

Financial literacy

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Introduction

Main goal of this project is to design a game that would help to improve financial literacy of the players. Target group are eight-grade students. We start with a review of a financial literacy problematic in the Czech Republic. We also present data regarding online behavior of our target group and their access to electronic devices. Following is our research. The last part of the project is the game design itself.

Literature review

In the first part of the project we found out that Czech citizens are struggling with financial literacy and are doing really poorly compared with other countries.¹ Even though there are attempts to improve the current situation. Government initiated inclusion of financial literacy into elementary schools and from this school year financial literacy is mandatory part of education.² There are also some ongoing EU projects, for example *Consumer Classroom*.³ Unfortunately Czech people do not see financial literacy as an important topic.⁴

Online behavior of Czech children is rather conservative. The most popular social site is still Facebook.⁵ They are accessing internet mainly from computers and laptops. The third choice are smartphones.⁶ Last part of the literature review was focused on gamification and motivation. Our most important conclusion from this part is that games

¹ PISA 2012 FINANCIAL LITERACY ASSESMENT FRAMEWORK. In: *OECD* [online]. 2012 [cit. 2014-04-14]. Retrieved: <http://www.oecd.org/pisa/pisaproducts/46962580.pdf>

² Školáci se budou učit o financích povinně. In: *Finance.cz* [online]. 2013 [cit. 2014-04-14]. Retrieved: <http://www.finance.cz/zpravy/finance/381238-skolaci-se-budou-ucit-o-financich-povinne>

³ ConsumerClassroom. In: *Vzdělávání spotřebitelů ConsumerClassroom* [online]. 2012 [cit. 2014-04-14]. Retrieved: <http://www.consumerclassroom.eu/cs/>

⁴ ZÁMEČNÍK, Petr. Češi a finanční gramotnost? Horší je jen Mexiko a Slovensko.... In: *Průzkum ING Pojišťovny* [online]. 2011 [cit. 2014-02-24]. Retrieved: <http://www.investujeme.cz/cesi-a-financni-gramotnost-horsi-je-jen-mexiko-a-slovensko/>

⁵ Czech DigiTeens 2013. In: *Confidencedigital: online mediální agentura* [online]. 2013 [cit. 2014-03-03]. Retrieved: http://cdigital.cz/wp-content/uploads/2013/10/ConfidenceDigital_CzechDigiteens2013.pdf

⁶ Jaké jsou internetové děti 2: Návyky nejmladších uživatelů internetu. In: *Seznam.cz* [online]. 2014 [cit. 2014-04-21]. Retrieved: http://vyzkumnik.seznam.cz/news_items/48?from=index

that are created to improve financial literacy usually fail to attract players if the entertainment part doesn't overshadow the educational one.⁷

Research

In this part we did our own research by questionnaire. We settled for sample of 113 eight-grade students as the questionnaire included unusually high number of open questions. Even though we tested the questionnaire on the group of ten students and altered it accordingly before initial research, during data processing we found out that some questions may not be ideal for the respondents. For example the students struggled with the note "skip following question".

Our questions were focused on three main topic—financial literacy in the schools, social sites preferences and technology availability and finally book, movies, games and future preferences. Last topic was represented by open questions and was not analyzed. However, we used the data as a general idea about what our target group preferences are.

According to our data only 46.9% of pupils that attended financial literacy classes in school say that they remember most of the topic. That is not entirely positive notion, especially when some students did not remember that they even had financial literacy class (we confirmed this information with the teachers). Our findings regarding social sites and technology of preference confirmed the data mentioned above.

Game design

In this part we will present the game design, competition, advertisement plan and expenses plan.

The game design is rather general as we wanted to keep some clarity in the text. The game itself is intended for eight-grade students, however it would be open for anyone. That is not true for competition which would be open only for eight-grade students and it is a great way how to spread the word about the game itself.

The name of the game is Figur and the in game currency is Figorunes. Players have profiles which may or may not be connected to the class profile (mandatory if you want to attend competition). Players can create their own in game character. On the screen players see not only their financial situation but also mood of their character. Bad mood influences their points.

⁷ Video games and financial literacy: Bloodbars and debtbunnies. In: *The Economist* [online]. 2013 [cit. 2014-05-09]. Retrieved: <http://www.economist.com/news/finance-and-economics/21571156-clicking-your-way-sound-financial-habits-blood-bars-and-debt-bunnies>

The game takes place in slightly absurd distant future. The player is transported there and has to survive—that means reading agreements, catching space rodents, helping roommate, finding job and improving your house bit by bit while the city is threatened by giant space snail. The game consists of ten levels. It takes place in number of environments which opens as the player progresses through the game. In each level player has a mission which he has to complete to move to the next level. He can repeat the level as many times as he wants, however once he moves to the next level the mission cannot be repeated. That is not truth for minigames. Simple games included in every level—they have nothing to do with financial literacy but they are a way to make the game more enjoyable for players. They can be repeated as long as the player wants to as the points do not add. Only the best results counts. Players can also win some special gifts—such as furniture or extra environment. They can also be awarded medals.

To protect game from being predictable, we decided to include random events. For example, in the third level players will be offered by insurance. In the level five in the 50% of cases the city will be attacked by giant sloth. There will also be more positive accidents. For example some of the players will find a CD of a country singer which is now worth rather large but reasonable sum of money.

First level – interests and agreements

In this level player finds him/herself stranded in distant future. He has no idea where he/she is and is now feeling hungry. He/she is standing on street and now has a number of options what to do. During the level he will be forced to catch space rodents, go to a bank and choose an apartment—hopefully after carefully reading (short) agreement because it may include a note about your hand being sold to a new hip restaurant. In this level the player will also meet the full time characters—alien roommate with an odd attitude.

The competition will be held when the game is made available to the public. Preferably during the start of the second part of school year. Students will compete both in class and individually.

Our advertisement plans mostly focuses on low budget marketing—using social sites and fliers that would be distributed to school. Initial expenses that in the financial plan are 750 000 Czech crowns.

Conclusion

The game we designed differs from most current games with the financial literacy topic. Instead of trying to teach students everything, we attempt to teach them basics in hope they will actually play the game. The initial expenses are high, but because the game includes only very basic topics from financial literacy, it is very easy to translate it and made available to people from different countries. We are sure, that the game is designed in a way that would attract many players and that their financial literacy would improve by playing the game.

Sources

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