Two Player Android Game Application

Ankit Atrey, Apoorva Tewari1, Dr. Ashish Baiswar2
1UG student of Department of Information Technology, Shri Ramswaroop Memorial College of Engineering and Management Lucknow, Uttar Pradesh, India
2Assistant Professor, Department of Information Technology, Shri Ramswaroop Memorial College of Engineering and Management Lucknow, Uttar Pradesh, India

Submitted: 01-05-2022 Revised: 04-05-2022 Accepted: 08-05-2022

ABSTRACT - The proposed game will be a computer game version of the popular board game Buck Rodgers. Players will be able to play the board game in the multiplayer style known as hot seat, where users take turns at the same computer. The game will allow from two to six players to play. The game will not deal with artificial intelligence and will solely be intended for multiplayer use. Due to the nature of the game, the graphics will be in two done in 2D and offer a layout and feel similar to that of the board game.

I. INTRODUCTION
With the rapid advancement of computer technology, the significance of software engineering in our daily lives is increasing. It affects every aspect of our lives today, including working, living, learning, and education. A new and popular mode of entertainment and an important application of technology are software games, which have become increasingly accepted by people of all ages. In today’s culture, technology is easily accessible and has become more convenient; more and more people like to play games and are also becoming motivated to design their own games. Software games are software applications that are installed on hardware devices such as videogame consoles, computers, handheld devices, and Personal Digital Assistants (PDAs). Software games have now become a worldwide creative industry, but because of the multidisciplinary activities required, their development is a very complex task.

1.1 PROBLEM STATEMENT
The main purpose or objective of this paper is to provide or develop a game that will use a program that will be able to play a game.

1.2 MOTIVATION
Two player games can be a way to help supplement your child’s learning and teach them key life skills. Get insight on how it can benefit your child’s development. It provides great source to develop early learning skills for younger children. Group play provides social benefit and promotes teamwork and builds confidence.

II. LITERATURE SURVEY
TV and movies are great, but when it comes to being the hero of your own story, nothing quite tops the immersive experience of a video game. And for the passionate ultra-fans of video games — gamers — nothing else even comes close. Even reality TV or sports, where the outcome is never fully certain, can’t fully compare to the excitement of hopping between perilous platforms in Super Mario Bros., the terror of turning a dark corner in Resident Evil’s Racoon City, or the elation of beating the final boss after countless attempts. With games, you’re the one in control.

So it’s no wonder that as we all look for ways to pass the time during the pandemic, more and more gamers are logging on, interacting with stories, and exploring virtual worlds. The NPD Group found that four in five U.S. consumers played a video game between May and November of 2020. And according to Nielsen Video Game Tracking (VGT), 46% of Americans reported an uptick in their play during lockdown. In fact, as of 2021, gaming has become a bigger industry than sports and movies combined.

III. METHODOLOGIES
Development methodology refers to a series of techniques and/or processes by which a video game is developed. While it is possible to develop a video game by following various general software methodologies (e.g. the waterfall model, the incremental or the agile method, etc.), game development generally consists of three phases: pre-production, production and post-production based on the film’s life cycle. In addition, certain
authors have even defined a preliminary phase.

**SUM methodology**

SUM is an agile methodology for game development that adapts the Scrum structure and roles [1]. SUM suits small multidisciplinary teams (three to seven components) and short-term projects (less than a year). The methodological definition is based on SPEM 2.0 (Software and Systems Process Engineering Metamodel Specification). The main advantage of SPEM is its flexibility and adaptability since it is not necessary to mention specific practices.

The collaborative learning methodology presented in [14] considers collaboration to be an enriching part of the learning process. By employing very formal models, however, it lacks graphical notations that are easy for the multidisciplinary team members to understand. Since the SUM methodology is directed towards video games in general and is defined for small projects, it is not suitable for the purpose of this study (although it might be considered supplementary). Similarly, the SM methodology proposes an interesting production process for educational games, but is unsuitable for software engineering.

IV. PROPOSED ARRANGEMENT FOR THE SYSTEM DESIGN

Game design sits under the broader field of video game development and refers to the use of creativity and design to develop a game for entertainment or educational purposes. It involves creating compelling stories, characters, goals, rules, and challenges that drive interactions with other characters, users, or objects.

Game design is an exciting, rewarding, and multi-faceted field with promising job prospects. However, becoming a game designer can be a challenging journey. Passion, patience, and persistence are essential! See what it takes to become a successful game designer and get first-hand insights from Troy Duniway, an award-winning AAA game designer and executive at major studios like Microsoft, EA, and Ubisoft. Troy helped create the Game Design course at CG Spectrum, an Unreal Academic Partner.

A game designer is the creative driver responsible for bringing a game to life. They are generally a cross between a writer, artist, and programmer.

"It's a multidisciplinary job that often requires you to understand a little of everything," says Troy, who has shipped over 100 titles on almost every platform and genre.

"It's not just about playing games and having ideas. You need to not only understand how to apply your ideas into many different, and often conflicting, areas of game design; you must also understand HOW to design, WHAT to design, WHEN to design each feature, and WHY you are designing.”

V. ADVANTAGES AND DISADVANTAGES

Controller-based games can be great for your hands. In a study involving a group of surgeons, researchers found that those who played video games were faster at performing advanced procedures and made 37 percent fewer mistakes than those who didn’t. Special video games have also been used as physical therapy to help stroke victims regain control of their hands and wrists.

Gaming is really a workout for your mind disguised as fun. Studies have shown that playing video games regularly may increase gray matter in the brain and boost brain connectivity. (Gray matter is associated with muscle control, memories, perception, and spatial navigation.)

The stereotype of a shy person who uses video games as a way to escape is not what the average gamer looks like. Past research involving children found that those who played more video games were more likely to have good social skills, perform better academically, and to have built better relationships with other students because of the social and collaborative component to some types of games.

The stereotype of a shy person who uses video games as a way to escape is not what the average gamer looks like. Past research involving children found that those who played more video games were more likely to have good social skills, perform better academically, and to have built better relationships with other students because of the social and collaborative component to some types of games.

Giving too much importance to computer games may take you away from surrounding people. They may fail to spend enough time with their close friends and relations. This is especially true if you do not allocate time for other activities.
VI. CONCLUSION

The CS model of elimination mobile game applications is constructed based on questionnaire survey and data analysis. New conclusions are gained after correction of original hypotheses: Elimination mobile game applications are mainly used by the age group of 19~30. Users cover students and office workers. Women users account for a slightly higher proportion. Most users play games less than 30min every day. Android and IOS are two major operating system of mobile phone. Players play many types of games, mainly including “Happy Xiaoxiaole” and other game applications. China Mobile is the first operator of mobile phone. General features, game content and economic efficiency and interaction are three main influencing factors of CS to elimination mobile game applications. All of them have positive impacts on CS.

VII. ACKNOWLEDGEMENT

We would like to sincerely thank our Guide Prof. Ajay Kr. Srivastava for guiding us in all this project work and we would like to thank some of our fellow members of the Information Technology department of Shri Ramswaroop Memorial College of Engineering and Management for allowing us to do our project work.

REFERENCES


