Chapter 16
Design, Development, and Marketing Process of Video Games

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ABSTRACT

In this study, general information about video game and video game sector, process of steps when designing, developing, and marketing a video game are presented in detail. Since game designers attempt to create their own type and develop new game type, there is no certain acceptance about suitable categorization for video games and certain number of video games types. For this reason, it is firstly mentioned about video game concept as well as systematically categorizing all game types in this study. Afterwards, each of these game categories and game types are described in details. Furthermore, it is aimed to raise awareness of researchers interested in this area, and to help in removing false or incomplete information about video games in the process of video game development.

INTRODUCTION

Game has an important role in life of people of all genders and ages, particularly in children lives. The word game etymologically stem from "jump, bound, prance, leap" in Turkish. But, although the term game has not a well accepted definition, it can be difined in two basic ways; the committed behaviours unconsciously without considering results or the all of committed actions freely, knowingly, a rule that certain in a specific time and place. The main purpose of game is to Improve phsical, cognitive and sensorial features, have fun, let off steam, relax, develop imagination, motivate, learn or teach something educationally.

Games, programmed with several technologies and played by crerating a visual user interface with a video renamed as video games. Video games include activities between player-player or player-artificial

intelligence. Players control the game with a keyboard, mouse, joystich, motion and sound sensing devices. To know why people play viedo games are the basic for video games investigations and ther are some studies trying to explain why people tend to play video games in literature. Sherry and Lucas (2001) state reasons of playing a game as challenge, rivalry, fantastic environment, exhilarant effect and variety. In this work, participations mention the purposes of playing a game as relaxing, keeping away from stress, spending time, can't find something to do. The other work in this subject is made by Kirriemuir (2002). In this work, purposes of playing a game are specified as fantastic environments, curiosity, rivalry. According to Rouse, players have some anticipations from video games. The anticipations are shown as consistency of video games, understanding limits of world of video games, working out rational solutions in video game, directing players while playing games, progression in achieving the tasks step by step, overtaken itself to game, experiencing temporary failures, players know chance of success, players don't have to repeat itself in a continuingly, getting stuck in game desperately, players want to be a part of game.

In this work, the general information about video games are presented and mentioned about historical development process of video games kinds of video games are categorized, necessary processing steps for designing are explained, and the developing and marketing process of video games are presented. There main purposes of the work is to eliminate information that are presented as inaccurate or incomplete about video games which we can encounter these in many websites, present the steps in creating video games in detail and raise the awareness in rapid increasing numbers of curious researchers about industry of video games.

VIDEO GAME INDUSTRY AND ITS HISTORICAL DEVELOPMENT PROCESS

The origins of first video game are based upon video game which is called Nimatron and later called Nim by Edward Cordon in 1940, ten thousands of people played Nimatron but artificial intelligence would win ninety percent probability (Wikipedia, 2015). Between 1956-1961, Mouse in the Maze (a mouse that searches cheese in a labyrinth), HAX (in the game, various visual forms and sounds can be made with two keys on the consoles), Tic-Tac-Toe (players can write X and O with a light pen in the game), works graphical in computers are called TX-0, were developed in MIT. According to Friedman (1995), the beginning of video game history is accepted as "Spacewar" that was designed by enginners of MIT in 1962. The game was prepared in Digital PDP-1 master computer. Digital PDP-1 master computer pass into the history by developing the first interactive war gameIn the progress of time it become popular took place in all of computers. Ralph Bea made a game "Corndog", running on standard television in 1966 and then he developed games like ping pong and shooting target in 1968. In 1969, Ken Thompson designed a game "Space Travel", it worked in MULTICS operating system. Space travel simulates motions of solar system and it is about taking spacecraft to the surface. Later, Ken Thompson and Dennis Ritchie designed the game in PDP-7 assembler language for bringing the costs down. In this period, the first UNIX version of "Space Travel" was found in development process of UNIX operating system to learn software development for machine (Ritchie, 2007).

In 1970s, television started to come into prominence as a visual output unit. In 1971, "Galaxy Game" was designed in Stanford University that includes vector graphic terminal and also which is the first pay game. In the same year, Don Doglow from Pamona University designed the first baseball game, it is played as by one by matches or complete season matches. Also in 1971, text-based version of "Star

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