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The application for learning languages on the base of mobile platforms

The article deals with the development of mobile application for children teaching on mobile platform base. The application represents learning game where playing process should be as much fascinating for child as possible. The study should not be obtrusive and less evident for the child. While the results of studying should be noticeable. This article describes the main components and structure of mobile application.

Quick development of mobile devices leads to creation of new functional possibilities, mobile devices become not only the means of communication, but they can be useful in a wide range of areas, from electronic commerce to entertaining.

According to the latest data of IDC the share of mobile operational system with the open code – Android on market rose from 69,1% to 79,3% in comparison with the similar period of the last year. IDC predicts that the volume of delivery of the tablets will exceed the volume of delivery of portable computers in 2014 [IDC 2013].

Nowadays IT enlarge the possibilities of parents, teachers and the preschool education specialists. The possibilities of the usage of modern mobile devices allow realizing and developing the abilities of the child completely and successfully. Unlike the usual technical devices of teaching the computer lets the child not only get a great amount of well prepared and strongly selected knowledge, but furthermore develop intellectual, creative ability. And that is the most important at preschool age is the skills to get new knowledge by themselves.

Mainly this game is for teaching of children of the age of kindergarten and school. At the beginning the pupil is interested in the form of the game only, then also in the material without which the participation in game is not possible any more. During the game the pupil does different exercises unwittingly. The game put the pupils in the search conditions stimulating the interest to win, therefore the children tend to be quick, to complete the task neatly following the rules of the game.

A conception using in this given system is directed to the implicit education. The child has a task to shoot the letters flowing from the right screen to the left and at the same time he/she must shoot the letters which compose the given word. Being keen on the game process he/she remembers in subconscious stage the letters and words to be collected.

The programming language Java was used to make the this app. As an environment of the development there were used Android Developing Tools (Eclipse, AndroidSDK, AndroidVM). The open source platform libGDX was included for the development [Meier 2012: 165–201].

The application being developed contains the local data base SQLite where the detailed statistics of the gamer such as grades and time of solving problems is gathered and stored. As well the database contains the resources of different languages (alphabets, letters, pictures...). The operation principle is rather simple, while starting the application on the screen you can see the grade level list. The user may choose the language for output the words and letters. The letters appear from the right part of the screen and they move with certain speed to the left part of the screen. The letters are generated at random, and as soon as they reach the screen edge they are deleted. If a child guessed correctly the letter that belongs to initial word, in the bottom part of the screen you can see the word which you must compose, and the color of appropriate letter changes to the green one. The fragment of the game process is shown on the picture 1. If the letter was not properly guessed, the user loses one point, “the point of health” (the indicator shows the number of mistakes which the user may have).

When the letter is composed, the process is over, the grade is being generated for the level and depends on the characteristic raw: the time of which the level has been passed; the number of lost “health points”.



Picture 1. The game process demonstration

The parents and teachers may use the given application as a didactic material for teaching of the children and schoolchildren. As well as the adults, especially the foreigners will be interested in this new application. They will be able to learn many words in different languages in a short time.

Confirmation

As follows the contemporary children master the tablets and smartphones much earlier than they speak. The children like buttons, colorful pictures on the screen. Then they are interested in games and watch the cartoons with pleasure. To fight with a taste for technics has no sense – it can confirm all the parents, that is why one should learn to combine the pleasure and the benefit, look for methods to develop the abilities of the child with a help of mobile devices. The main task which the parents are faced is to control the time, which child spends with the tablet or smartphone, and the strong selection of the contents. Shortly speaking the child should have an access to those applications which the parents approve and within fixed time limits.

Literature

IDC (2013), *Apple Cedes Market Share in Smartphone Operating System Market as Android Surges and Windows Phone Gains, According to IDC*, International Data Corporation, <http://www.idc.com/getdoc.jsp?containerId=prUS24257413>
Meier R. (2012), *Professional Android 4 Application Development*, Wrox.

Abstract

The article is devoted to questions of development of mobile applications based on Android OS for teaching children. This article describes the basic components and structure of the mobile application. Learning's process should be unobtrusive and at the same time should be interesting.

Key words: ABC, libGDX, Android, game, mobile system alphabet, teach kids.