

UNITY BASED GAME DEVELOPMENT, FUNDAMETALS, DESIGN AND MODELING

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APPROVAL


This internship titled “Unity Based Game Development, Fundamentals, Design and Modeling”, submitted by **Md. Tamim Rahman**, ID No: 152-15-6186, to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 02-05-2019.

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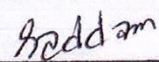
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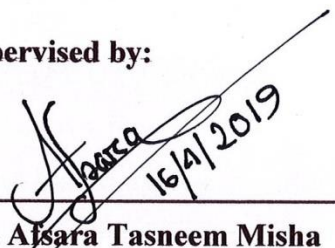
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DECLARATION

I hereby declare that, this internship report is prepared by me, **Md. Tamim Rahman**, **ID No: 152-15-6186** to the department of Computer Science and Engineering, Daffodil International University. Under the supervision of **Ms. Afsara Tasneem Misha**, **Lecturer, Department of CSE**, Daffodil International University.

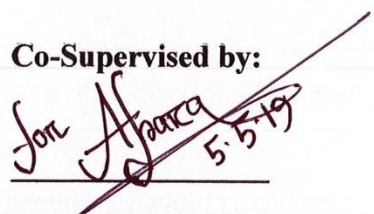
I also declare that neither this internship report nor any part of this internship report has been submitted elsewhere for award of any Degree or Diploma. I also declare that, I collect information from B2M Technology, Unity, Tutorial, Books and Internet.

Supervised by:



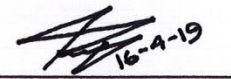
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ABSTRACT

The Unity engine is the most popular third-party game development software among developers around the world. Equipment and studies from AAA to indie use Unity, and the percentage of developers and artists who rely on Unity as their main development tool continues to grow. Unity supports the development of all major platforms: for mobile devices, PCs, consoles, Web, VR and AR. Unity is used to create games (such as 2D and 3D) and other applications, advertisements, interactive stories and art, visualizations, films and probably much more.

In contrast, Unity allows powerful behaviors written in one of three solid languages: JavaScript, C # and Boo. Furthermore, all three languages can be used simultaneously within a project to allow people from different technological backgrounds to contribute to a project at the same time.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In the rapid growth of the development of CSE and the game development sector that grows even faster, the future is difficult to predict. I am working on this project and I select this type of work to improve the development cycle, graphics, points, scripts and animations. In a game plan, the artifact is a game and much more than any other software. It's like a web server. Not including content the web server makes no sense. This is an important effect in a game project. This is not just a simple project. This is the connection of the whole environment of a game; History plays the work of art and many others.

1.2 Motivation

I am presently finding out my degree in CSE Engineering at the Daffodil International University, I remember of the worth of receiving realistic information that integrates the information of textbooks and helps students to urge a broader posture of the topic. Through the situation, I unconcealed that i used to be principally Associate skilled within the details of Unity and its diversion platform. As an online service supplier, I'm expressing o.k., communication with people, understanding their needs and providing them with higher service. My skills square measure supported my ability to scan and understand the case totally and to act quickly andshowing intelligently.

1.3 Objective

The ultimate goal of my internship is to organize myself to participate within the spirited market. Thus this is often terribly effective in talent development. I might wish to assemble an unprecedented quality to supply Maine as knowledgeable. The office in computing is planned to create on the market work data though the scholars square measure still in class, to synchronize work data with scholastic education and to assist students move from one category to a different.

1.4 Company Introduction

B2M Technology Ltd. is proud to be a game development company in Bangladesh. They're specialists within the field of diversion, wherever they need associate moral and basic industrial relationship and area unit customers. As I have a tendency to look at growth throughout the last decade since our starting, they are really happy with what they have achieved associated even extra excited regarding their prospect of associate equally promising future.

1.5 Layout of the Report

- Chapter-1** Describing Objective, Motivation of position and Introduction to the corporate.
- Chapter -2** Describing methoB2Mogy & internship work.
- Chapter-3** Describing daily task and activities, Events and Activities and Challenges.
- Chapter-4** Describing competencies attained, Smart Plan, Reflections.
- Chapter-5** Describing conclusion and Future Scope.

CHAPTER 2

ORGANIZATION

2.1 About the Company

B2M Technology Ltd. is proud to be a game development company in Bangladesh. They're specialists within the field of diversion, wherever they need associate moral and basic industrial relationship and area unit customers. As I have a tendency to look at growth throughout the last decade since our starting, they are really happy with what they have achieved associated even extra excited regarding their prospect of associate equally promising future.

2.2 Product and Market Situation

B2M Technology Ltd. is proud to be a game development company in Bangladesh. They're specialists within the field of diversion, wherever they need a moral and basic industrial relationship and square measure customers. As I have a tendency to look at growth throughout the last decade since our starting, they are very proud of what they have achieved and even extra excited regarding their scan of an equally hopeful future. B2M Technology Ltd conjointly offers varied game development services and skilled coaching services. These indicating below.

Professional Training Services

1. Learning the Unity Interface
2. C# Scripting in Unity
3. Unity Animation Workflows
4. Unity Physics Simulations
5. AI Pathfinding
6. Material Creation Workflows
7. Lighting and Light Baking Techniques
8. Audio
9. Creating User Interface Elements
10. Gameplay Programming Workflows

2.3 The Goal Set of the Company

The company's shopper base includes all customers and each one sized businesses, furthermore as start-ups. The corporation aims to focus on customers, as they are goals, offers and have the most effective potential for growth for the company. Game Development Service believes that these market places have special prices and repair needs and makes customers extra committed and consistent.

2.4 The SWOT Analysis

The SWOT analysis is a constructive method to recognize your strength and weakness and categorize both the opportunity release to you and the fear you face.

Strengths:

- a. The Communiqué with people alienated by distance.
- b. Work since residence through simplicity
- c. Establish a gaming business
- d. Collection of information

Weaknesses:

- a. Newcomers underestimate the quantity of experience needed to survive on the market.
- b. Large amounts of money needed to create businesses.
- c. Competition for small retailers.
- d. Varied analysis and repair decisions

Opportunities:

- a. The Era formation of the altering population.
- b. The number of games is increasing
- c. Introduction of a simpler development.
- d. Review of the regulatory development of games.

Threats:

- a. The economic crisis.
- b. It remains to be seen to what extent consumers can be persuaded to embrace

2.3 Managerial Structure

Managerial Structure of B2M Technology Ltd. shows in fig 2.5:



Figure 2.5: Shows managerial structure of B2M Technology Limited.

CHAPTER 3

TASKS, PROJECT AND ACTIONS

3.1 Daily Task andActivities

Month - 1: First month at B2M Technology Ltd., the following tasks that I performed:

1. Learning the interface of the base unity.
2. Basic C # Script in the unity
3. Basic workflows of Unity Animation.
4. Basic Unity Physics simulations.
5. Basic AI trajectory.
6. Basic workflows for creating materials.
7. Basic lighting and light baking techniques.
8. Basic audio.
9. Creation of basic user interface elements
10. Game programming Basic workflows.

Month - 2: Second month at B2M Technology Ltd., the following tasks that I performed:

1. Basic concepts of artistic workflows.
2. Basic workflows for 3d modeling
3. Basic UV mapping
4. Basic character modeling
5. Basic sculpture in ZBrush
6. Basic retopology
7. Basic Texturing in Substance Suite.
8. The art of basic environment
9. Basic concepts of the environment.
10. Basic concepts of character.

Month – 3: Third month at B2M Technology Ltd., I learned and performed the following tasks

1. Design of the basic level
2. Basic design documentation.
3. Basic construction of a game design document.
4. Editing a Doc Basic game project
5. Basic construction of a design level doc.
6. Basic prototyping and decision-making / documentation process based on the prototype results.
7. Find fun
8. The Unity post processing stack
9. Construction of modular level groups for rapid basic construction
10. Integration with systems.

Month – 4: The final month at B2M Technology Ltd., I learned and performed the following tasks:

1. Creation of navigation points and NavMesh agents.
2. Establish patrol routes and guide enemy movements.
3. Store statistics for the characters and retrieve them as you wish.
4. Implementation of Scene uploads, game managers and game loops.
5. Start basic spawn.
6. Collection of basic loot.
7. Archive and retrieve inventory items
8. Create juicy basic fights.
9. Creation of areas with magical effects and attacks.

3.2 Activities

To show and describe my events and activities in the company, I'm doing a project. The project is a game. It's a complete strategy game. Ok, let's see the project plan of my game "Ghost Run"

3.3 The Background

In this project, it is a strategy game for a single player who watches over the next destructive entity. In general, quick action and character participation must take precedence in this game.

3.4 About “Ghost Run”

It's a simple logic game. The major character of "Ghost Run" is a little ghost who runs into the night sky and saves the life of the next destroyer. The player's main mission is to use his logic to save the life and score of Ghost.

3.5 Gaming Scope

The environment of the game facilitates the rhythm of the story. I show the flow of action between the inputs, the script and the outputs shown. I'm working mainly with story, animation, graphics, game installations, scripts and the object, and I'm not working on the web version, cartoons or programming [2].

3.6 Schedule Table

Table 3.6 Schedule Table [1]

Set Out	Finish	States and Objective
January	January	Project offer, gathering supervisor with the idea.
January	February	Preparation, Thoughts on the game.
February	March	Create a document, choose tools and environment.
March	March	Start planning and implementing.
March	April	Development, testing, execution with report writing.
April	May	Final assessment of the report and tests.
May	Project submission	

3.7 Basic Story

It's a simple logic game. The major character of "Ghost Run" is a little ghost who runs into the night sky and saves the life of the next destroyer. The player's main mission is to use his logic to save the life and score of Ghost.

At first player can control the game controls by going to the "control menu" and see different options. The player can also change the graphic settings. However, the player can directly select "Play" from "Options" and start playing. After starting a level, the player will find useful advice next to the screen and will be able to follow him and enjoy the game. If you lose, you can repeat the level by pressing "R". After finishing the game, you will have the "Play" option or simply "Exit".

3.8 Some System Requirements

PC Windows 10 / 8.1 / 8/7 / Vista / XP (32 or 64 bit)

Processor: Dual Core 2.0 GHz or equivalent processor.

1 GB of system RAM.

1 GB of free disk space.

Video card compatible with Direct X 9.0c with 512 MB of RAM.

Sound card compatible with DirectX.

3.9 The Use Case

The following table summarizes the use cases of the system. I created the use cases based on the basic view [2] of the game. The swim diagram with background programming that two important views of an SRS game.

Table 3.9: The Use Case [2]

Level 0	GHOST RUN GAME					
Level 1	PLAY	OPTION		STORY		EXIT
Level 2	NEW GAME	COMPLETING LEVEL	EXIT GAME	SHOW CONTROL	CHANGING CONFIGURATION	VIEW STORY

3.10 The Diagram & Description (Use Case)

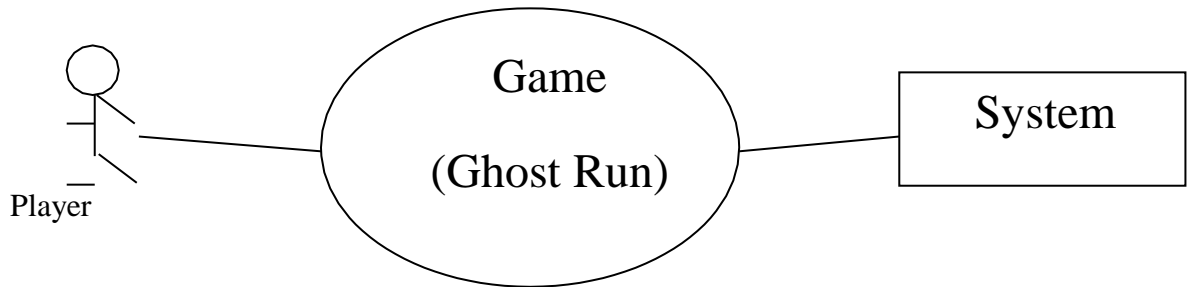


Fig 3.10: Diagram (Use Case)

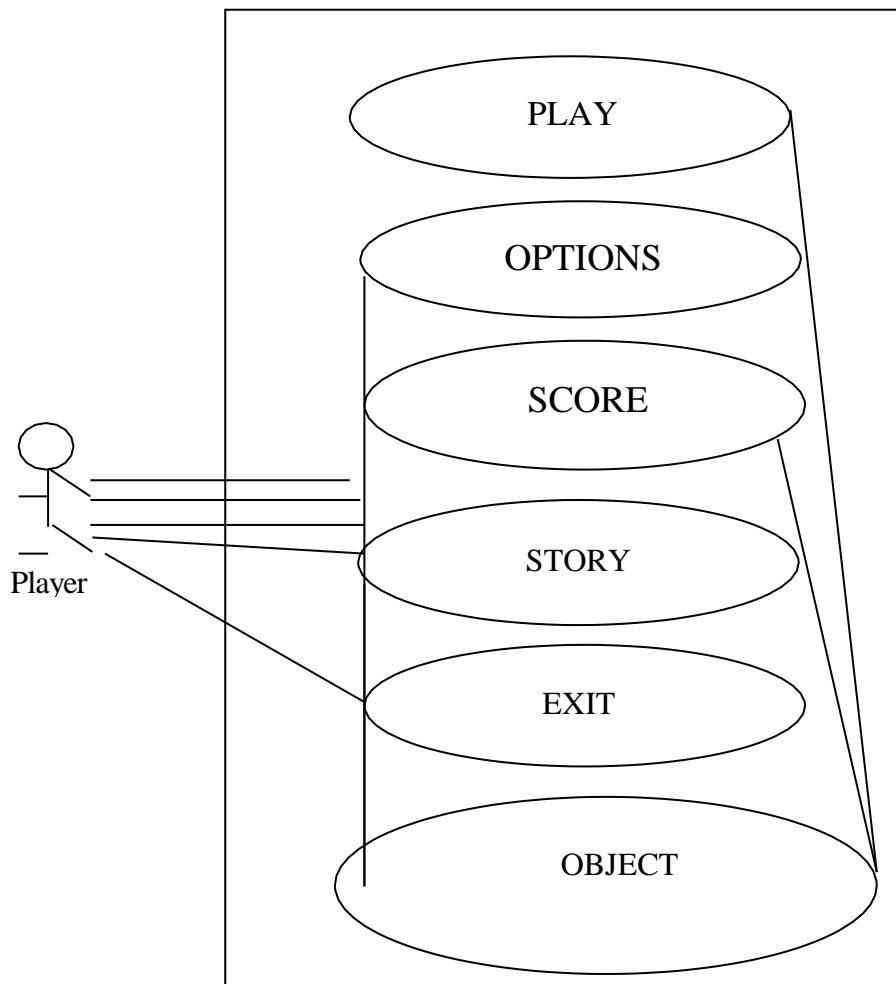


Fig 3.10.1: Diagram (Use Case)

This diagram takes us to the "Play" section of use cases. These use case descriptions are provided here-[1]

Play

i.

Use case: Play

Primary Actors: Anybody playing Objective in context: a new game begins

Precondition:

1. The method supports game arrangement.
2. The file was activating for implementation& the game screen display.[1]

Triggers: The player desires to begin a new game [1].

Scenario:

1. Go to the game's main menu. [1].
2. Clicking the new game button [1].
3. In the system new game is loaded [1].

Exception: Game packed down

Priority: Indispensable, implementation is required to.[1].

When Available: First increment [2].

ii.

Use case: Exit

Primary Actors: Anybody playing Objective in context: a new game begins **Precondition:**

Played a level. [2]

Triggers: Exit game level that Player needs to

Scenario:

1. Press game pause button.
2. If pause menu appear, click Back button to Menu button [1].
3. The game is over and the title screens appear[1].

When Available: First increment


3.11 The Development

Unity includes many integrated components that greatly accelerate the game development process.[1] These include:

- Physical engine
- Collision detection and management
- Entry recognition
- Creation of objects and manipulation of transformations (position and rotation of game objects) [2].
- Scene integration (transition from one level to the next) [2].
- Attached model (which represents game objects with 2D models of external programs) [2].

3.12 Some Execution Tools

Table 3.12: Some Execution Tools [2][10]

Product Of		
Tools	Unity 2d	Photoshop
Usage	Game Engine	Photo Editing
Work Experience	Backend Activity	Gaming Model Texture

3.13 Resource and Requirements

Table 3.13: Resource and Requirements [2]

Activities	Design (Level)	Game Engine	Graphics Design	Documentation
Skill	Translate Ability	Knowledge of Unity to modify and execution	Knowledge of Graphical Modeling and execution	Knowledge of Formal Report Writing
Resource	I took the decision and	Unity Game Engine that I worked there	2D Model Creating	Idea from Supervisor
Outcome	Idea of Level	Interactive portion of Levels	Visibility and 2D Details	Game Reports are Different from other

3.14 Test case

Test Case : This test will check if the animation is working correctly.

Test Procedure : Import a character model with animation in unity.

Expected Result : Animation is working.

Actual Result : Animation is not working [10].

Comment : Need to check character configuration on window.

The appropriate animation was not selected. Select it[10].

Conditional Test : Again run scene [10].

Expected Result : Animation is working[10].

Actual Result : Yes, it is working[10].

Accuracy : Accuracy depends on hardware configuration [10].

3.15 Test case

Test Case:	This test will check if the interaction between objects is working correctly [2].
Test Procedure	: Add scripts of interaction in the objects that I want to [2] Interact with each other. Run scene [2].
Expected Result	: Objects are interacting [2].
Actual Result	: Run time exception [2].
Comment:	Need to add checking in the scripts for the objects that have [2] a particular script.
Conditional Test	: Run scene.
Expected Result	: Interaction is ok now.
Actual Result	: Interaction is ok now.
Accuracy	: Perfectly accurate.

3.16 Play “Ghost Run”

This chapter provides the procedure of the game and also contains some snapshots to give the player some ideas about the game before starting to play it[10].

3.17 Snapshot

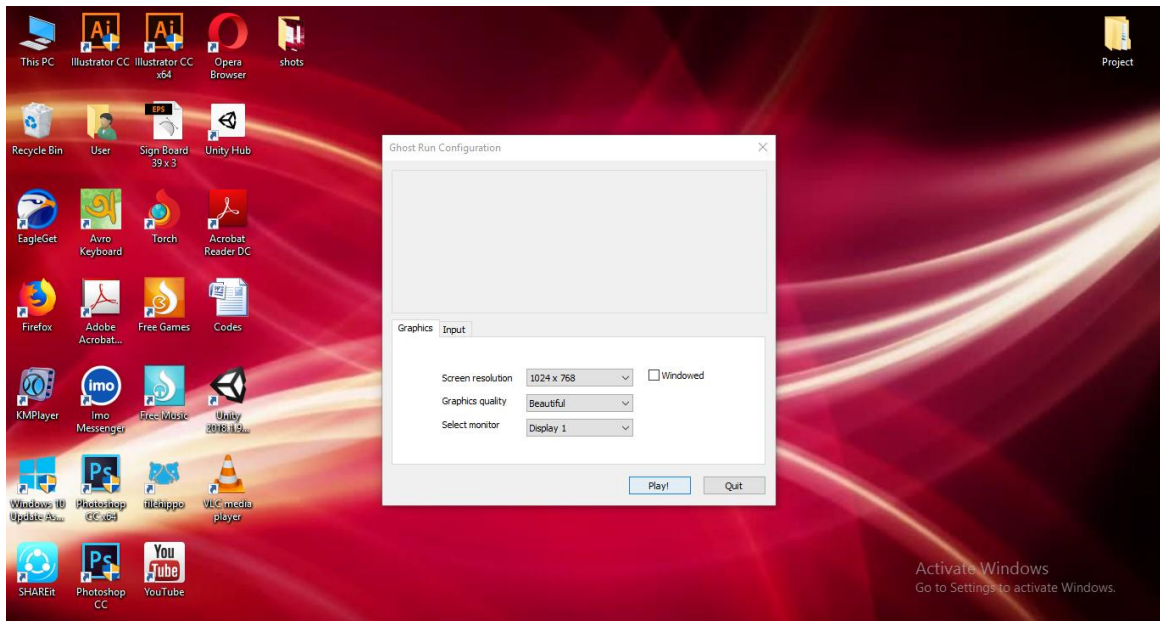


Fig 3.17.1: Configuration Option

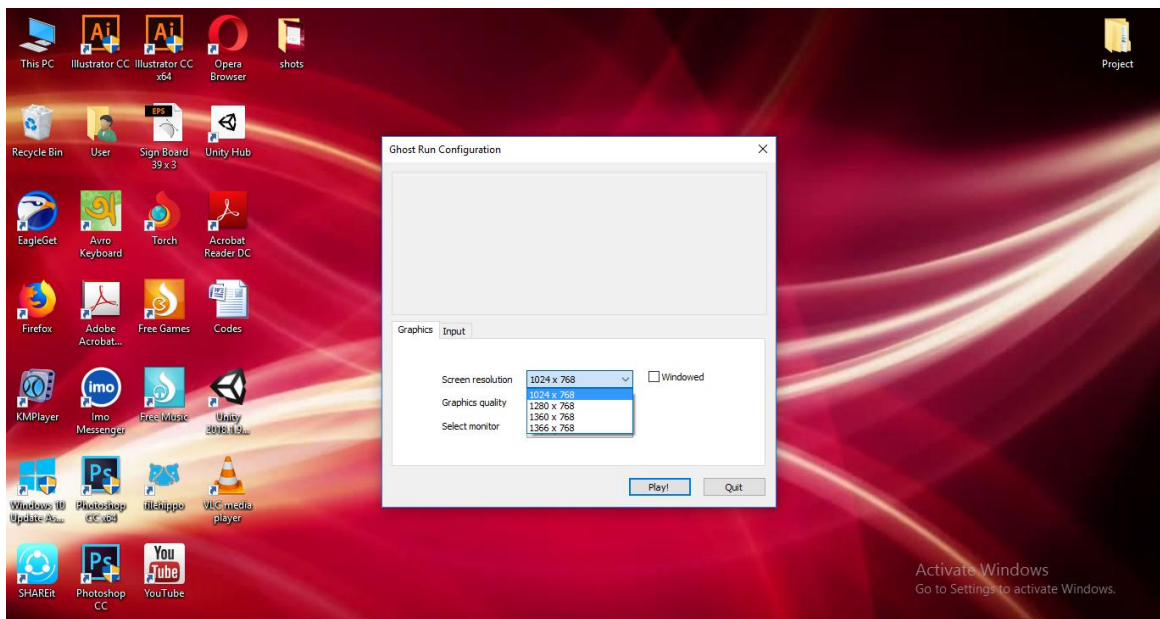


Fig 3.17.2: Screen Resolution

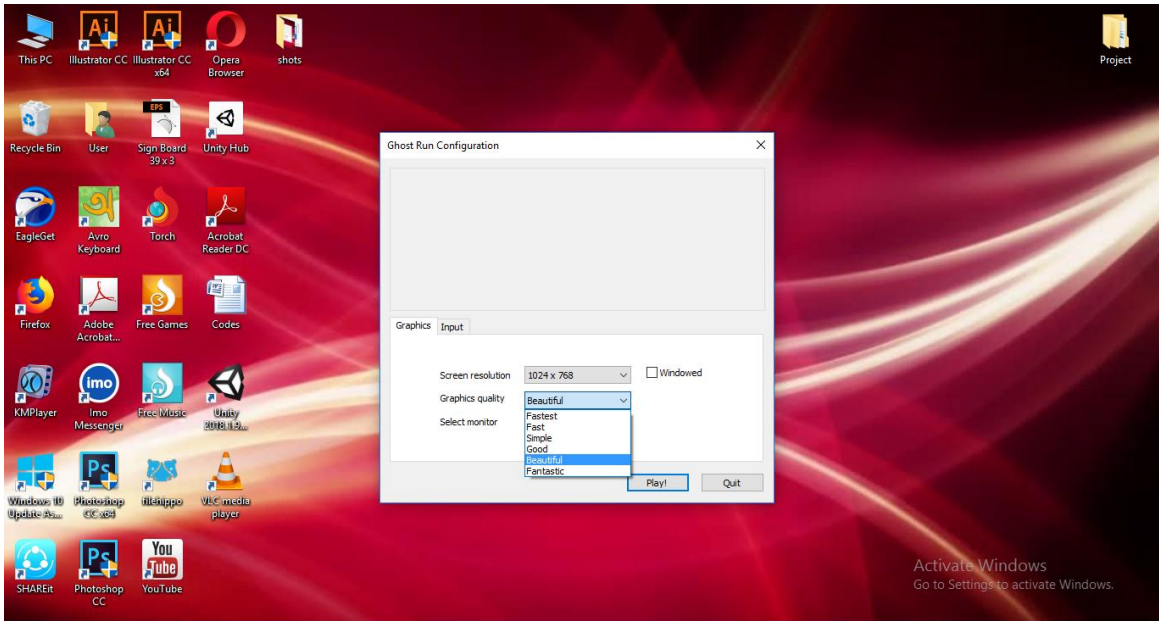


Fig 3.17.3: Graphics Quality

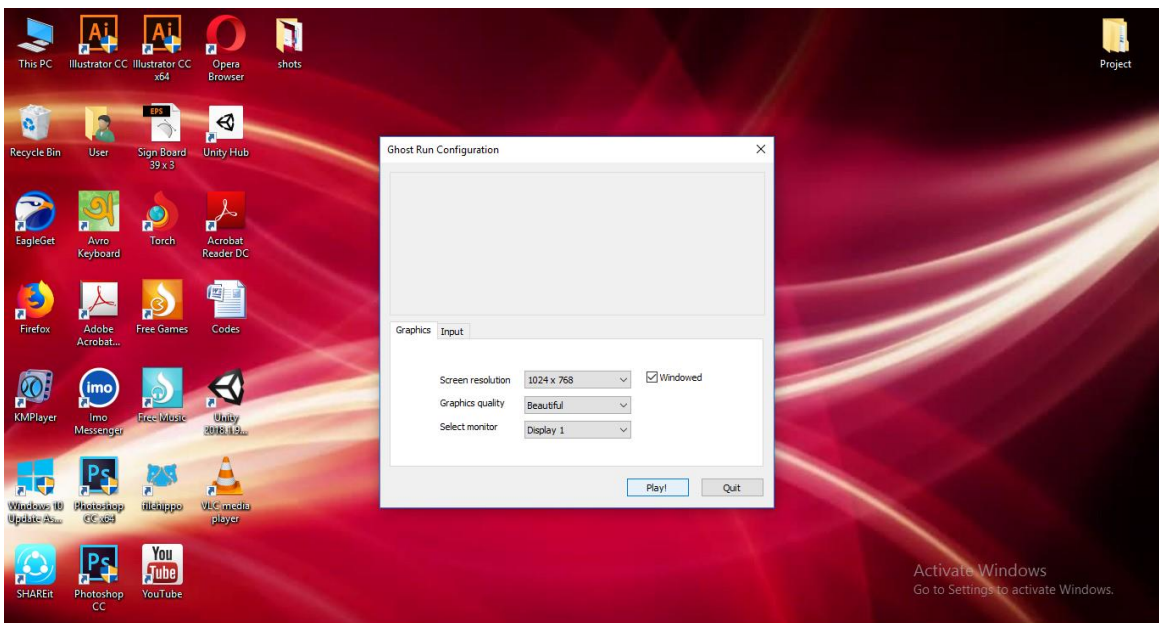


Fig 3.17.4: Click Play Button



Fig 3.17.5: Made with Unity

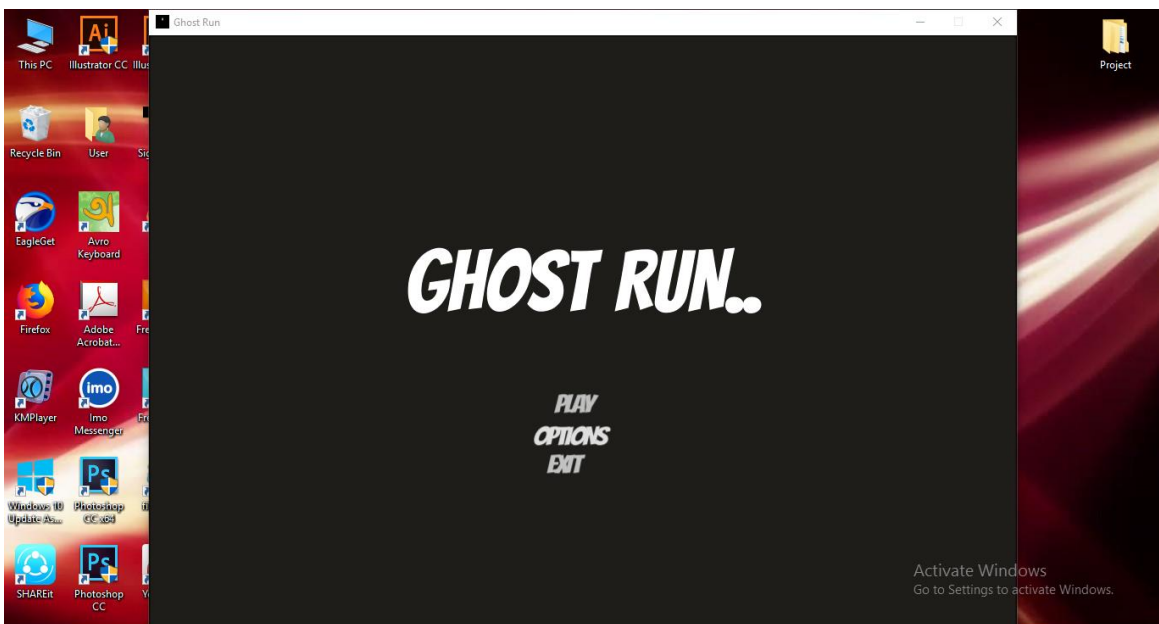


Fig 3.17.6: Main Menu



Fig 3.17.7: Main Menu



Fig 3.17.8: Playing Game

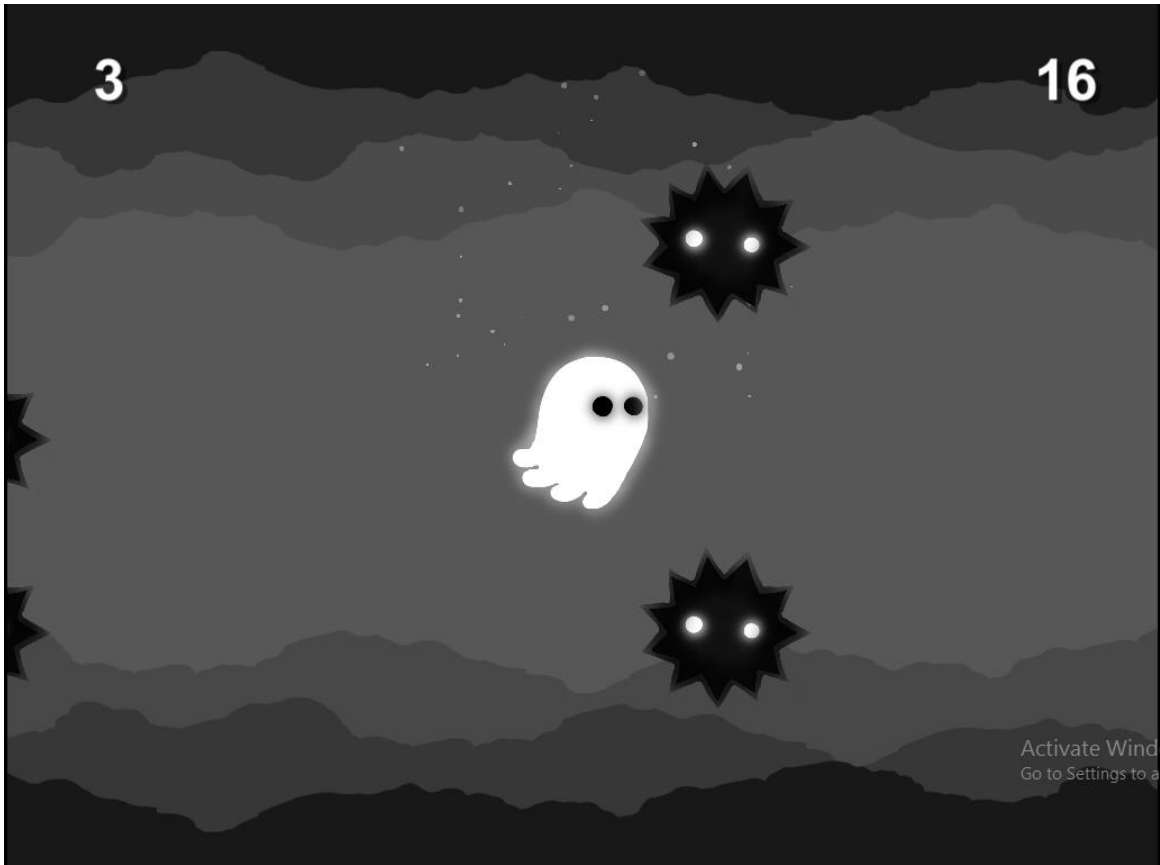


Fig 3.17.8.1: Playing Game



Fig 3.17.8.2: Playing Game



Fig 3.17.8.3: End Game

CHAPTER 4

EXPERIMENTS, SMART PLAN AND REFLECTIONS

4.1 Skills Gaining

The skills gained or teaching outcomes unit of measurement Associate in nursing announcement of what a student have to be compelled to grasp, understand or be able to do as a results of a learning technique. Install and deduct the game, turn out games and totally different applications, announcements, interactive stories and art, visualizations, movies and much further. Leadership role in units aligned with learning outcomes, field and spot assessments. The scholar association geographical point finances the coaching outcomes of assorted student interns: gathering associate degreed organizing data on A spot Project description: participate inside the look of the Unity web site. That's a lot of, supported learning outcomes; the on-site supervisor will offer steering on the organization's policies and procedures.

4.2 Smart Plan

Every company should have a wise commit to succeed. Essentially some common things of combination produce a wise set up.

4.3 Reflections

B2M Technology Ltd. began operational in 2018. In recent years it's extended its portfolio of operations and services supported shopper recommendations and taking into thought time desires. They have worked with many comes and organizations and achieved name. They use the most recent technology and update services where necessary. They are company game developers ready to supply up-to-date solutions with a bunch of extraordinarily economical technical specialists.

CHAPTER 5

CONCLUSION AND FUTURE CAREER

5.1 The Barrier

1. Work with the game engine completely in a new experience for us. I usually work with different OO languages, DBMS, language, etc[1] [2].
2. Adopt these things through video tutorials, tutorial texts and learning materials and the Internet provided by the tools themselves. It's a matter of time, patience and hard work[1].
3. It's a very delicate job and takes a long time because the game engines try to connect the game environment with the real world[1].
4. The creation of a 3D model is very difficult because it is necessary to work with each point of the model[1].
5. There are game engines that require a thorough knowledge of their properties, sections and subsections.

After all, the game project is not a 3 or 4 month project for a single person [1].

5.2 Realizations

1. Now I know much more about game engines. How it works?
2. I know how a model is constructed and how it is animated.
3. The main thing is that as a software engineer, skill and expertise to create a SRS document and an overall software product report is now better than before.
4. Co-Operation between group members.
5. Develop communication skills.
6. Growing creative thinking and imagination capability[1].

5.3 Future Plan

- LevelExtension
- Improve GraphicalRepresentation
- Introduce new gamefeatures
- Introduce new environment andscenes
- Takeuserresponsethroughwebsiteandproducewebranklist [1].

5.4 Challenges

No job has any challenges, but once four months of wise experience and sharing of friends once hearing relating to time of day, I discovered that there unit some common challenges on the stage. I feel the inmates have three things: unpaid / low, temporary, and that I am during a very race to induce experience.

Sometimes it's not enough work: they haven't given pine State enough work. I'm bored, underused, I bit my fingers on my table and that I am tempted to browse Facebook.

Too much work: As results of intern's unit happy to put a foot inside the door, some jobs can build the foremost of young workers global organization agency offer them long hours of boring and repetitive work. I'm afraid to lift questions: suddenly there is associate flow of labor, and finally I even have the possibility to envision myself! But I'm undecided relating to x, y, z ... I'll feel the pressure of being associate freelance and self-sustaining worker, but it is higher to clear up the uncertainties!

Compete with another trainee: fortunately, he was associate intern; we have a tendency to tend to lift ourselves which we are going to merely associate ourselves with comes that have worked in teams where there was a cooperative relationship. Trainees during a} very future point, or a recommendation for Associate in Nursing honest letter that competes in various work environments, may not be therefore kind.

A new lifestyle: as a spanking new graduate, I'm getting accustomed a spanking new means which can be quite beautiful. Instead of getting up at eight and aiming to a few of lessons on a day to day, I'm sitting at a table 9-5. I'd abdomen my people variant to avoid wasting} lots of money. The hours and additionally the new state of affairs of life produce socialization harder than before.

APPENDEX

APPENDEX A: Internship Reflection

The main objective of my post during a skilled setting, sensible solutions to planet issues is to use the data no inheritable within the room. And therefore the skills and relationships relevant at level during a professional setting, learning to manage new data, skills and therefore the ability to work out the way to outline and develop plans. Increase the Unity network with supervisors from alternative skilled and professional relationships. I'm knowledgeable within the exhibition field with shoppers, label skilled and professional supervisors and alternative staff to be told from understanding the behavior also on get through interaction. To perform the tasks of my post, I'm travail Associate in nursing applicable industrial label. they're a mission / vision of Associate in Nursing enforced organization, the way to contact colleagues, however power is shared, however it's structured, however selections are created, the way to perceive the culture of knowledgeable organization and what degree of responsibility and feedback for the 'organization. . With Associate in nursing analysis at the tip of my post and skill of coaching in individual conferences, it offers the chance to specific knowledgeable opinion.

APPENDEX B: Company Details



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<http://b2m-tech.com>

REFERENCES

- [1] N. Nahar, "slideshare.net," 30 November 2014. [Online]. Available: <https://www.slideshare.net/NadiaIIT/final-project-report-of-a-game?cv=1>.
- [2]"Every Step With You In Your Academic Dreams | TMC Academy", TMC Academy, 2019. [Online]. Available: <https://www.tmc.edu.sg/>. [Accessed: 08- Apr- 2019].
- [3]W. Goldstone, "Unity 3D Video Tutorials | 100% Free | Unity3D Student | The Best Way to Learn Video Game Development", Unity3dstudent.com, 2019. [Online]. Available: <http://www.unity3dstudent.com>. [Accessed: 08- Apr- 2019].
- [4]"Brackeys is creating videos on Game Development | Patreon", Patreon, 2019. [Online]. Available: <http://patreon.com/brackeys>. [Accessed: 17- Mar- 2019].
- [5]"Home | Brackeys", Brackeys.com, 2019. [Online]. Available: <http://brackeys.com>. [Accessed: 04- Mar- 2019].
- [6]"Android Authority", YouTube, 2019. [Online]. Available: <https://andauth.co/subscribe>. [Accessed: 02- Mar- 2019].
- [7]"Blackthornprod is creating Game Dev Videos | Patreon", Patreon, 2019. [Online]. Available: <https://www.patreon.com/blackthornprod>. [Accessed: 31- Mar- 2019].
- [8]"Digital Tutors is now Pluralsight", Digitaltutors.com, 2019. [Online]. Available: <http://www.digitaltutors.com/11/index.php>. [Accessed: 18- Feb- 2019].
- [9]"Mixamo", Mixamo.com, 2019. [Online]. Available: <http://www.mixamo.com>. [Accessed: 07- Feb- 2019].
- [10]"Welcome to the University of Greenwich, London", University of Greenwich, 2019. [Online]. Available: <https://www.gre.ac.uk/>. [Accessed: 14- Feb- 2019]

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