



Gloomy Friday- 2-D Platform Game

Zakaria Khan¹, Adiba Qureshi², Sayyed Amesha³, Saad Sheikh⁴, Prof. Sadia Patka⁵

Student, Computer Science and Engineering, Anjuman College of Engineering and Technology, Nagpur, India¹⁻⁴

Professor, Computer Science and Engineering, Anjuman College of Engineering and Technology, Nagpur, India⁵

Abstract: The following thesis describes a case study, in which we will be focusing on developing a 2-D adventure game. The game is developed using agile development method. The thesis concentrates on the development of 2-D game using unity game engine, visual studio and other designing applications. The game is an adventure game with a character, who cross obstacles and solve challenges to complete the level. We used multiple methods, modules and features in the development of our game. While new knowledge about game development and game design is merely a by-product of that process. Our motive of developing a 2-D game is to understand different features and modules of software used.

Keywords: Game engine, UX, Animation, Scripting, Graphics, 2d Model, Gamer, System.

I. INTRODUCTION

The game development industry is growing rapidly thus predicting its future is hard. We are working on this game called gloomy Friday, we choose this type of work for doing better with development cycle, development period, graphics, scripting, adopting new technology, animation. The basis of this project focuses on development of an adventure game. Consequently, success can be measured by taking a look at the resulting game. A game is much more than just its software. It also has to provide content to become enjoyable.

Content of a game is necessary without it the quality cannot be measured. The software part of the project is not the only one, and it must be considered in connection to all other parts: The environment of the game, the story, characters, game plays, the artwork, and so on. Video game development is the process of creating a video game. Development is undertaken by a game developer, which may range from one person to a large business.

Traditional commercial PC and console games is normally funded by a publisher and taken several years to develop. 2-dimensional games can take less time and can be produced cheaply by individuals and small developers. The 2-dimensional game industry has seen a rise in recent years with the growth of new online distribution systems and the mobile game market. Due to low capabilities of computers, a lone programmer could develop a full game.

II. METHODOLOGY

The context of the adventurous content can help direct the game developer's artistic decisions. In our game, the player made to cross the obstacles in the fantasy world. The game development industry is growing rapidly thus predicting its future is hard. We are working on this game called Gloomy Friday, We choose this type of work for doing better with development cycle, development period, graphics, scripting, adopting new technology, animation. The basis of this project focuses on development of an adventure game. Consequently, success can be measured by taking a look at the resulting game. We studied two different types of software development models described as follows:

Water fall model

The Waterfall Model is recommended for large and complex systems that have a long life-time. It is believed that the waterfall model would be an appropriate choice when developing a critical system, since the model emphasizes on thoroughness.

Agile method

Agile is an iterative approach to project management and software development that helps teams deliver value to their customers faster and with fewer headaches. Instead of betting everything on a "big bang" launch, an agile team delivers work in small, but consumable, increments. Requirements, plans, and results are evaluated continuously so teams have a natural mechanism for responding to change quickly.

After considering the pros and cons of above-mentioned models we ended up using the agile method.



III. MODELING AND ANALYSIS

The workflow of the proposed system will be implemented to the given flow system: -

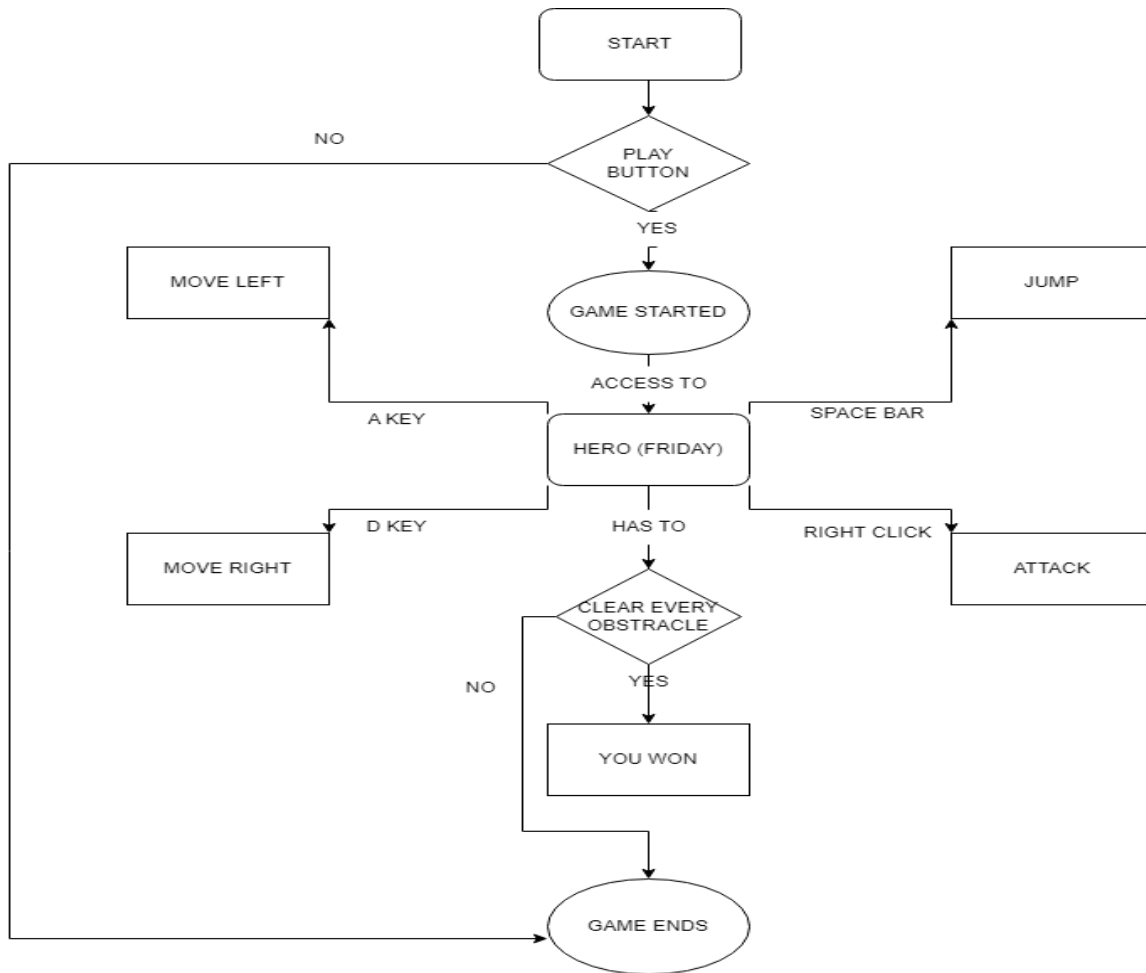


Figure 2. The game scene



IV. CONCLUSION

A software project means a lot of experience. We learned a lot through this project. This project has sharpened our concept of Game engine, animation and the software-hardware interface.

We learned a lot about different documentation. The piece of software we developed is intended to serve the gamers of the world. The success of this project may give pleasure to billions of game lovers among the universe. This project not only tested our technical skills but also our temperament.

REFERENCES

- [1] <https://www.ibm.com/topics/software-development>
- [2] <https://jserd.springeropen.com/articles/10.1186/s40411-016-0032-7>
- [3] https://www.academia.edu/36672411/_Tic_Tac_Toe_Game_Project
- [4] https://en.wikipedia.org/wiki/Video_game_development
- [5] Jeremy Hsu. For the U.S. Military, Video Games Get Serious, August 2010. <http://www.livescience.com/10022-military-video-games.html>.
- [6] Christopher Hundhausen, Sarah Douglas, John Stasko, and Andjohn T. Staskoz. A meta-study of algorithm visualization effectiveness, 2002.
- [7] IGN. The Other Mario Games, Vol. 2: Mario is Missing. And many gamers left him that way., August 2008. <http://retro.ign.com/articles/897/897225p1.html>. [23] Erkki Kaila, Teemu Rajala, Mikko-Jussi Laakso, and Tapio Salakoski. Effects of course-long use of a program visualization tool. In Proceedings of the Twelfth Australasian Conference on Computing Education Volume 103, ACE '10, pages 97-106, Darlinghurst, Australia, Australia, 2010. Australian Computer Society, Inc.
- [8] Brad King. Educators Turn to Games for Help, August 2003. <http://www.wired.com/gaming/gamingreviews/news/2003/08/59855>.
- [9] Konami. Castlevania Official Website, August 2012. <http://www.konami-castlevania.com/>.
- [10] Microsoft Research FUSE Labs. Kodu Game Lab, August 2012. <http://fuse.microsoft.com/page/kodu>.
- [11] Primer Labs. Code Hero Official Website, August 2012. <http://primerlabs.com/code-hero>.