

Towards an Authoring Tool to Help Teachers Create Mobile Collaborative Learning Games for Field Trips

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SITULEARN

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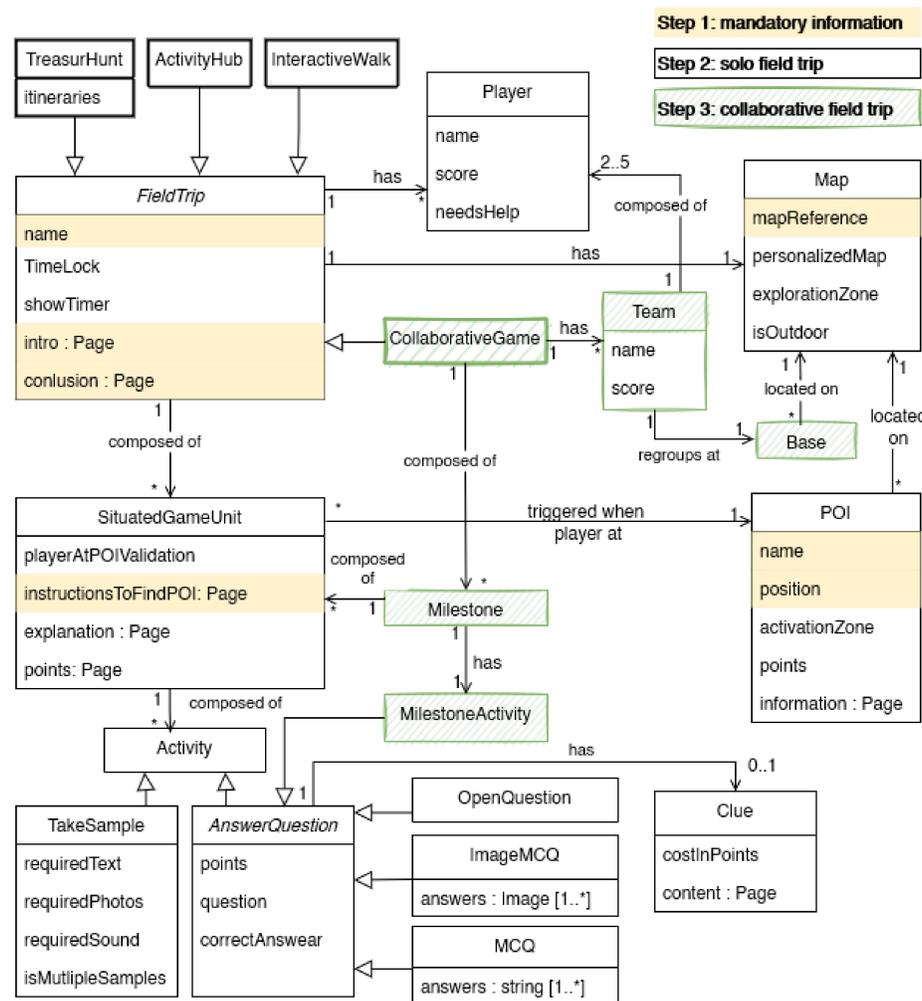


The SituLearn-Editor **authoring tool** allows teachers to create custom geo-located **smartphone applications** for their field trips.

It provides 3 types of solo game models :

- Treasure Hunt
- Activity Hub (museum)
- Interactive Walk (city tour)

We are currently working on a 4th multiplayer and collaborative game model : MOCOGA.



MOCOGA Model

In a **MOCOGA (MOBILE COLLABORATIVE learning GAME)**, the students are in **Teams**. They need to **organize and coordinate** themselves to complete several **Situated Game Units** in a given time. Then, the team members go back to their **Base** camp to complete a global **Milestone Activity**. They will need to **collaborate** because this activity requires knowledge that was previously acquired by the different team members, while completing their Game Units.

SituLearn Player



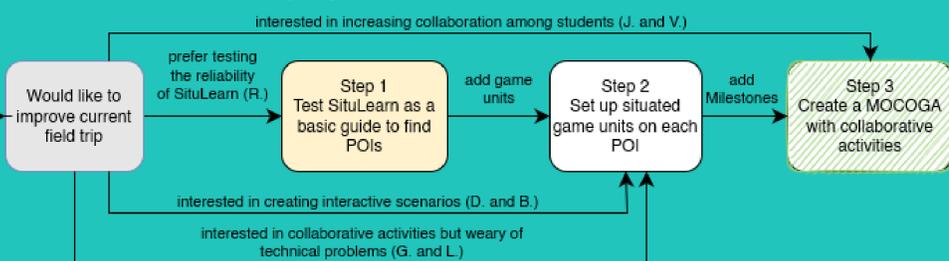
Students find the *Points Of Interest (POIs)* and complete the *Situated Game Units*, composed of *Activities* (answer questions and take samples).



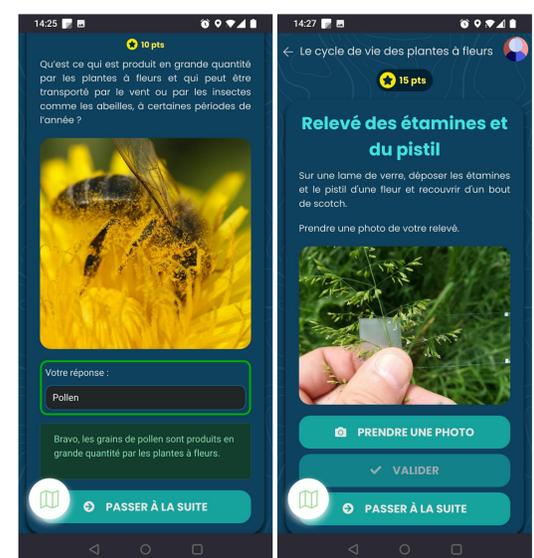
Guy, one of the pilot teachers of the project, using SituLearn for his field trip about plants. Screenshots of the mobile app he created below.

Modular, Step-by-Step design

The MOCOGA Model provides a step-by-step modular design method to help teachers adopt it gradually. Teachers can start out by using SituLearn to create a smartphone app that guides the learners to the *POIs*, then set up more complex *Activities* with a solo game model and then, eventually, transform it into a collaborative MOCOGA. This model was co-designed with the 8 pilot teachers of the project.



The game mechanics and elements for the MOCOGA Model were extracted from 19 digital and non-digital multiplayer games.



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