

20 Design and implementation of BusinessApp, a MALL application to make successful business presentations

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Abstract

Little by little, Mobile Assisted Language Learning (or, simply, MALL) is taking force in the field of education, as it supports language blended learning and language learning ubiquity. The study presented here belongs in the Social Ontology-based Cognitively Augmented Language Learning Mobile Environment (SO-CALL-ME) research project, whose final aim is to design and create English as a Foreign Language (EFL) mobile applications (henceforth, apps) that apply a solid pedagogy to teaching technical and language skills. Thus, these apps provide a very flexible form of learning that is also practical, interactive, adaptive, dynamic and deeply rooted in daily socio-cultural situations and contexts. In particular, our study has aimed at designing and implementing an app to help its users create and perform successful business presentations. Thus, the potential users of our app are both professionals and students in general, since business presentations are a compulsory and essential activity in most professional environments nowadays. Using our app will allow them to learn these skills ubiquitously and autonomously, since it contains self-evaluating (automatically corrected) exercises.

Keywords: EFL, mobile, application, language learning, MALL, app, business, *BusinessApp*.

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1. Introduction

More and more students (and learners, in general) combine their learning tasks with other multiple activities every day. These other activities (work, fellowships, child care and other domestic responsibilities, etc.) are not less important for them and require their attention several hours a day. This reduces to a great extent the amount of time that they can devote to learning and/or practicing what they have learnt.

In such cases, they mostly find odd moments and time left between their other multiple activities throughout the day. In other words, they learn when and wherever they can (for instance, at home, at university, or on public transport). This is what the term *ubiquitous learning* means (Kukulska-Hulme, 2012; Peng, Su, Chou, & Tsai, 2009).

This scenario has made the application of new technologies and educational modalities and trends to learning become a hot topic (Vázquez Cano & Martín Monje, 2014). This has given rise to two new types of important Open Educational Resources (OERs), namely Massive Open Online Courses (MOOCs) and apps. Both MOOCs and apps clearly enable not only ubiquitous learning, but also *blended learning*, that is, a mixture of face-to-face and online learning (Bueno-Alastuey & López Pérez, 2014; Rodríguez-Arancón, Bárcena, & Arús, 2012). The main catalysts for this change are, obviously, smartphones and PC tablets, which combine portability and full computational power and frequently allow for an almost ubiquitous web access.

Recent statistics show that the ratio of mobile phones per person is even higher than that of PCs or laptops. Besides, according to the Spanish Statistics Institute (INE, Press release, October 2013 <http://www.ine.es/prensa/np803.pdf>), the number of mobile data plan contracts has increased enormously lately. Mobile phones are already an unavoidable component of the life of European citizens regardless of their age. Citizens use them both for leisure (playing games, communicating with their family and friends, personal scheduling, etc.) and for academic and/or professional purposes (web searching, learning, etc.).

Therefore, the need to add either new MOOCS or new apps to the current repertoire of OERs becomes more urgent every day. Both types of OERs have a place in the development of any learning module (cf. [Vázquez Cano & Martín Monje, 2014](#)). However, MOOCs are more adequate when presenting theoretical content, since (a) they are not supposed to be interactive and (b) MOOC learners do not necessarily have to play an active role when they learn. On the other hand, apps are more suitable not only when providing theoretical background and knowledge, but also when practicing what has been or is being learnt, since they are usually more interactive and are less restricted than MOOCs, e.g. by virtue of their presentation format. Accordingly, apps are more versatile and adaptable and also allow for a more *autonomous learning* than MOOCs.

For this reason, the work presented here aimed at developing an app (*BusinessApp*) from its inception. This app helps learn English for a specific purpose in a particular domain, that is, the domain of business and the purpose of creating and performing successful business and/or professional presentations (presentations of e.g. goods, services and companies). The topic of business presentations has never been dealt with in any other freely available app up to now ([Calle-Martínez, Rodríguez-Arancón, & Arús-Hita, 2013](#)), since freely available apps are usually more basic and not so specific).

In the next section we summarise the most relevant details of *BusinessApp* development.

2. The development of *BusinessApp*

BusinessApp is part of a whole set of MALL apps, built within the SO-CALL-ME research project (ref.: FFI2011-29829 – see the Acknowledgements). The main objective of SO-CALL-ME is to develop apps with a solid pedagogic base that can help to learn content and develop skills in English. More broadly speaking, it aims at providing a set of OERs for English learning that are flexible, practical, interactive and dynamic, while also deeply rooted in daily socio-cultural situations and contexts ([Pareja-Lora et al., 2013](#)).

In particular, the purpose of *BusinessApp* is twofold: it can be broken down into a general purpose and a specific purpose. The general purpose of *BusinessApp* is to help improve its users' oral skills in English (basically, their oral expression and their oral comprehension skills). Its specific purpose is to help its users put these oral skills into practice in order to create and perform successful presentations of products, goods, services, businesses and/or companies in their professional environment.

Even though the target users of this app are thought to be only the authors' English University students at the beginning, it soon became obvious that the range of target users was much wider. On the one hand, business presentations are an almost compulsory and essential activity in most professional environments nowadays. In a more and more globalised world, the language most frequently used for these presentations is English, the *lingua franca* in business, international companies, science and technology. On the other hand, some authors, such as [Cotton and Robbins \(1993\)](#), [Ellis and Johnson \(1994\)](#) or [Matthews \(1987\)](#), point out the importance of carrying out practical activities when learning a language, since they help acquire oral skills to be put into practice in future professional situations.

Thus, *BusinessApp* has been developed to be useful either for (a) people that need to learn how to make good business presentations in English for their work, and (b) students at all levels, who have to learn and/or to create and perform good presentations in any area of their current studies (not necessarily in English). All these target users, to a lesser or to a greater extent, do or will need the skills and knowledge that can be developed and learnt with *BusinessApp* at some point in their professional career.

From a more technical point of view, *BusinessApp* has been developed following the Rapid Application Development (RAD) methodology ([Maurer & Martel, 2002](#)). In this methodology, the development of applications is driven by the implementation phase, and the other usual phases of software development are subject and secondary to implementation. The main aim of this methodology is to finish a first prototype of the application as soon as possible. Then, the first prototype evolves and is transformed, within an iterative process, into several

different, increasingly improved versions of the prototype. This improvement process is fed with the results of the evaluation tests, which are run by some selected typical users of the final application. This process ends when the evaluation tests are fully successful and, then, the last prototype implemented is considered the first actual version of the application. Accordingly, the design phase in RAD is reduced to a minimum, and its results are, basically, the specifications of (a) the different screens that constitute the human-machine interface, and (b) the actions that have to be taken when any of the components of these screens is selected, clicked on and/or played.

2.1. The design of *BusinessApp*

In this light, the design of *BusinessApp* had to specify only the main blocks of the application, the screens that would have to be shown, and the different actions that had to be taken in each case. Accordingly, *BusinessApp*'s design was structured around four main modules or screens, namely (1) the STRUCTURE module, (2) the BODY LANGUAGE module, (3) the GRAPH & TREND DESCRIPTION module, and (4) the GOOD & BAD PRESENTATIONS module.

Firstly, the design of the STRUCTURE module includes all the necessary screens to explain (a) how a good business presentation is structured, that is, the macrostructure of a successful business presentation (which are the main blocks that such a presentation should include, and in which order), as well as (b) what should the contents of each of these blocks refer to.

Secondly, the design of the BODY LANGUAGE module contains a number of screens giving some clues and hints about what are considered good and bad manners and postures when performing a business presentation, that is, the right body language that should be used during a presentation.

Thirdly, the design of the GRAPH & TREND DESCRIPTION module includes some additional screens that provide the common vocabulary (a) to describe graphs and tables, which are quite usual in business presentations, and (b) to provide further information about trends using these two elements.

Finally, the design of the GOOD & BAD PRESENTATIONS module includes a supplementary set of screens that present some accompanying but important issues that can enhance a business presentation (good intonation and rhythm, making jokes, etc.). In addition, the design of the *BusinessApp* included the specification of yet another secondary module of the application, the GLOSSARY module, which should help learners manage the vocabulary they are taught when using the app.

All the screens and the actions specified in the design of *BusinessApp* were extracted from a didactic unit previously created by the authors, according to the usual linguistic and pedagogic standards of quality to get an effective oral and written communicative competence. The method followed is the Communicative Language Teaching (CLT) approach, which stems from the socio-cognitive perspective of socio-linguistic theory, with an emphasis on meaning and communication, and a goal to develop learners' communicative competence (Canale & Swain, 1980). Consequently, the design of each module block (that is, of each sub-screen) portrays a set of suitable examples and the most useful and usual lexical and discursive units associated to that block. Reading and listening to these examples, as well as learning the units mentioned, greatly helps to create and perform successful business presentations. All in all, this provides the app with a solid linguistic and pedagogical basis. Besides, each module also includes a set of self-evaluating (and automatically corrected) exercises, which facilitate the autonomous learning of the content and the development of the skills addressed by the app.

2.2. The implementation of *BusinessApp*

Some recommendations and standards for mobile learning⁴ put the emphasis in the need to implement apps so that they can be run on any selected platform (e.g. a mobile phone, a PC tablet or a laptop) and/or regardless of the device's operating system (*Android*, *iOS*, *Windows*, etc.). Usually, this means that (a) the contents of the *app* must be represented in HTML5 and (b) these HTML5

4. For instance: http://e-standards.flexiblelearning.net.au/documents/2014-recommended-vet-estandards_v1.1.docx

contents must be managed and presented on the screen of the device by means of some form of Java (e.g. JavaScript).

We however have not followed these recommendations, because we wanted to evaluate the suitability of *MIT App Inventor Classic* (<http://appinventor.mit.edu/explore/classic.html>) for the implementation of MALL apps. The reason to carry out such an evaluation is that *MIT App Inventor* is a semiautomatic development environment with quite a user-friendly interface for people not used to programming (which might be the case of linguists programming MALL apps). Besides, it is most appropriate for the implementation of applications following the methodology selected (RAD). Therefore, *BusinessApp* has been implemented by means of *MIT App Inventor Classic*.

MIT App Inventor Classic consists of three main modules: (a) the module to implement the different screens of the app, conveniently specified in the design phase (not shown here for the sake of space); (b) the module to program the actions that must be performed when any of the components of the screen (such as a button or a textbox) is selected, clicked on or played (see [Figure 1](#)); and (c) the module that simulates the behaviour of the app in a standard (or basic) smartphone, which is useful for testing what was already implemented ([Figure 2](#)). The main advantage of this tool is that it has been conceived for almost fully drag-and-drop programming. In particular, the module to perform the actions associated to screen components makes programming almost as easy as doing a jigsaw puzzle. In fact, the different elements that can be combined to program the application are represented on the screen as pieces of jigsaw puzzles ([Figure 2](#)).

The main disadvantage of *MIT App Inventor Classic* (inherited by *BusinessApp*) is that it generates apps that can only run on Android. However, this disadvantage is a bit secondary, since Android (a) is one of the most used mobile operating systems, and (b) provides a lot of built-in pre-defined services, like the text-to-speech and the speech recogniser services, which are quite useful to develop MALL apps. In particular, the Android text-to-speech built-in service is pervasively used in *BusinessApp*, in order to read aloud the texts that learners have to listen to, with a more than satisfactory intonation at a minimum cost.

Figure 1. Implementation of the *BusinessApp* screen actions with *MIT App Inventor*

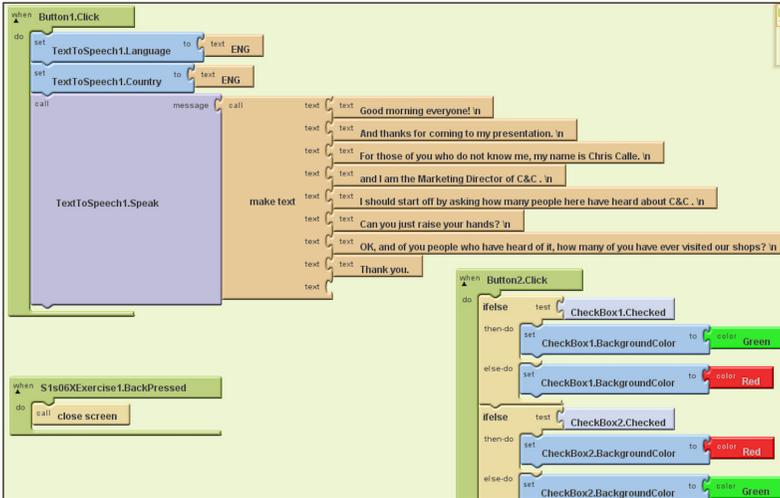
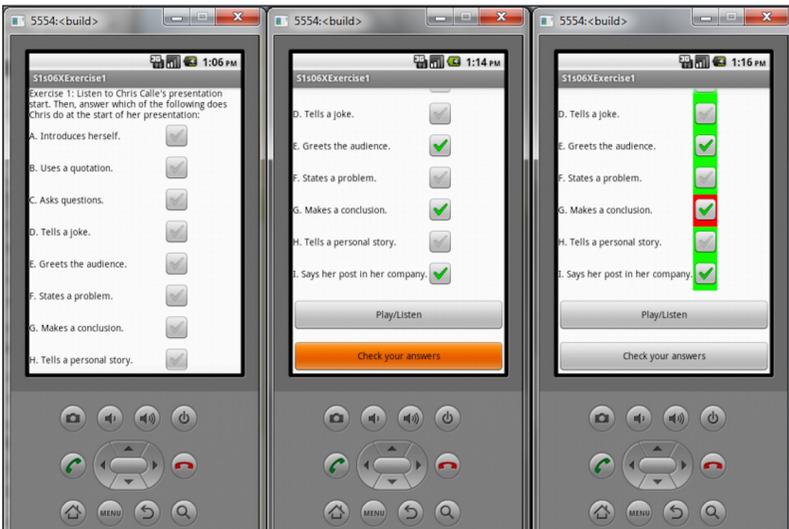


Figure 2. Simulating the execution of the *BusinessApp* screen with *MIT App Inventor*



3. Future work

Some evaluation and testing of *BusinessApp* has already been accomplished by the authors themselves in order to develop a fully functional version of the app. However, a real evaluation phase with actual users is still to be performed. The users in this real evaluation phase will be our students.

Towards this end, *BusinessApp* will be uploaded to the virtual space of their courses. Students will then download and test it themselves. After testing it, they will have to create and perform a business presentation, which will be scored according to the criteria for good presentations presented in the app. This will help evaluate the suitability of *BusinessApp* to learn its associated content and develop the corresponding English skills. In addition, students will have to fill a questionnaire about more technical issues of the app (such as its usability). This questionnaire will be elaborated with the rubric presented in [Martín-Monje, Arús, Rodríguez-Arancón, and Calle-Martínez \(2013\)](#) as a basis. The data so obtained will help improve the implementation of *BusinessApp* in the future (if necessary).

4. Conclusions

In this paper, we have presented *BusinessApp*, a mobile application that we have developed (a) to help its users create and perform successful business presentations in English, and (b) also, from a more general perspective, to improve their oral and communication skills in this language.

This mobile application has been designed according to solid pedagogical and linguistic criteria, and can be used for the ubiquitous and blended learning of the aforementioned content and skills.

Autonomous learning is also enabled in the application by means of the self-evaluation exercises that accompany each of the modules of *BusinessApp* and which can be automatically corrected by the application.

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