



**Don Bosco Institute of Technology, Mumbai – 400070**  
**Department of Computer Engineering**



**Report on: Unreal Engine Workshop**

**Title: Unreal Engine Workshop**

**Date:** 16<sup>th</sup> and 17<sup>th</sup> October, 2021

**Time:** 2:00-5:00pm

**Venue:** Google meet

**Excerpt:** <https://meet.google.com/pkm-nhty-urt>

**Participants on Google meet:** 13

**Resource Person:** Amish Thekke Parambil

**Organizing Department/Committee/Authority:** ACM Student Chapter

**Faculty Coordinator:** Ms. Sana Shaikh

**Objective:**

- To help learners acquire the skill required in 3D game development.
- To educate learners on the rudimentary skills needed to get started with Unreal Engine.
- To improve learners understanding of 3D graphics and design.
- To enhance knowledge in terms of the usage of blueprints in Unreal Engine.

**Outcomes:**

- Unreal Engine equips users with powerful game development tools to create high-end video games.
- To Understand how to build realistic environments for games.
- To help users in terms of visualizations and architectural walk-throughs.

**Report:**

ACM's Unreal Engine Workshop was held over a duration of 2 consecutive days dating 16<sup>th</sup> to 17<sup>th</sup> October, 2021 from 2:00 to 5:00pm. The focal point of the workshop was to make the participants familiar with Unreal Engines game

development tools and functionalities. The workshop also aimed to instruct the participants on the tricks and tips which would make their further on game development process much more simplistic.

The first day of the workshop began with Mr. Amish Parambil demonstrating the flow of the overall workshop through crisp presentation. He then shared a couple of benefits pertaining to the Unreal Engine, it being free and the most powerful 3d game development platform around. Also, it is mostly used for PC and PS5 games and it provides a high level of optimization compared to other engines. Further on, he displayed a demo project which he had built during Teknack 2021. He also went through a handful of blueprints and functionalities which he made use of in his game. He later on said he would be sharing the files of the game he implemented which could be useful if any participant wanted to work on similar scene or a gameplay which requires comparable mechanism in their game. He then explained the creation of a simple project, by starting unreal engine and going through the start-up page and its features and selecting the third person template to begin with the creation of a demo game for the workshop. Mr. Amish then shared that Unreal allows users to select whether they want to code in C++ or if they want to make use of blueprints, so in this workshop he would make use of the latter. He then explained about shadow maps, and how to resolve it using lighting. He also briefed the participants on world outliner which is used to get a list of all the assets present in the geometry, how materials can be customized using blueprints and what is the objective of shaders. At the end of the first session, he informed the participants that he would be sharing a template folder with them so as to demonstrate how to build a primitive game using blueprints.

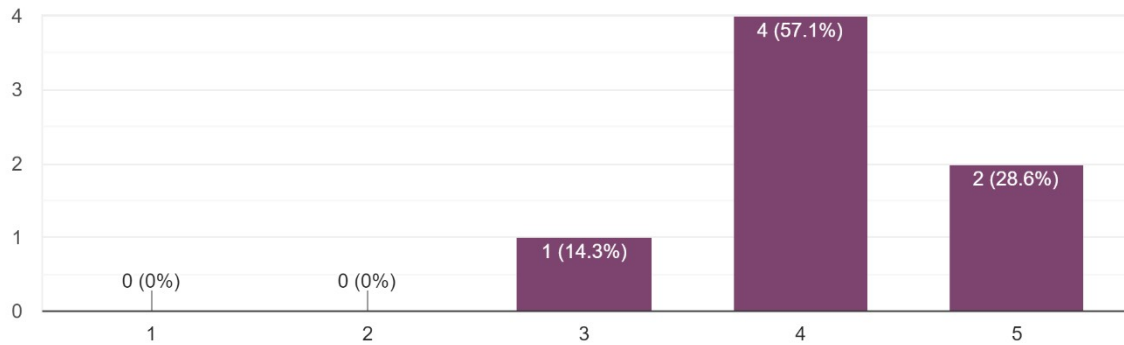
The second day of the workshop began with Mr. Amish opening a simple open world game template provided by epic games and demonstrated how to make use of the blueprint layout to create simple character movements. He later on went about explaining the how is the gameplay scripting done and how to create elementary animation and UI components for a game. He explained how the camera angle is placed in the scene. He then demonstrated how on clicking a few hotkeys one can save a lot of unnecessary efforts. For example, by pressing Escape the player will come back to its original position, moving the objects (press w), resizing the objects (press r), rotating the object (press E). Further on, he explained how the objects are rendered and how with the help of lit and unlit one can see the objects in their original form also, how brush wire frame shows what are the elements made of. He then proceeded to demonstrate functioning of various physics components and camera speed. He also illustrated how to create a terrain by creating small ridges, how to flatten those ridges, and also how to create craters. Lastly, he shared important tips and tricks which would assist the participant greatly during their game development process.

The workshop concluded with Mr. Amish answering queries in regards to the gameplay and blueprint scripting. Also, the participants were asked to fill the feedback form pertaining to the workshop.

## **FEEDBACK ANALYSIS:**

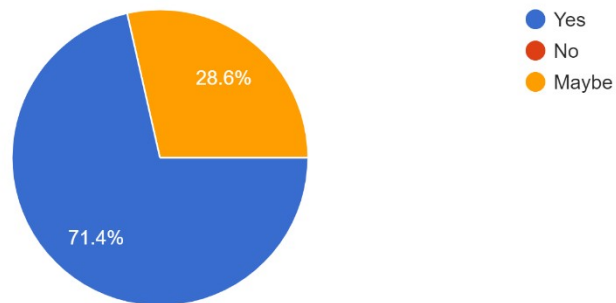
How satisfied were you with the event?

7 responses



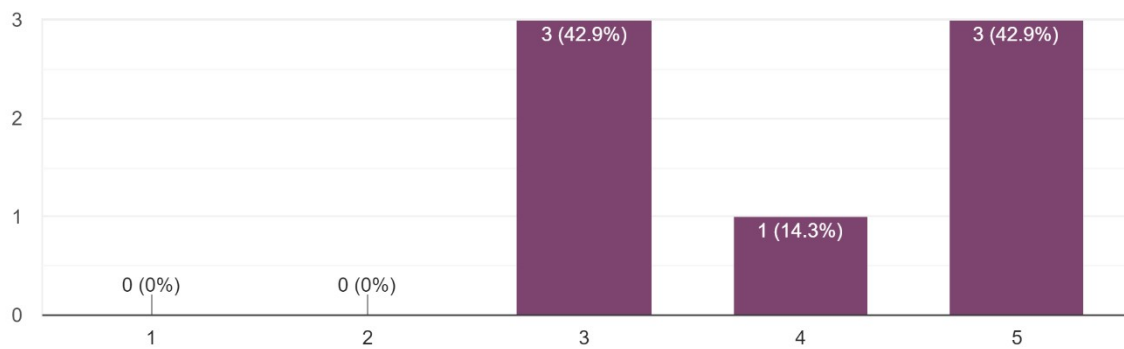
Was the content of the event adequate enough to get you started with the game development process?

7 responses



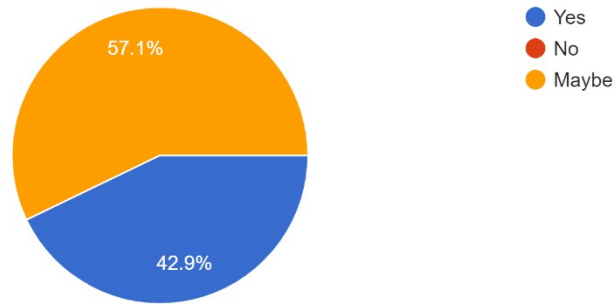
How well did you understand the basics of Unreal Engine?

7 responses



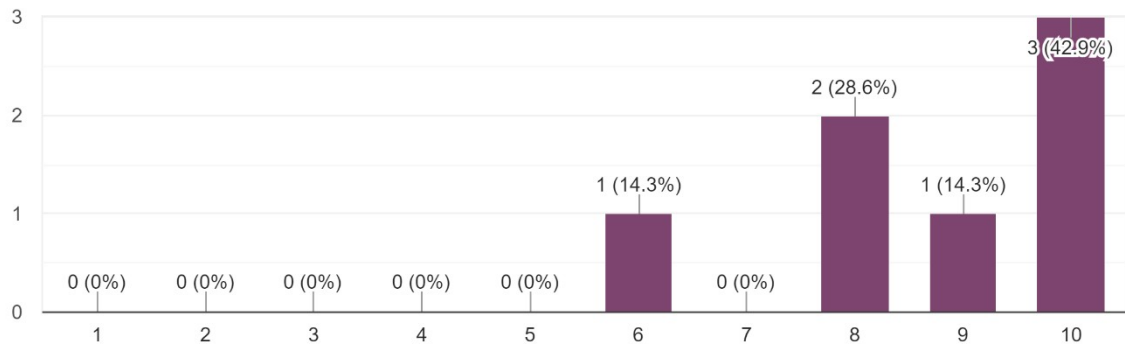
Will you be able to make a game by yourself?

7 responses



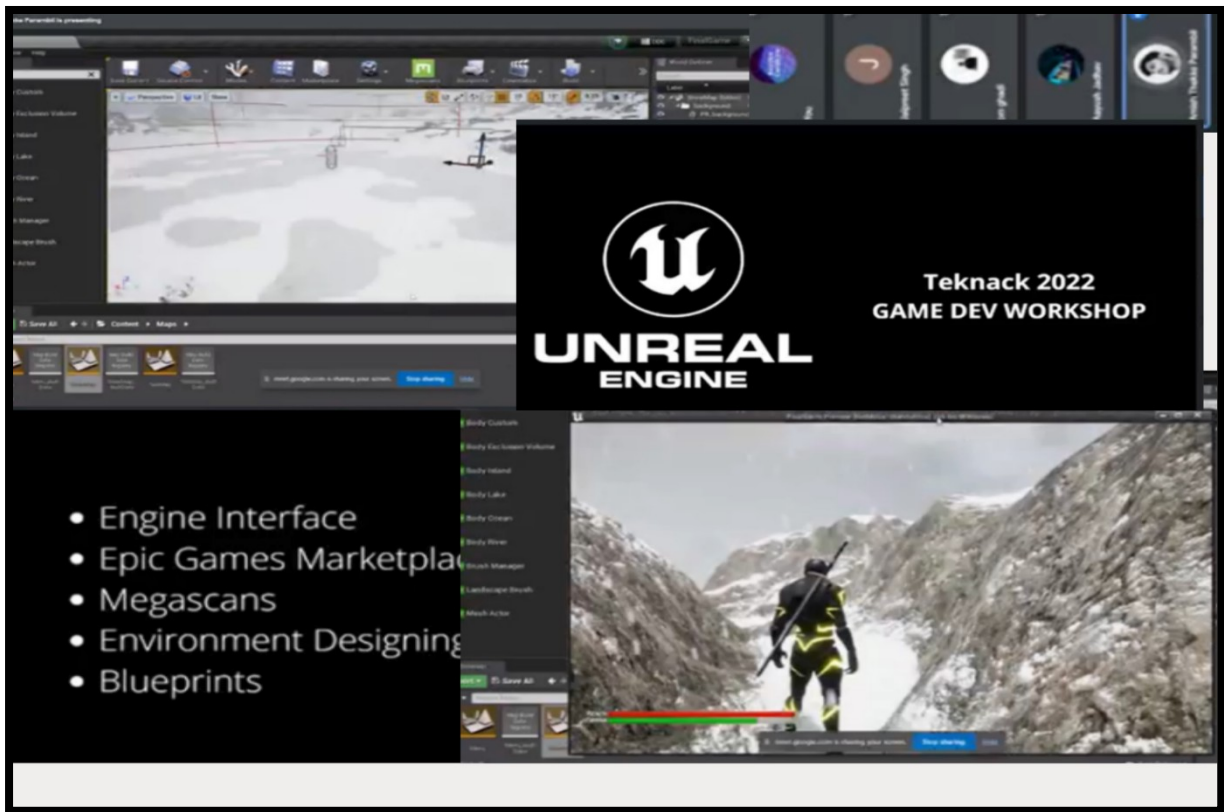
Rate your speaker Amish

7 responses

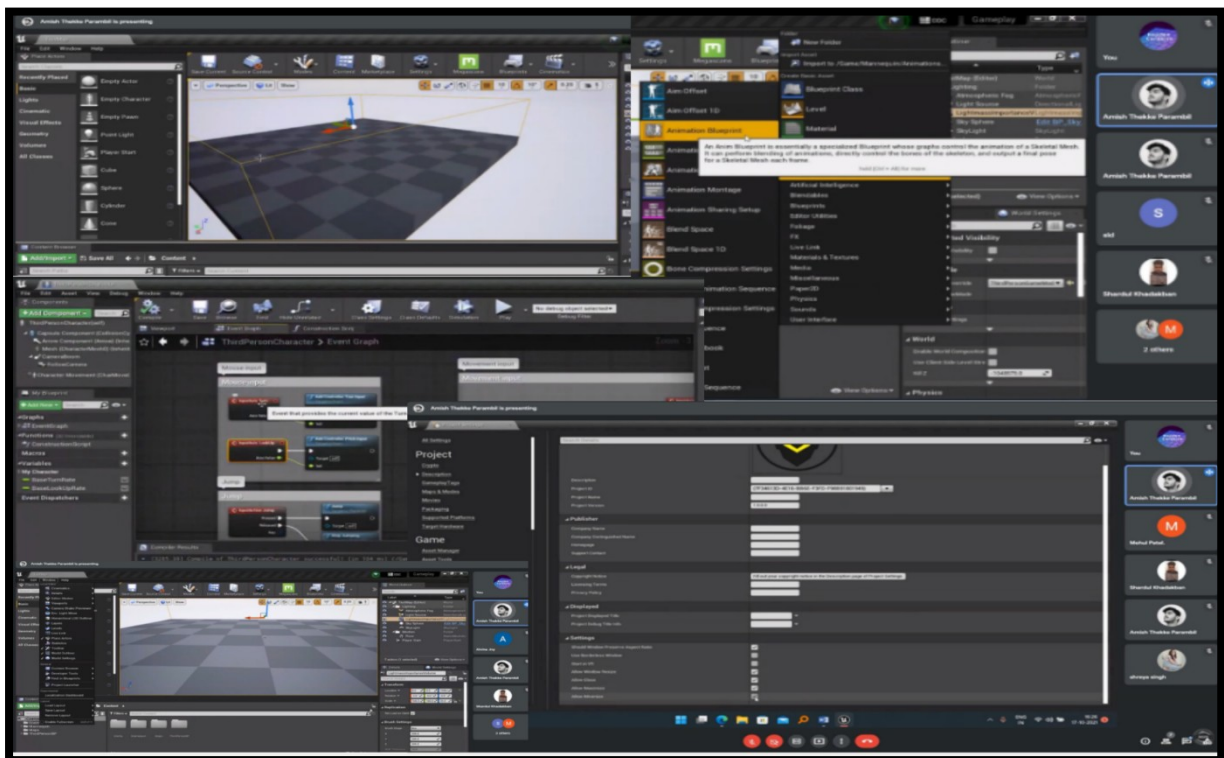


## SNAPSHOT OF THE EVENT:

### Day1:



### Day2:



POSTER

**TEKNAK 2022**

**UNREAL WORKSHOP**

**GAME DEVELOPMENT WORKSHOP**

**16 & 17 OCT 2021**

**2 PM TO 5 PM**

**SOME FEATURES OF UNREAL ENGINE**

- SIMULATION AND EFFECTS ●
- WORLD BUILDING ●
- ANIMATION ●

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