



**SILVER OAK
UNIVERSITY**
EDUCATION TO INNOVATION



IEEE

**Silver Oak University
IEEE Student Branch**

A REPORT ON
**Unity Game Development and its
Application**

Date: 11th-16th April, 2022
Platform: CV Raman Hall

GUJCOST, DST, Govt. of Gujarat
Sponsored
SHORT TERM TRAINING PROGRAMME
on

Unity Game Development & its Application

**11th to 13th,
15th & 16th April**

Organized by:
Department of Computer Engineering,
Silver Oak College of Engg. & Technology,
Silver Oak University



Introduction

Silver Oak University IEEE Student Branch gives students a community of peers, and a connection to faculty and industry professionals who drive innovation in countless technical fields. Department of computer engineering, SOCET, Silver Oak University along with Silver Oak University IEEE Student Branch in association with GUJCOST, DST & govt. of Gujarat had organized a Short-Term Training Program (STTP) on “Unity Game Development & its application.” Unity is a platform which is mainly used to create interactive gaming applications.

About the Speaker

To conduct the Short-Term Training Program, we had a presence of an eminent speaker Mr. Yohaán Tavadia, Co-Founder & CTO at EV India, Founder of Ahura Technosoft LLP, Co-Founder of House Craft, XR Developer and an IT Consultant. The speaker has keen interests in Electric Vehicle, Game Development and Augmented Reality (AR).

About the Session

Date: 11th-13th April and 15th-16th April, 2022

Time: 10:00 AM to 2:00 PM IST

Venue: CV Raman Hall

Participants: 75

DAY 1:

The event started with Dr. Satvik Khara Sir, founding member of Silver Oak University IEEE Student Branch greeting and admiring our prominent speaker Mr. Yohaán Tavadia with a bouquet as a welcoming address. An announcement was done about extension of the event from 3 days to 5 days. Mr. Yohaán Tavadia sir started the session by a small question “Why do you chose gaming?”. Later on, he opened up himself about why he chose gaming, the key words of the speaker goes “if you love games, learn how to format a PC” and with that he showed the participants a well formatted PPT about what is a game, why are they good, evolution of gaming, how a raw sketch is created into module & then how module phrases are set & animations are created. The detailed explanation was given about developing a game, MDA (Mechanics-Dynamics-Aesthetics) framework for games and all about game engine & unity hub was briefed.

The session was divided into 2 parts theory & practical. The speaker then started the practical session using Unity Hub for the practical. The importance of programming for animation was explained through an example and at the end the students' queries were solved which were being faced while creating a script. Live and well-formed answers and explanations were given by Mr. Yohaán Tavadia sir.

DAY 2:

The following day, the session was conducted in Gujarati, as suggested by the participants. Mr. Yohaán Tavadia sir, our expert speaker began the session with a short doubt solving period from the previous session and began interacting with the students and asking their ideas on several types of games and also asked the students if they tried something new apart from previous day's task. As an answer of doubts from previous session and to apply new learning a hands-on practical was seen to be conducted. A short explanation about scene management and collision detection and also how logically we can develop a game was seen. While interacting with the students, some collision games of shapes and blocks were created using script. The discussion of various built-in libraries and documentation of Unity, as well as how the game was created using built-in libraries was done. Also, the introduction about the use of UI was given. At the end students were assisted with some software-related issues and other questions with an instruction to complete the daily task.

DAY 3:

Having a great learning experience from the past days the following day started with our eminent speaker giving a greatly beneficial information about the instrumental animation in the game development. The acknowledgement about some tools from the UNITY for animations such as particle system, controlling particle with scripting, basic 3d animations, animators, and control animations using script was given. As per the suggestions from students two custom animations were seen to be created with a wonderful explanation. At the end he concluded the class by instructing a task of creating an animated scene using tools and the students were guided at certain crucial points

DAY 4:

As instructed in the previous session the given tasks were inspected to check the team coordination. As a result of hard work many students came up with creative game features and creative names for their particular games. A well explained practical about different types of lighting in games, about light shades and shadows were shown. A short description about explosion in games and how to make objects explode inside the game was given.

A short checking to every group's project was done and some valuable feedback was given as per the doubts. Some instructions and main points about game development was briefed to the students to improve their project and to add more features to make the game more interactive.

DAY 5:

The last day of the event commenced with resolving the doubts which were faced by certain students in some parts while developing the game. The session was then persuaded with audio source implementation and suggested use of [OPENGAMEART.ORG](https://opengameart.org) Website and motivated students to make team and start a little project on Game designing. Afterwards he taught how to export game as windows or Android installable files, which can run after installing in device and shared an apk file with attendees to install and run in their phones. The fifth day of this program came to an end with lot of motivation from our speaker and having a glimpse of some of his past experience and giving interested students an opportunity to learn from his work.

Admiring the speaker is key moment of an event which the university respects. Giving this principle its utmost meaning, the eminent speaker Mr. Yohaán Tavadia was admired with a memento by Dr. Satvik Khara sir.

Conclusion

This program covered an overall process of Game Development using Unity. Finally, the 5 days hands-on interactive and knowledgeable Workshop ended creating a spark in the students for game development.

A beneficial statement was made by Mr. Yohaán Tavadia sir in which he states about gathering a team of volunteers from university for his ongoing project. Expressing gratitude towards the management of Silver Oak University and Dr. Saurin Shah, Provost, Silver Oak University. Dr. Satvik Khara, and Founding Member Silver Oak University IEEE SB. Prof. Mayuresh Kulkarni, Branch Counsellor of Silver Oak University IEEE SB. Also, the enthusiastic participants and the whole team of Silver Oak University IEEE SB, Silver Oak University IEEE WIE AG, Silver Oak University IEEE SPS SBC worked hard to make this event successful. The workshop was full of wonderful ideas and was great insightful information by the students to uplift their skills. We sincerely look forward to organizing such a more informative and brain-teasing workshop.

Some glimpse of the event



