Mobile Phone Casual Games Design with Appeal to Children

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Abstract. In this paper, we will present the design decisions, evaluation and conclusions stemming from the process of making a set of three casual games, characterized by a common design style and simple scenario..

Keywords: casual games, mobile games, memory game, character, scenario.

1 Introduction

The game is an integral part of the human life starting from early childhood. Children are becoming very familiar with the use of computer technology, from a young age, and especially with the use of mobile phones. Young kids, i.e. between the age of 4 and 9, can prove to be very capable and competent operators of these appliances. Although are not usually the owners of mobile phones, they often use the phones of their parents in order to play casual games in a variety of settings. They often use the phones to play games that their parents usually selected and bought, when in waiting or travel time, when relaxing at home, or for keeping entertained and quiet in a social visit or restaurant.

The casual games are a well known class of computer games, appealing to a wide audience. They form a very wide variety and are characterized by simple rules, fast learning curve, and no commitment (in contrast with other more complex games). Because of these characteristics casual games are considered to be ideal to engage and motivate young children.

2 Design of a Set of Casual Games Aimed for Kids

A set of three games were designed and developed in the course of a Master thesis, in the Graphic Arts and Multimedia postgraduate course of the Hellenic Open University. The game types selected were widely established, similar to many games that can be easily found in the internet, but are also widely known in their standard paper form. What distinguished these games from the plethora of similar games available was that they specifically targeted in having a very recognizable aesthetics identity, characters and script. Thus they were able to differentiate from the competition, in order to aim for targeting the preference of children.

Fig. 1. Start up screens from the Amnesia of Who memory game, introducing the characters

Fig. 2. Gameplay screens of the memory game: Amnesia of Who

The types of casual games that were developed are:

- A memory game titled “amnesia of Who” (Fig 1., Fig.2)
- A hangman game titled “unhang Hank” (Fig.3)
- A maze game, titled “love is in the air” (Fig. 4)

Fig. 3. Screens from the “Hangman” casual game: Unhang Hank

All the games formed a family, using a common font, which was especially designed for these games, and graphic design of characters and general style identifiable as a set. The design of the casual games focused on the creation of a central character in each game and a small story around them, in order to attract the interest of children. The evaluation aimed to assess if the children could identify with the characters and their adventures, and whether this characteristic of the casual games would appeal to them, thus giving a competitive advantage to these casual games as opposed to other ones that are available in the game marketplace.

In the memory game *Amnesia of Who*, the player is trying to help the hero who's name is Who, who is originally from the planet MakeMake and has amnesia as a result of an accident, to remember members of his family. The game has increasing difficulty as the player helps Who to find more members of his family.

Certain gaming elements were adapted to the scenario, in order to be more appropriate for children. Unhang Hank for example (Fig.3) which is a typical hangman game (the player trying to find the secret word by guessing letters), instead of adding body parts and ultimately ‘hanging a man’ (which is the game’s usual game play), it is reversed so that a captive man (Hank) that is in a hanging cage, is released. By each correct guess, the player is gradually breaking a bit off the cage so that eventually the man in the cage can escape.

In *Love is in the Air* the player helps with his/her finger the alien hero, Noa, to reach his loving match Noi, through an animated maze (Fig.4). There is no single correct route, as the maze elements move and change the correct route on the fly. It differs to the other two games in that its gameplay consists of several very different mazes with animated elements (i.e. UFOs, Pools with fish, aliens, etc). It is characterized by increased difficulty, large variety, surprise (in what will follow), and funny animated elements.

Fig. 4. Love is in the Air: an animated maze game with variety and increasing complexity

3 Evaluation

The memory game titled as "amnesia of Who" was designed, programmed (along with its original music score and sound design) and was presented to a number of 5 children, aged between 4-9 years old, for an initial evaluation in order to get a valid feedback [5]. The evaluation used a 12-questions likert scale questionnaire, with criteria based on Game Usability Heuristics [2], while the criteria mentioned in [3],[4] were also considered.

All three games have a common underlying graphical style so that they form a very recognizable set. Each game has an underlying simple scenario, a trait that is not common practice for casual games in general. As was pointed out from the games evaluation, the existence of a simple scenario line as well as the choice of bold graphics and colors were specific characteristics that attracted the interest of children's and made the games much more enjoyable in the age group between 4 and 9.

Especially regarding the enjoyment factor to the games, the subjects responded very positively. The emotional involvement of the children, -achieved via the game scenario whereby the kids tried to help the hero in each case-, was a crucial defining factor towards their overall enjoyment.

The evaluation also pointed out at other possible adjustments for further improving this type of game typology. Further details on the design concepts and evaluation can be found in [1].

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References

1. Vasiliki, A.: Master Degree thesis in Graphic Arts-Multimedia. School of Applied Arts, Hellenic Open University
2. Desurvire, H., Wiberg, C.: Game usability heuristics (play) for evaluating and designing better games: The next iteration (2009), <http://www.behavioristics.com/downloads/DesurvireFinalHCI09PLAY.pdf>
3. Falstein, N., Barwood, H.: The 400 Project (2006), http://theinspiracy.com/400_project.htm
4. Koivisto, E., Korhonen, H.: Mobile game playability heuristics (2006), <http://www.forum.nokia.com/>
5. Nielsen, J. (2006), <http://www.nngroup.com/articles/quantitative-studies-how-many-users/>