (remember that only the ones marked by a red star are mandatory), the questions (and their answers) given to the students have to be written down. The questions can appear following three different layouts: Multiple Choice, Yes/No or Free Text Answer.

If Multiple Choice has been selected, the question text, the time limit and the maximum amount of selectable answers need to be set.

To enter the text of the right and wrong answers, click on *Answer* and begin filling the answer text field. Do not forget to tick the *Answer correct* box and to indicate the amount of points earned if you fill in a correct answer.
The mini-game will be displayed for the students in the following fashion:
Generic Quiz Game: a flexible quiz game

This game allows the teacher to use different types of quizzes together: multiple choice questions, fill the blanks, drag and drop words ...

1/ Drag and drop the Generic Quiz Game in an orange challenge box:

Let's drag to this box:

By clicking on the text Generic Quiz Game we can edit the game by clicking on Edit

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (Game Title)
- The preferred language (Select Language)
- A quick summary of the game (Game Description)
- The total time allotted to the students to finish this mini-game, indicated in seconds (Game timeout (seconds))
- The general theme of the mini-game (fields Select the topic and Subtopic Name)
- The minimum amount of points to be scored for the exercise to be passed (Minimum Success Points)
- The message to be displayed when the students pass the mini-game (Custom 'passed' message)
- The message to be displayed when the students fail the mini-game (Custom 'failed' message)
In order to add questions, click on

The Question panel appears and the type of question layout can be selected:

It’s entirely possible to mix several different layouts inside the same quiz. Let’s describe all the layouts available.

**Fill the blank**
Select a *Fill the Blank* type.

The question is divided in two separate parts. On one hand there is the text of the question (*Question Text*) itself and on the other the part of the question in which the answer will be filled by the players (*Answer Text Template*). The space to be filled is coded with the `%s` symbol. Each time you want a blank to be filled, a `%s` symbol has to be written.

After writing the question, the available answers have to be written. To do so, click on *Answers*, and add an answer.
Don’t forget to tick the box indicating it’s a correct answer and to fill in the amount of points gained by the players. If you’re writing a question with multiple blanks to fill, you need to write in the answers in exactly the same order that the blanks are displayed on screen.

The mini-game will be displayed for the students in the following fashion:

![Mini-game display](image)

**Drag and Drop Words**

The question is divided in two separate parts. On one hand there is the text of the question (*Question Text*) itself and on the other the part of the question in which the answer will be filled by the players (*Answer Text Template*). The space to be filled is coded with the %s symbol. Each time you want a blank space to be filled, a %s symbol has to be written.

After writing the question, the available answers have to be written. To do so, click on *Answers*, and add an answer. Don’t forget to tick the box indicating it’s a correct answer and to fill in the amount of points gained by the players. If you’re writing a question with multiple blank spaces to fill, you need to write in the answers in exactly the same order that the blanks are displayed on screen.

Because we’re writing a question where we will be displaying multiple wrong answers to pick from, don’t forget to write those wrong answers.
We should also give to each of the answer an order, as indicated in the field *Order for answer*. We advise you to give a « 0 » order to correct answer and a negative order (« -1 », « -2 », etc...) to the incorrect ones.

The mini-game will be displayed for the students in the following fashion:

**Video Player**
Creating this type of questionnaire is very easy as it’s actually not a quiz but simply a way of displaying video or pdf documents.

Once you select the layout *Video Player* you enter a question text which will be displayed to present and contextualize the video or pdf file. Then enter the Internet link (URL) corresponding to the document to display in the field *Youtube or Vimeo Url*.

A time limit can be set but it’s entirely optional.
The mini-game will be displayed for the students in the following fashion:

**Multiple Choice Selection**

Let’s select a *Multiple Choice Selection* layout. We simply input the text of the question.
We can associate an image to the question (not mandatory):

We click on Answers in order to input the desired answers.

Click on to save the mini-game. You can see what the minigame looks like by clicking on the button or by clicking again on the quiz in the orange challenge box and then selecting Play.
The mini-game will be displayed for the students in the following fashion:

Many different types of activity can be created this way, by mixing question types, modifying allotted time, points and so on.
Robocode is a game that will automatically generate an exercise pertaining to the discovery of the basic notions of algorithmic and coding. The game revolves around helping a robot to move around in a labyrinth and find the exit.

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (*Game Title*)
- The preferred language (*Select Language*)
- A quick summary of the game (*Game Description*)
- The total time allotted to the students to finish this mini-game, indicated in seconds (*Game timeout (seconds)*)
- The general theme of the mini-game (fields *Select the topic* and *Subtopic Name*)
- The minimum amount of points to be scored for the exercise to be passed (*Minimum Success Points*)
- The message to be displayed when the students pass the mini-game (*Custom 'passed' message*)
- The message to be displayed when the students fail the mini-game (*Custom 'failed' message*)
- The difficulty level of the game (*Select the difficulty*). The complexity of the labyrinth will depend directly on this parameter.
- The maximal number of code lines/instructions available to the players (*Max source lines of code limit*). According to this parameter the students will be able to give more or less instructions to the robot. Lowering this parameter increases the game difficulty.
The mini-game will be displayed for the students in the following fashion:
DragIT: visual questions based on drag and drop

DragIT offers multiple choices question style questionnaire with a visual twist, asking the students to set back in place images on a certain background image.

This game uses a purely graphical editor, external to the authoring tool we have been using so far. The edit button is called Edit Externally rather than Edit for the other games.

Creating and editing the game is a 3-steps process, taking place in three separate screens. First a game title and some instructions have to be entered. Total game time, time allowed matching one object, bonus time gained for a correct answer and malus time subtracted for a wrong one can also be set.

Once everything ready, press the Next button to proceed to the next screen. Here a background image for the game has to be uploaded. This background image is where the players will need to drag and drop the answers they are given. To upload the image, select it’s emplacement on your hard drive.

In the example below, the image is an empty table of 4 columns corresponding to 4 molecules, the idea behind the game is that the players will need to place the color corresponding to a molecule inside the column with the name of the molecule.
Once the background image uploaded, click on Next. In the last step of this editor we have to create “points of interest” and associate them images. Those points of interest mark the correct place where the images have to be dragged and dropped.

- The icon duplicates an existing point of interest.
- The icon destroys an existing point of interest.
- The icon associates an image to an existing point of interest. You need to upload this image from your hard drive.
- The icon gives a name to an existing point of interest.

Don’t forget to click on Save Game to save your work.

The mini-game will be displayed for the students in the following fashion:

Only one of the images to sort is displayed at a time, with a green bar on top of it indicating a timer. The player has to drag and drop the image at the right place before the timer runs out, or they incur a time penalty. The four blue dots indicate the possible places where to drag and drop the current image. Once the green bar is depleted or the image has been placed successfully, a new image to be placed appears.

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MatchIT: a visually based question and answers game

MatchIT is a game displaying multiple choice types of questions in a visual fashion, and answers can be either an image or a text or a sound. The principle of the game is the following: the players need to associate images (or text or sound) two by two, by dragging and dropping the elements on the right hand side on the elements in the middle of the screen.

This game uses a purely graphical editor, external to the authoring tool we have been using so far. The edit button is called *Edit Externally* rather than *Edit* for the other games. Creating and editing the game are all done on the same screen.

First a game title and a timer have to be set in the red ribbon at the bottom of the screen.

We have then to create “points of interest” by clicking on the big grey plus sign at the center of the screen.

Those points of interest can be either represented by images, sound or text.

If the point of interest is an image or a sound, the files have to be uploaded from your hard drive.

Once a point of interest created, a small window (see below) appears both in the center of the screen and on the right hand side of it. Those two windows are linked and will need to be dragged and dropped together by the players.
We now have to place, 2 at a time, all the elements to link. Don’t forget to click on SAVE GAME to save your work.

The mini-game will be displayed for the students in the following fashion:

The players will need to drag and drop the elements on the right hand side on the elements in the middle of the screen. A countdown timer is displayed on the bottom right on the screen in the red ribbon.
Millionaire Quiz: A game of questions
Planet Ninja is a game that allows creating multiple choice questions in a visual and fun way. Students will have to cut in slices the right answer when it appears (as a bouncing planet) on the screen.

In order to instantiate correctly this game, a certain number of information fields have to be filled:

- The game name (Game Title)
- The preferred language (Select Language)
- A quick summary of the game (Game Description)
- The total time allotted to the students to finish this mini-game, indicated in seconds (Game timeout (seconds))
- The general theme of the mini-game (fields Select the topic and Subtopic Name)
- The minimum amount of points to be scored for the exercise to be passed (Minimum Success Points)
- The message to be displayed when the students pass the mini-game (Custom 'passed' message)
- The message to be displayed when the students fail the mini-game (Custom 'failed' message)
• The difficulty level of the game (*Select the difficulty*). The movement speed of the planets appearing on screen will depend directly on this parameter.
• The amount of slowdown bonuses (*Number of Rallenty bonus*). Once triggered a slowdown bonus slows the passage of the planets on the screen in order to have a bit more time reading the text on it and decide to slice them or not.
• The amount of good answers in a row needed to activate a slowdown bonus (*Select the number of correct answers in sequence to activate rallenty bonus*).
• The amount of time a slowdown bonus lasts, in seconds (*Rallenty bonus duration (seconds)*).

Once all the fields filled (remember that only the ones marked by a red star are mandatory), the questions (and their answers) given to the students have to be written down.

The text of the question and (optionnaly) the allotted time per question has to be entered.

Then we need to fill in the text for all the answers (right and wrong) we want to see displayed on the screen. The more answers we answer, the more choice the students have and the more difficult the question, but it might also take more time for the right answer to pop so we recommend around three or four answers total per question.

When entering a correct answer, don’t forget to tick the *Correct Answer* box and to add the amount of points netted by the player.

The mini-game will be displayed for the students in the following fashion:
STUDENTS’ GAME INTERFACE

With Beaconing you can access a gamified learning path directly on PC (via a Web Browser). This does mean that no geolocation activity will be working as there is no GPS on most PC.

The different learning path created through the authoring tool will be available at this URL:

https://student.beaconing.eu

We have already created for you students accounts, please contact us for more information.

By clicking on the Play button at the bottom of the screen, the students will access to the learning path that have been assigned to them and will be able to play them.
By clicking on START, the corresponding learning path will be launched.

The students will see the gamified earning path as a point-and-click game in which they will need to solve riddles and enigmas by moving around and engaging the different characters displayed on the screen. Those interactions will prompt the launch of the mini-games you did create and associate to the said learning path.

Students play, learn and earn points.