

Game Development By Using Unity 3D

¹Aniket Tanaji Kumbhar,²Rupesh Gangaram Gurakhe,³Sayali Dilip Jadhav,

¹UG Student,²UG Student,³UG Student,

¹Department Of Computer Engineering,
¹S.S.P.M.'s College of Engineering, Kankavli,India

Abstract: Three-Dimensional (3D) Game Engines are large and complex, but very efficient at creating huge, artificial worlds for entertainment. Game engines are vital for developing 3D applications and games today. This is because the engines significantly reduce resources---time and manpower---to implement mandatory but complex functionalities. However, with over 100 engines available with highly different ranges of features, performance, license, and cost, selecting an appropriate game engine for a specific objective becomes a challenging problem

IndexTerms–Unity 3d tools, mixamo, adobe fuse.

I. INTRODUCTION

Gaming industry is one of the booming industries in today's world. We are designing game named as "MAS" that is Master Anim System. The game contains are player. the player can move left ,right ,forward and backward using arrow keys, player can pick the gun and also change the gun by using scroll the mouse. if you click the keyboard 'G' button or Ctrl button then player can take the grenade and aim the specific area. the player can save the civilian and the civilian are in green color. Unity 3D game engine is the most professional, steady and efficient game engine, and Unity 3D game engine supports Web, PC, Mac, iOS, Flash, Android, , desktop, mobile platforms. The project used the Unity 3D game engine to develop a 3D game, which the case of the game is a third person controller (TPC) game. The report is aimed at people who are beginning with learning Unity and possess at least a basic knowledge of the Unity 3D game engine. It does not discuss the whole process of creating the game.

II. EXISTING SYSTEM

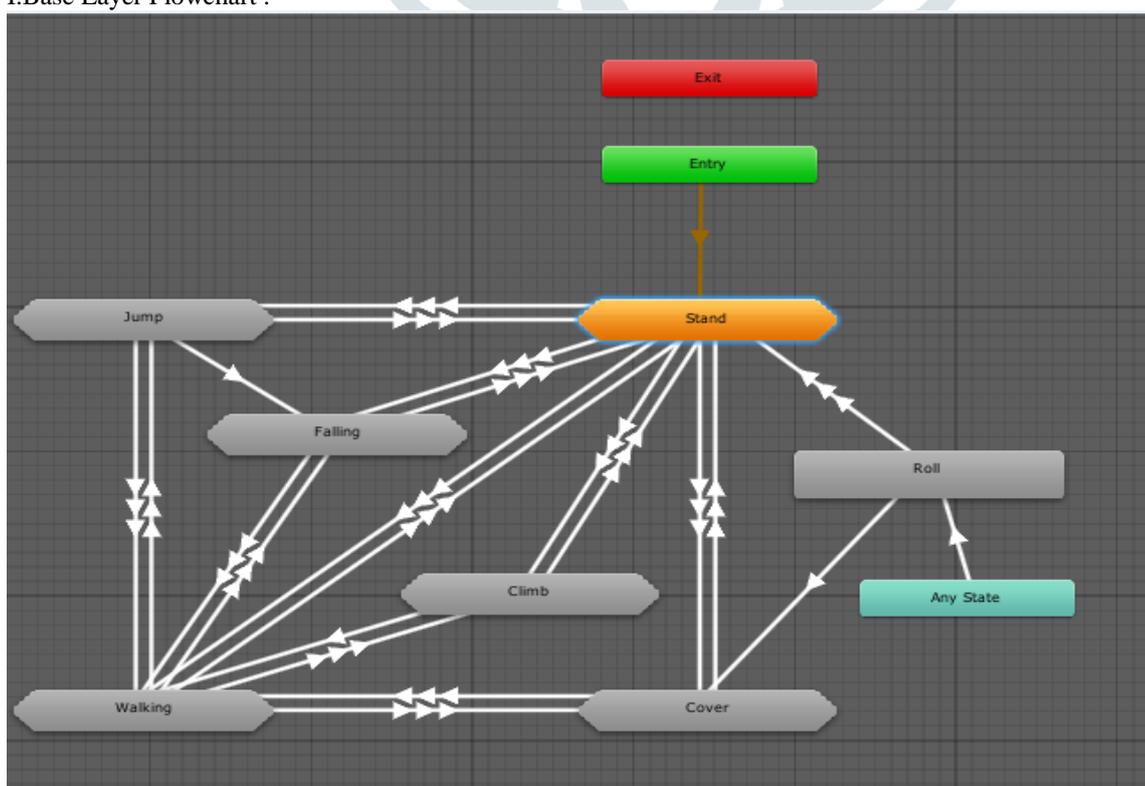
In existing games the main drawback is that we have to develop the game using different platforms. It was very time consuming and much complex. Various task such as running, climbing, rolling etc. requires more coding and also requires different platform to build it.

III. PROBLEM STATEMENT AND PROPOSED SYSTEM

Previously the components used the development of game such as animation, models etc are separately. The software that which we have used is unity 3D using this software we can combine all the components and thus the complexity can be decreased and gaming also becomes easier.

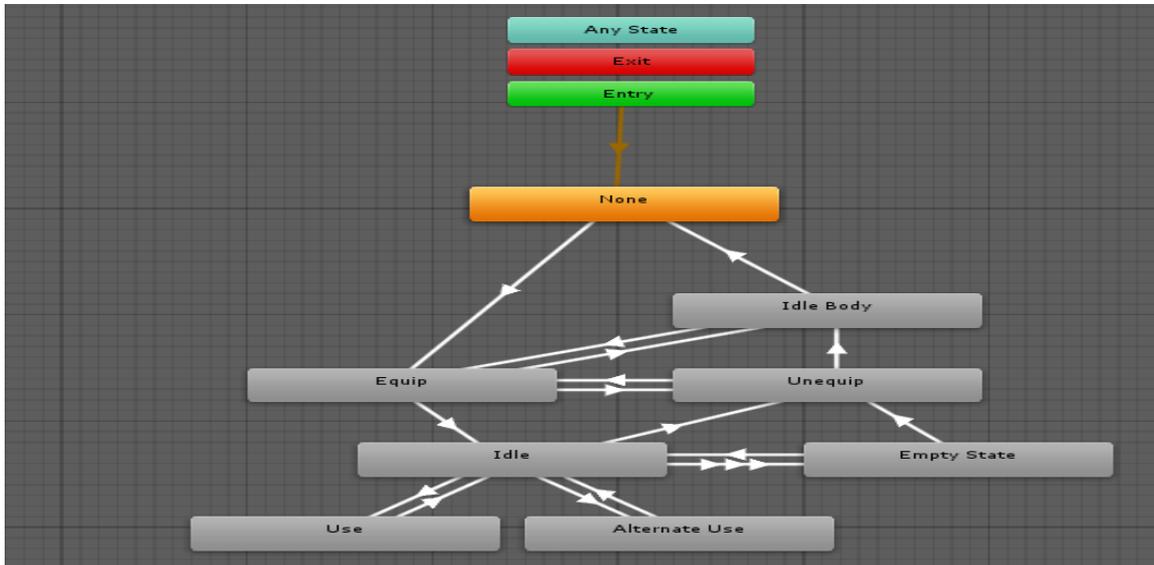
IV. WORKING

I.Base Layer Flowchart :-



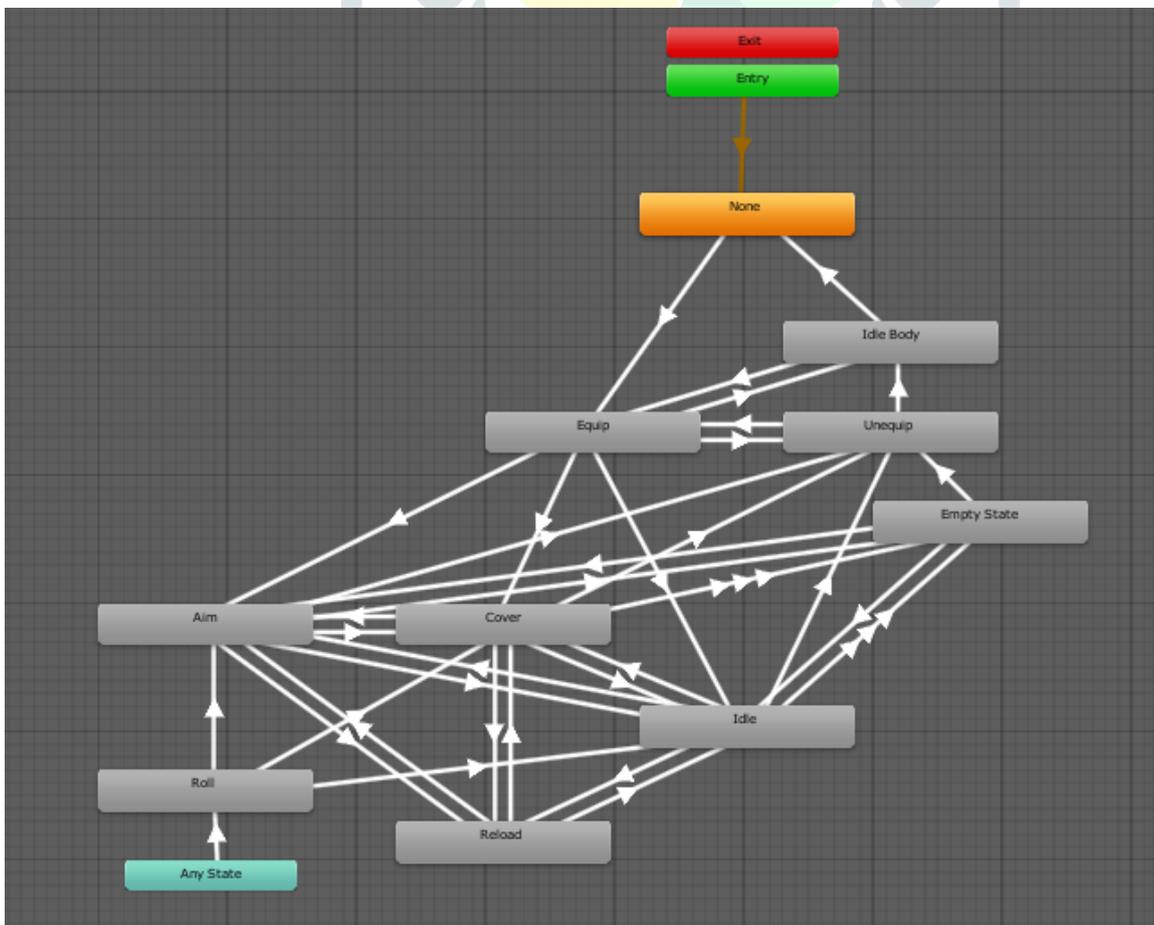
Base layer flowchart is used to show the basics of the game. Player can enter the game after which he/she will be in stand position. Player can do Various task such as jumping, rolling, climbing, walking and taking cover to the object. After completing any task it comes in its default position as standing. These are the free moves player can use to test the game also. After hitting space button the player will jump/roll. Upward key is used to climbing and also walking in straight direction. For taking cover player can hide behind the big object which protect itself.

II.Player tool flowchart-



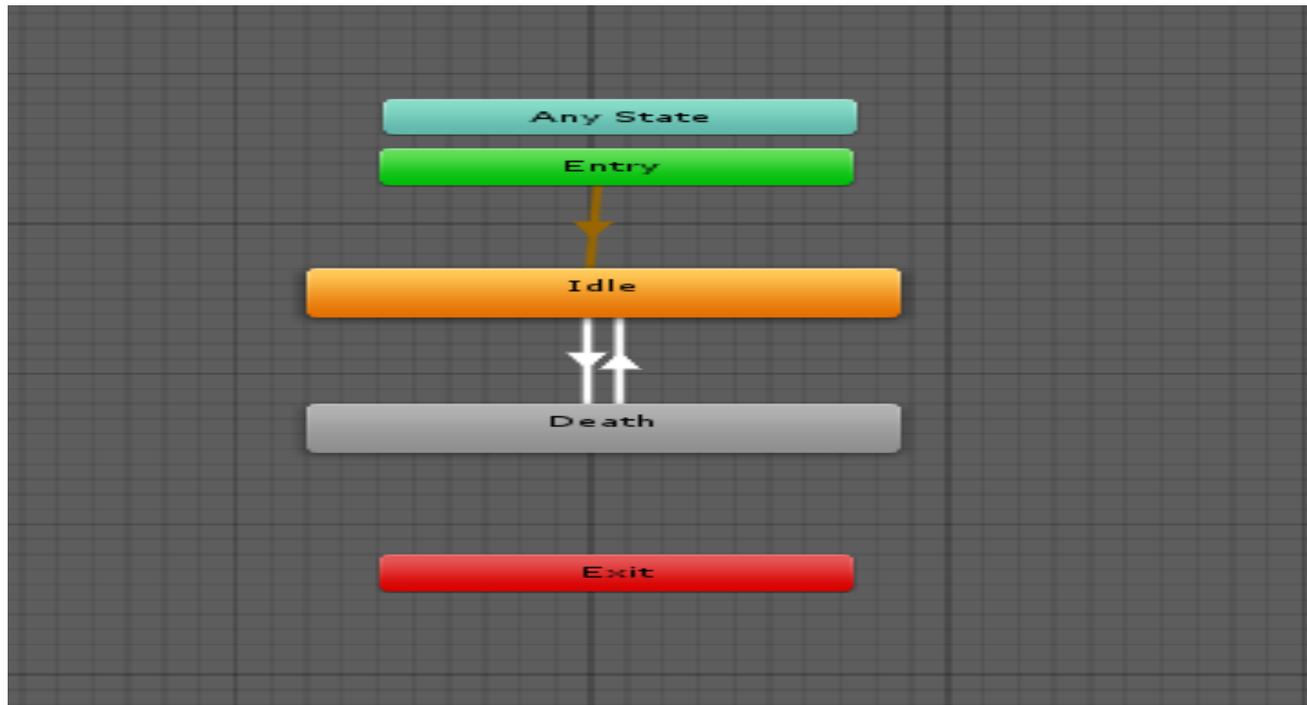
Player tool flowchart is showing the actual gameplay. After entering into the game player can move or can remain in ideal sate. For having the weapons player can use scrolling of mouse. He/she can change the weapons by scrolling mouse.

III.Pistol flowchart :-



These are the main activities that can player perform with the weapons. This flowchart is of the player having pistol in his/her hand. Player can release the weapons also. After having a gun player could move, roll, jump, aim and can shoot also to the enemy. Reload is the activity which player has to do manually when the weapon is empty. By default player got 50 ammunition with 2 grenades.

IV. Death flowchart :-



In death flowchart we can see how the player will be dead. Player who is playing a game has to save the civilians from the enemies. Player got some weapons by default to save the civilians. The health bar of the gamer is shown on top in red color. It gets decreased when the enemy shoots to him. Headshot decreases the health more rapidly than the other body shots. After the death of the player the game comes into the main menu.

V. METHDOLOGY

We are using Unity 3D for developing our game, Adobe fuse is for used for design model and Mixamo used for Animation.

Gaming industry is one of the booming industries in today's world. We are designing game named as "MAS" that is Master Anim System. The game contains are player. the player can move left ,right ,forward and backward using arrow keys, player can pick the gun and also change the gun by using scroll the mouse. if you click the keyboard 'G' button or Ctrl button then player can take the grenade and aim the specific area. the player can save the civilian and the civilian are in green color.

VI. SYSTEM REQUIREMENT

- i. **Hardware Requirement**– minimum hardware requirment are the processor is intel I3 ,I5,I7 and minimum RAM 1GB,harddisk are 20GB. And monitor are 15 colores monitor.we are using 122 keyboard keys , and minimum graphics card with DX 10.
- ii. **Software Requirement**- the minimum software requirement are windows 7,8,10,ubuntu and the languages are use JAVA script and C#.

VII. CONCLUSION

Proposed project provide multiple facilities and less efforts for game developer for developing new games for Desktop and mobile environment. We are using Unity 3D for developing our game. We get advantages of using Unity 3D is Work accurately, fast, reliable and also time saving. The efficiency of the work done would be improved. User satisfaction would be higher.

VIII. REFERENCES

1. <http://Docs.unity3d.com/manual/index.html>
2. <https://msdn.microsoft.com/en-us/magazine/dn759441.aspx>
3. <https://www.oreilly.com/library/view/game-development-with/9781634624053/>
4. <https://www.mixamo.com/#/>
5. <http://pdfs.sementicscholar.org>