COMPANY ACY Entertainment Pvt. Ltd. LOCATION Noida, India SOFTWARE AUTODESK® MAYA®

How ACY Entertainment built Chakravyuha for 'The Legend of Abhimanyu' game

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Yogesh Sharma
Co-Founder
ACY Entertainment Pvt. Ltd.



Image courtesy: ACY Entertainment Pvt. Ltd.

Did you know that the battlefield for the epic Hindu battle of Mahabharata was 48*128KM in area? Or that Chakravyuha, one of the most celebrated battle formations, consisted of thousands of cavalries, chariots and elephants? No? Now imagine that in a game! Sounds exciting and challenging, right? And come next month, you will be able to experience it on your iPhone, thanks to Solon, OH (USA) & Noida (India) based indie game development company, ACY Entertainment.

We spoke to **Yogesh Sharma**, **Cofounder of ACY Entertainment** to get a low down on their upcoming release The Legend Of Abhimanyu

Tell us about The Legend Of Abhimanyu

The Legend of Abhimanyu - LOA is the first ever true 3D mobile action adventure game based on "Indian Mythology", inspired by the epic Mahabharata. This is the story of a sixteen-year-old boy, Abhimanyu, who was born as a mortal, on the request of Gods, to save good from the evil in a war in which there was nobody left except him, to fight all alone with the invincible warriors of that era.

This uniquely designed mobile game with enriched art, exciting gameplay and a technology that make it fun to play; brings the unrivalled console gaming experience on mobile platform. The thrilling cinematic war setup with amazing graphics, real-time combat actions, boss battles, supernatural villains with amazing attacking powers and incorporation of war strategy to break all the levels.

The game story revolves around Abhimanyu, who is forced to enter a war going on between two clans for supremacy: Pandavas, the protagonist, and the Kauravas, the antagonist LoA has used Indian contemporary art and transformed the story into a game for gamers across the globe, clubbed with hack n slash, archery on chariot gameplay, many 3D puzzles, and unique boss fights.

The power of main antagonist Guru Dronacharya, Aswathama, Karna,



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Dussasana, and Duryodhana has been inspired by five main elements: Earth, Water, Lightning, Fire and Air. To support the powerful antagonists, we created 5 different class of warriors namely Archer, Sword Soldier, Spear Soldier, Sword General and Mace Soldier. With the use of these elements and warriors, the composition of the game is being divided into 16 different levels with a variety of different puzzles and mazes to bring forth our rendition of Chakravyuha.

Mahabharat's Chakravyuha is one of the most known and discussed defense formations. How did you go about creating this for a game interface?

This answer is split into 2 parts:

1) Creating in-game "Chakravyuha" with thousands of soldiers

Mahabharata was one of the mightiest wars ever fought and the army used the scale of measurement known as Akshauhini to measure the strength of the battle formation. A single Akshauhini consisted of 21,870 chariots, 21,870 elephants, 65,610 cavalries and 109,350 infantries. It is said that over the course of the war, 18-20 Akshauhini armies were killed. And all this happened in a concentrated battlefield within the Kurukshetra, which is roughly 48 x 128 Km in the area. That makes a very dense war. Below is the picture of Hoysaleswara Temple, Halebidu showing – Chakravyuha:



Image courtesy: ACY Entertainment Pvt. Ltd.

It was quite an impossible task to render even 1 Akshauhini when we talk about mobile devices or for that matter PC and Console. We had to do lots of research and brainstorming to come up with the idea of Mud Soldiers. We also took some inspiration from the great Terracotta Army and finally below is the result of our hard work, the aerial view of our rendition of "Chakravyuha":



Image courtesy: ACY Entertainment Pvt. Ltd.

2) Creating Kurukshetra battlefield which was roughly the size of 48 * 128 KM in the area

Next step was to start creating the Mud Soldier model and place them in a big scene which should depict the scale of Kurukshetra battlefield. We worked on some explorations with different lightings and below are some different explorations of levels:



Image courtesy: ACY Entertainment Pvt. Ltd.

At this stage, we have many different types of Military Formations that includes an approx. 200-250 Mud Soldiers in each Military Formation and all the above is divided into 16 levels. Lastly, since we could only capture 13th Day of Kurukshetra War, we tried our best to create all the different shades of lighting depending upon the daylight sequence. Below are some different in-game captures showcasing different lighting with different dramatic skyboxes:



Image courtesy: ACY Entertainment Pvt. Ltd.

How did you about developing the looks for the characters?

LoA has used Indian contemporary art and transformed the story into a game for gamers across the globe. Initially, we spent around 2 months to finalize the lead character, Abhimanyu, keeping in mind that his body language should depict that he his young, only 16-year-old.

Each and every character of LoA has a story to tell for example when you look at the smallest character Archer, you will notice by looking at his facemask and bow length that he is very agile, clever and ruthless. By looking at Mace Soldiers Armours and behaviour you will notice the terror and finally looking at the biggest warrior Duryodhana who is equipped with 3 massive layers of armour and all the armour layers define his different weapon skills. You can visit us at <u>www.legendofabhimanyu.com</u> for more details of Character and Game Art.



Image courtesy: ACY Entertainment Pvt. Ltd.

How did Autodesk Maya help in the creation of this game?

Game Development is all about customization and Maya is capable enough to support this with a basic knowledge of MEL or Python scripting. Maya is also known to be much more powerful application when we talk about huge list of library of animation tools. Overall, we have created hundreds of animations of LoA in the span of 3-4 months and whenever we wanted to tweak an animation Maya just did its magic. LoA is a mix of Hack n Slash and archery, and weapon inventory in the entirety of the game is huge, so we didn't have much flexibility in reusing animations. But with the help of animation tools, we were able to create our own inventory of animations with not spending huge number of hours in creation.

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