

## **Delivering Adventure: Moodle games for foreign language learning.**

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### **1 Introduction**

In recent times, the importance of learning a language has increased due to the enormous social and cultural interaction and geographical mobility existing worldwide. Within this context, the knowledge of a foreign language allows people to enlarge their way of communication by easily integrating on this new global society. Consequently, learning different languages is necessary. Progressively more, the learning process takes place in on-line platforms. These platforms have some advantages: there are no spatial and temporal limits to develop learning.

One of the most used and well-known on-line platforms for language learning is Moodle. This platform is an excellent tool with many possibilities not only for its pedagogical nature but also because it can be an open-source platform [2,3,5,8].

Moodle is supported by research works such as the one conducted by de Andrews & Daily [1] where it is considered as an excellent tool for collaborative learning/teaching. Graf & List [6] also state that Moodle is the best platform among other nine tested.

In Moodle, there are some activity modules built to practice language skills, where we detected a deficiency. This deficit is based on the lack of motivation that sometimes students feel when practising languages. In this sense, we propose to create new modules or activities to stimulate students to improve some skills and, in addition, increase the interactivity among them. Taking this fact into account and knowing that Moodle offers the possibility of creating and inserting new modules in the platform, we decided to develop two modules to practice language skills in Moodle.

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The modules developed are two games, which consist of touring on a map while solving interactive exercises along different places.

## 2 Games based learning

Cognitive psychology states that human factors (attention, motivation, memory, emotions, etc.) affect interaction with computers [5]. Based on this statement, we believe that developing games to be used during the language learning process is significant since games are excellent motivators [5].

Motivation is an important factor as students with no motivation experiment apathy, inactivity, passivity and their learning turns complicated. Hence, our interest on stimulating people by developing games [4].

Learning foreign languages require effort. Games are able to canalize that effort through challenging activities. In other words, along this adventure, students forget for a moment the idea of feeling and approaching languages learning as something distant and strange [4].

## 3 Delivery and Adventure: Modules description

Having described Moodle and after justifying language learning through games, now, we proceed to illustrate the two developed modules and some activities they contain.

### 3.1 Delivery

In this activity (Figure 1) students take a tour of various destinations on a map, by clicking on each specific icon. Every location shows a recording done by the teacher, where he or she provides students with directions to help them locate the next site and so on until the final one.

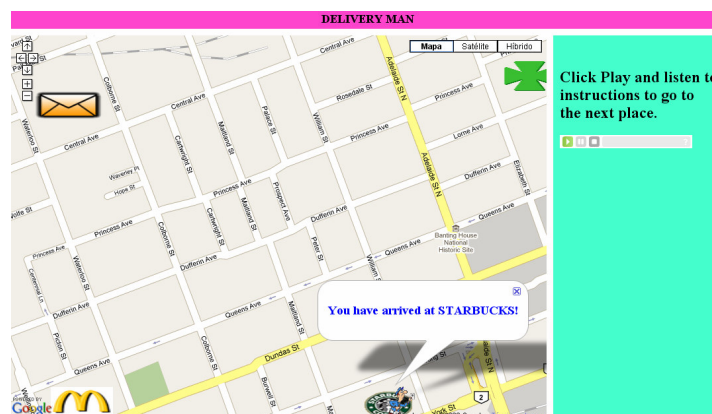


Figure 1. Interface of the activity "Delivery".

With this module, students will practice listening and oral skills and specific vocabulary to be able to get orientated when handling street planners and maps.

### 3.2 Adventure

Along this game (Figure 2) students take a tour of various destinations on a map, by clicking on the specific icon for the site. Again, here every itinerary is raised through an exercise designed by the teacher. The exercise has been designed as a game in different stages;

students need to solve the individual exercise in which they are immersed in order to be able to locate the next destination and so on until they reach the final one.

This game is more complete than the first one, since, among other possibilities, it is possible to exercise more than one language skill at a time.

With this module, students can practice listening, vocabulary, grammar, reading and writing skills depending on how the variety of exercises proposed by the teacher. Besides, by means of this exercise, students would also be able to put into practice interdisciplinary skills such as problem solving, critical thinking, autonomy and decision making.

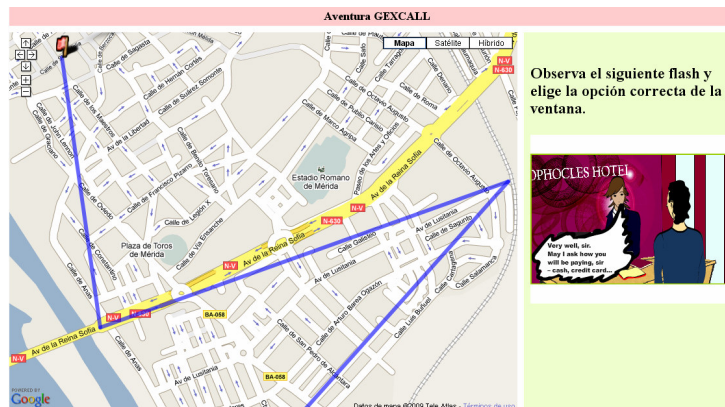


Figure 2. Interface of the activity “Adventure”.

#### 4 Game modules implementations and integration

The two mash-up modules are implemented using files with languages PHP, HTML and Javascript. In these files, one can access the Google Maps API, using, then, the actual maps of Google and the functions provided by API. They also contain the functions of a Moodle module that can be integrated into the platform and creates a table for every module that is inserted into the Moodle database.

Voice sounds and exercises for every specific module are implemented in a JavaScript file, although we are currently working on an authoring tool to make it function automatically.

Finally, sounds, videos or any other multimedia components included in the modules should be host in the same route as the content of each module is.

Figure 3 shows a scheme of the integration of Moodle, Google Maps and the two developed modules.

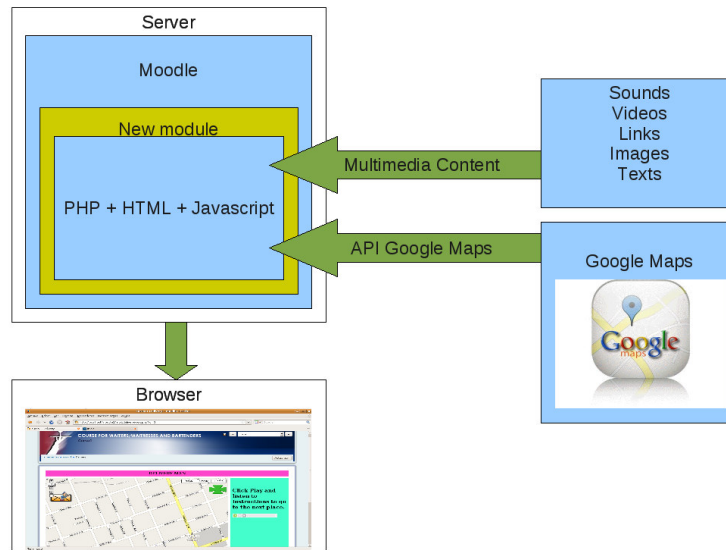


Figure 3. Integration of Moodle, Google Maps and developed modules.

Here, we see that specific modules have been created using PHP, HTML and Javascript files, and are integrated into a Moodle platform on a server. These modules utilize the Google Maps API and the required multimedia content. To run the modules in Moodle a browser is used.

## 5 Final remarks

Language learning is not a simple task; however by making use of games, we believe that students can be highly motivated towards learning. Furthermore, with the object of making language learning easier, we propose to the use of Moodle platform and the modules that can be developed and then integrated into the platform.

Based on the idea of easing language learning through stimulating activities that motivate students, we have developed two tasks for Moodle. Both ones are interactive and fun and students can practice a variety of language skills effortlessly.

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