FIGURE PUZZLE GAME

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Education has many goals. There is a huge amount of research and practitioner knowledge about teaching and learning. They become better at puzzling figure or solving puzzle problems and accomplishing challenging task. From an educational point of view, it is clear that solving Figure Puzzles helps to maintain and improve children's vocabulary, spelling skills, and knowledge of many miscellaneous tidbits of information. Solving Figure Puzzles tends to contribute to one's self esteem. For Children's their expertise in solving Figure Puzzles plays a role in their social interaction with other (people pages.uoregon.edu).

Games provide an excellent environment to explore ideas of thinking. The fact that many games are available both in a non-computerized form and in a computerized form helps to create this excellent learning environment. Learning games can help students to contextualize and apply lesson content to themselves and real life. A modern education prepares pupils to be productive and responsible adult citizens in a world in which mind/brain and computer working together is a common approach to solving problems and accomplishing tasks and also giving knowledge to children who's playing on it. Some electronic games are merely computerized versions of games that existed long before computers. Others only exist in a computer format. Computer network have made possible games that allow many thousands of players to be participating simultaneously.

The computerized animation and interaction in these games bring a dimension to games. Your mind/brain learns by developing and storing patterns. As you work to solve a problem or accomplish a task, (as you think) you draw upon these stored patterns of data, information, knowledge, and wisdom. Helps to create this excellent learning environment. As noted from an online article (pages.uoregon.edu).

Osborne (2004) defined game theory as "a bag of analytical tools designed to help us understand the phenomena that we observe when decision-makers interact". The decision makers or "players" are actors whose cooperative and competitive interaction can be assessed and predicted. Situations where the cooperation or competitive elements between the players are recorded and quantified are called "games." Tools are game theoretical concepts that can be used to describe the actions and interactions of the actors.

Purpose and Description

The main purpose of this study is to develop a Figure Puzzle Game to present many challenges to a child's ability to concentrate and process information and to gain knowledge.

Children. This Figure Puzzle Game can help the learners to have an automatic locomotors response to the shuffled picture and to enhance also their ability in playing the aforementioned educational game.

Teachers. This Figure Puzzle Game is a form of educational innovation that will make teaching-learning process enjoyable and meaningful. This will aid the pupils to explore and experience visual brainstorming.

Parents. This form of activity motivates their children to widen the arithmetic skills in forming shuffled puzzles. It is also a form of recreational activity of the children. Directing them into such kind of activity can get away from unethical and immoral actuations.

Future Research. To inspire them to conduct similar research like this to come up with other or different educational games that will help the learners to equip with the necessary skills.

General Objectives

This study aimed to develop a Figure Puzzle Game for children's intended for 5 to 12 years old.

Specific Objectives

1. To observe on how the children solve the puzzle
2. To design and develop an educational game.
3. To test the usability of the developed game.

Scope and Limitation

The study focused on the developed Figure Puzzle Game intended for 5-12 years old. The children are expected to learn from the

knowledgeable one in informative manner. Windows XP, Windows 7 and Windows can run the said type of educational game.

Chapter II

REVIEW OF LITERATURE

This portion presents a review of several literatures that would be beneficial to the study summarized from previous writings, showing detailed facts asserted by few people or pioneer in the field of computer industry. On this element of study some reviews of the author's passage in order to help the researchers to find ways in contact with the problem that have been encountered. Literature review has been made to generate ideas on how to solve the identified problem & to find solution for such problem exists in the project.

Game means different things to different people that provides an excellent environment to explore ideas of computational thinking. The fact that many games are available both in a non-computerized form and in a computerized form helps to create this excellent learning environment. Modern education prepares students to be productive and responsible adult citizens in a world in which mind/brain and computer working together is a common approach to solving problems and accomplishing tasks as mentioned from an online article (pages.uoregon.edu)

Puzzle as a game that a person plays against themselves. Focuses on describing how multiple actors in given situations interact with each other, either socially or competitively. One of the great successes of

puzzle is a description of how good higher-level strategies can emerge from a low-level description of the rules or setup of the game. The player (or solver) can never see very clearly beyond the first few jumps away from their current position. Instead, the solver must try to move in the general direction of the solution, without seeing precisely where the moves will lead them. In order to do this effectively, the solver must somehow generate ideas for which positions of the puzzle are closer to the solution state than others, and which moves are likely to result.

Waterfall Model is a sequential design process, often used in software development process in which progress is seen as flowing steadily downwards (like a waterfall).

According to Royce's original waterfall model, the following phases are followed: 1) Requirements specification; 2) design; 3) construction (implementation or coding); 4) integration; 5) testing and debugging; 6) installation and 7) maintenance. Thus, the waterfall model maintains that one should move to a phase only when it's preceding phase is completed and perfected. (en.wikipedia.org, 2013)

SDLC stands for Software Development Life Cycle. SDLC is essentially a series of steps, or phases, that provide a model for the development and lifecycle management of an application or piece of software. The intent of SDLC process it to help procedure a product that

is cost-efficient, effective, and of high quality. (Veracode.com, February, 2013)

According to Charsky (2010) describes how edutainment and instructional computer games where touted as the savior of education because of their ability to simultaneously entertain and educate. From this observation we can deduce that the purpose of using educational games according to Charsky (2010) is to educate. This is also the case according to Guillen-Nieto and Aleson-Carbonell (2012) and Purushotma (2005), who both agree that educational games aim to educate in one way or another. However, generally we want to be able to further say something about the effectiveness of the education provided by an educational game.

VB.net 2008 stands for Microsoft Visual Basic.Net 2008. Microsoft Visual Studio is an Integrated Development Environment (IDE) from Microsoft. It can be used to develop console and graphical user interface applications along with Windows Forms applications, web sites, web applications, and web services in both native code together with managed code for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET Framework, .NET Compact Framework and Microsoft Silverlight. Visual Studio includes a code editor supporting IntelliSense as well as code refactoring. The integrated debugger works both as a source-level debugger and a

machine-level debugger. Other built-in tools include a forms designer for building GUI applications, web designer, class designer, and database schema designer. It allows plug-ins to be added that enhance the functionality at almost every level - including adding support for source control systems (like Subversion and Visual SourceSafe) to adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Team Foundation Server client: Team Explorer). Visual Studio functions as the code editing area, form designer, code validator, compiler and library browser for a software development project. It supports languages by means of language services, which allow any programming language to be supported by the code editor and debugger, provided a language-specific service has been authored. In this course we will be exploring installation, initialization, and basic use of the IDE for the purpose of writing VB.NET software.

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