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# A Metamorphosis Approach to Virtual Reality

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**Abstract:** Virtual Reality is the present day growing scenario that takes place now days. Virtual Reality plays a key role in almost every industry like movies, games, education etc. In this scenario we are going to represent a metamorphosis approach that is a changeable approach we know that a 2d modelling is converting into 3d model but in our paper we are metamorphosis a 3d model into 2d model there begins a new scenario that imagination that is visualized in 3d is shown in 2d where virtual is not present but the person can experience the reality.

**Keywords:** Metamorphosis, approach, 2d modelling, 3d modelling, virtual reality, we/our/us represents the three authors

## I. INTRODUCTION

Virtual reality (VR) is a simulated information environment used in a growing number of applications. The aim in VR is to create an experience that mimics or resembles real life situations using a computer. People can try out and practice in a virtual world procedures that are complex, difficult, time consuming, expensive, and even dangerous. To date VR has found applications in the education, entertainment industry, building and engineering design, medical surgery, the tourist industry, advertising, food retail and others. While today's tv and video productions got used to the benefits of virtual studio technology, the interaction between actors and virtual objects inside a virtual world remains challenging. This contribution offers deep insights to actor tracking in virtual studios and their advantages for live productions.

The following figure shows the Virtual studio.



Here when we observe the figure closely we can come to a conclusion that the green space that is there in the picture needs to be imagined and modeled by the designer. Here Designing plays a key role that is done by the latest software AUTO CAD etc. This shows the complete advanced version of the Virtual Reality in the present day scenario. This approach cannot be understood to a layman who does not have any idea regarding the virtual reality.

This paper will be the initiation to a layman to understand the virtual reality in a step by step manner. A building can stand with the support of basement. In a tree roots are more important than height. So in this paper roots are the students and the tree is a VR APPLICATION.

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### II. LITERATURE SURVEY

Let us once go to our olden days where there is no communication medium no mobiles no TV no internet facility. Virtual Reality was born in the olden days its present in our day to day life. We can say Virtual Reality is an ensemble application. In the olden days our grandfathers and grand mothers used to say some stories like RAMAYANA, MAHABHARATA, and TALES regarding kings etc. We used to imagine the characteristics that are said in these tales and get dreams in these aspects at night. This means on those days we are living in an imaginary world that is recreated by us in our dreams. Let us see the quote said by our EX PRESIDENT A.P.J.ABDUL KALAM.

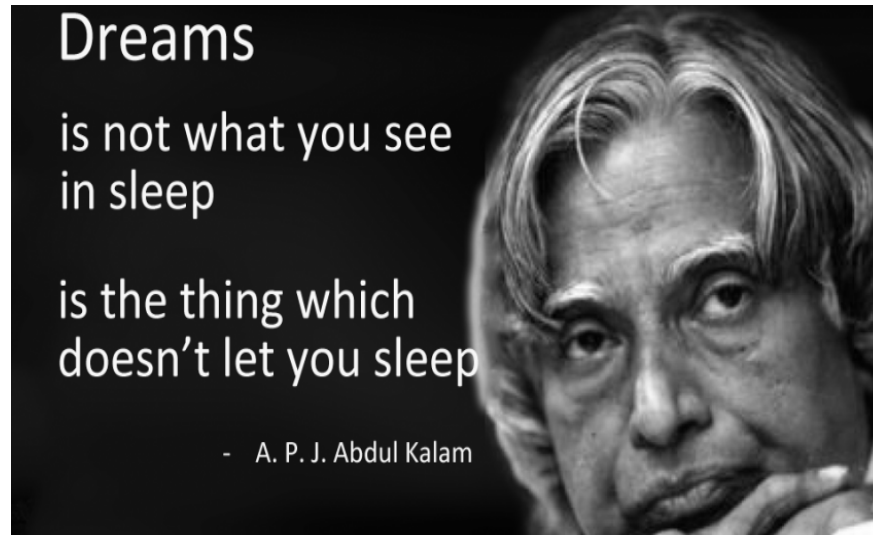


Fig1:Abdul Kalam quote

This quote was said by our EX PRESIDENT a long year ago. But our researchers has started this innovation they used to dream on virtual Reality where dreams came in the form of paintings. The following is the brief history of Virtual Reality.

- 1838 : The stereoscope (Charles Wheatstone)
- 1849 : The lenticular stereoscope (David Brewster)
- 1939 : The View-Master (William Gruber)
- 1929 – Link Trainer The First Flight Simulator
- 1930s – Science fiction story predicted VR
- 1950s – Morton Heilig’s Sensorama
- 1960 – The first VR Head Mounted Display
- 1961 Headsight – First motion tracking HMD
- 1965 – The Ultimate display by Ivan Sutherland
- 1968 – Sword of Damocles
- 1969 – Artificial Reality
- 1987 – Virtual reality the name was born

#### A. Virtual reality in the 21st Century

The first fifteen years of the 21st century has seen major, rapid advancement in the development of virtual reality. Computer technology, especially small and powerful mobile technologies, have exploded while prices are constantly driven down. The rise of smartphones with high-density displays and 3D graphics capabilities has enabled a generation of lightweight and practical virtual reality devices. The video game industry has continued to drive the development of consumer virtual reality unabated. Depth sensing cameras sensor suites, motion controllers and natural human interfaces are already a part of daily human computing tasks. Recently companies like Google have released interim virtual reality products such as the Google Cardboard, a DIY headset that uses a smartphone to drive it. Companies like Samsung have taken this concept further with products such as the Galaxy Gear, which is mass produced and contains “smart” features such as gesture control.

Developer versions of final consumer products have also been available for a few years, so there has been a steady stream of



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software projects creating content for the immanent market entrance of modern virtual reality.

It seems clear that 2016 will be a key year in the virtual reality industry. Multiple consumer devices that seem to finally answer the unfulfilled promises made by virtual reality in the 1990s will come to market at that time. These include the pioneering Oculus Rift, which was purchased by social media giant Facebook in 2014 for the staggering sum of \$2BN. An incredible vote of confidence in where the industry is set to go. When the Oculus Rift releases in 2016 it will be competing with products from Valve corporation and HTC, Microsoft as well as Sony Computer Entertainment. These heavyweights are sure to be followed by many other enterprises, should the market take off as expected.

### III. COMPARING CONSTRUCT 2D AND VIRTUAL REALITY

Construct 2 is a powerful ground breaking HTML5 game creator designed specifically for 2D games. It allows anyone to build games — no coding required!

#### A. Installing Construct 2

The Construct 2 editor is for Windows only, but the games you make can run anywhere, such as Mac, Linux or iPad. Construct 2 can also be installed on limited user accounts. It's also portable, so you can install to a USB memory stick for example, and take it with you!

1) *Getting Started:* Now you're set up, launch Construct 2. Click the *File* button, and select *New*.



Fig2:Construct2d game opening

2) You will see the 'Template or Example' dialog box.

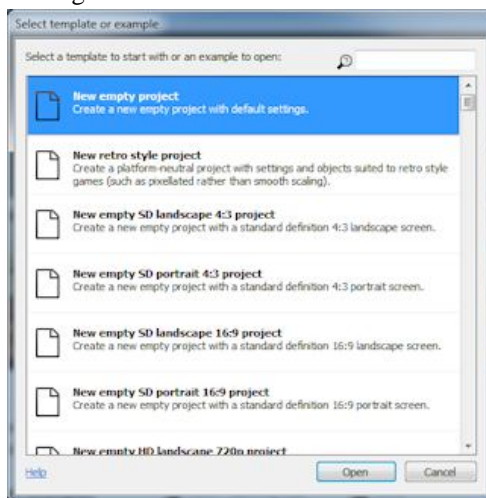


Fig3: Taking a new project in construct2d

This shows a list of examples and templates that you can investigate at your leisure. For now, just click on 'Open' at the bottom of the box to create a blank, empty new project. Construct 2 will keep the entire project in a single .capx file for us. You should now be looking at an empty *layout* - the design view where you create and position objects. Think of a layout like a game level or menu screen. In other tools, this might have been called a *room*, *scene* or *frame*.

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### B. Inserting Objects

- 1) *Tiled Background:* The first thing we want is a repeating background tile. The *Tiled Background* object can do this for us. First, here's your background texture - right click it and save it to your computer somewhere.



Fig4:Tiled Background

Let us see the following educational game or an application that is designed in **RTS-PTG NAGARJUNA SAGAR** by the 8<sup>th</sup> class children.

**PERCENTAGE PROBLEMS-QUANTITATIVE APTITUDE**

A BATSMAN SCORED 110 RUNS WHICH INCLUDED 3 BOUNDARIES AND 8 SIXES. WHAT PERCENT OF HIS TOTAL SCORE DID HE MAKE BY RUNNING THE WICKETS

LET US IMAGINE A PLAYGROUND AND IT CAN BE DISPLAYED AS FOLLOWS TO SOLVE THIS PROBLEM WE MUST NEED A TECHNICALLY WE MUST NEED OUR IMAGINATION TO BE STRONG ENOUGH TO EXPLAIN THE OUTCOMES LET US IMAGINE A PLAYGROUND AND A PERSON PLAYING THE MATCH LET US SUPPOSE HE IS VIRAT KOHLI

$3 \times 4 + 8 \times 6 = 12 + 48 = 60$  total = 110. so let us assume this calculation as  $110 - 60 = 50$ . We need percentage. It is obtained as  $50/110 \times 100$

now guess the answer from the following options

☐ 45%    ☒ 45 5/11%    ☐ 54 6/11%    ☐ 55%

$50/110 \times 100 = 45 \frac{5}{11}$  correct answer

Fig5:Arithmetic game imagination

The following are the members of the team who made this game in PTG\_NAGARJUNA SAGAR SCHOOL.



Fig6: NAGARJUNA SAGAR TEAM

The following are the images that children are playing this game

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This means the VR APPLICATIONS Which we are going to visualize are achieved by using a software called construct 2d that is here we do not have experience to visualize those applications .This is a new metamorphosis approach in the development of virtual reality.

### IV. CONCLUSIONS

We would like to conclude that an imagination can become true by using any path only with the particular VR or Serious games it may or may not be true always. So the way we see the problem must be innovative to develop new applications in the present day scenario. This approach of tracking a system along with the approach of innovation in mind will bring a rapid change in the vision of a human idea in the elevation of a student's idea or reader's idea will bring a vast change in the thinking process especially in the mind of readers.

We would like to also mention a small point here thinking is a reverse process thinking in unidirection as well as bidirection will definitely fetch the ideologies of the readers especially in TECHNOLOGY.

### V. ACKNOWLEDGMENT

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