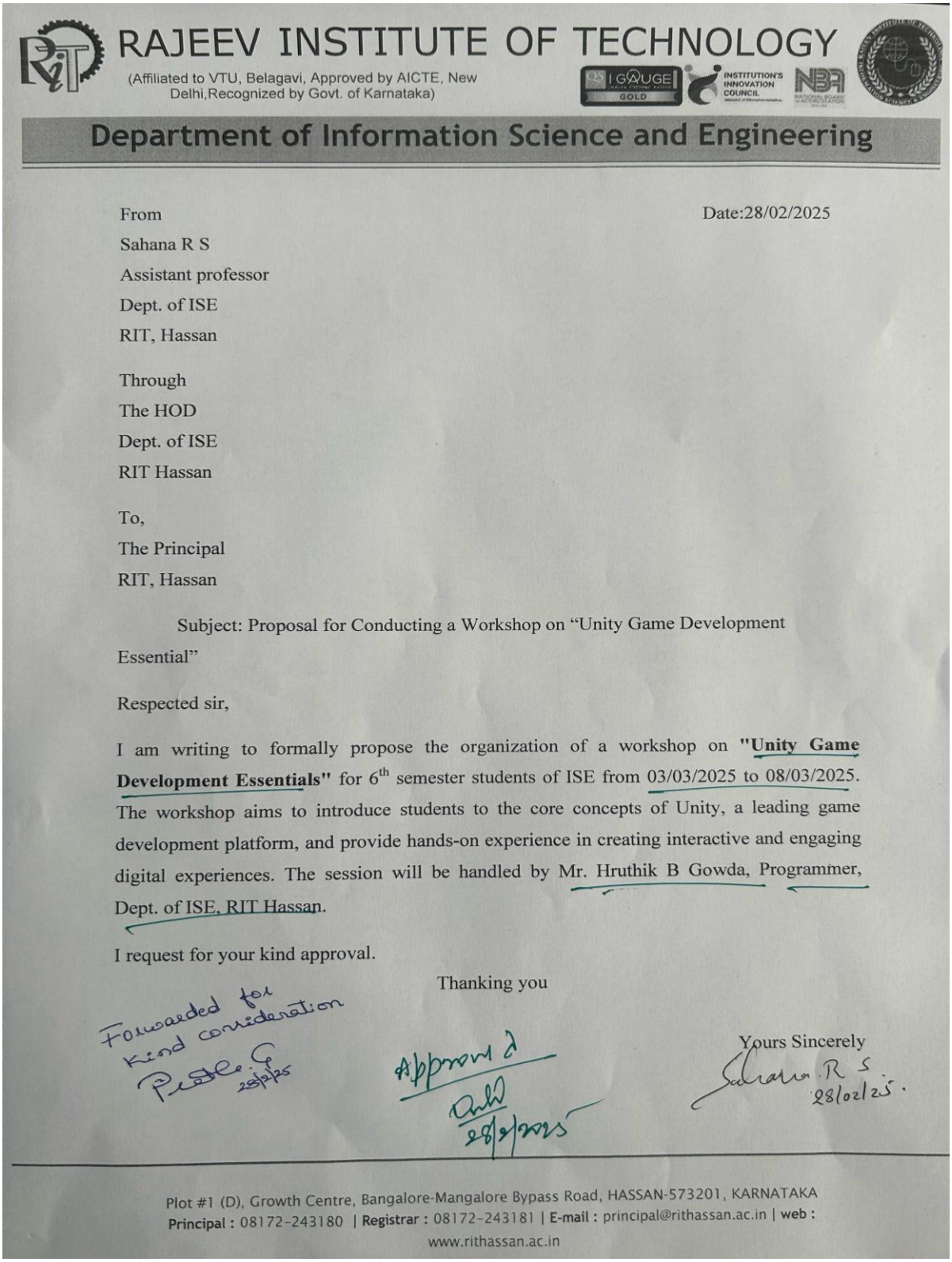


RAJEEV INSTITUTE OF TECHNOLOGY
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi,Recognized by Govt. of Karnataka)

Department of Information Science and Engineering

From
Sahana R S
Assistant professor
Dept. of ISE
RIT, Hassan

Date:28/02/2025

Through
The HOD
Dept. of ISE
RIT Hassan

To,
The Principal
RIT, Hassan

Subject: Proposal for Conducting a Workshop on "Unity Game Development Essential"

Respected sir,

I am writing to formally propose the organization of a workshop on **"Unity Game Development Essentials"** for 6th semester students of ISE from 03/03/2025 to 08/03/2025. The workshop aims to introduce students to the core concepts of Unity, a leading game development platform, and provide hands-on experience in creating interactive and engaging digital experiences. The session will be handled by Mr. Hruthik B Gowda, Programmer, Dept. of ISE, RIT Hassan.

I request for your kind approval.

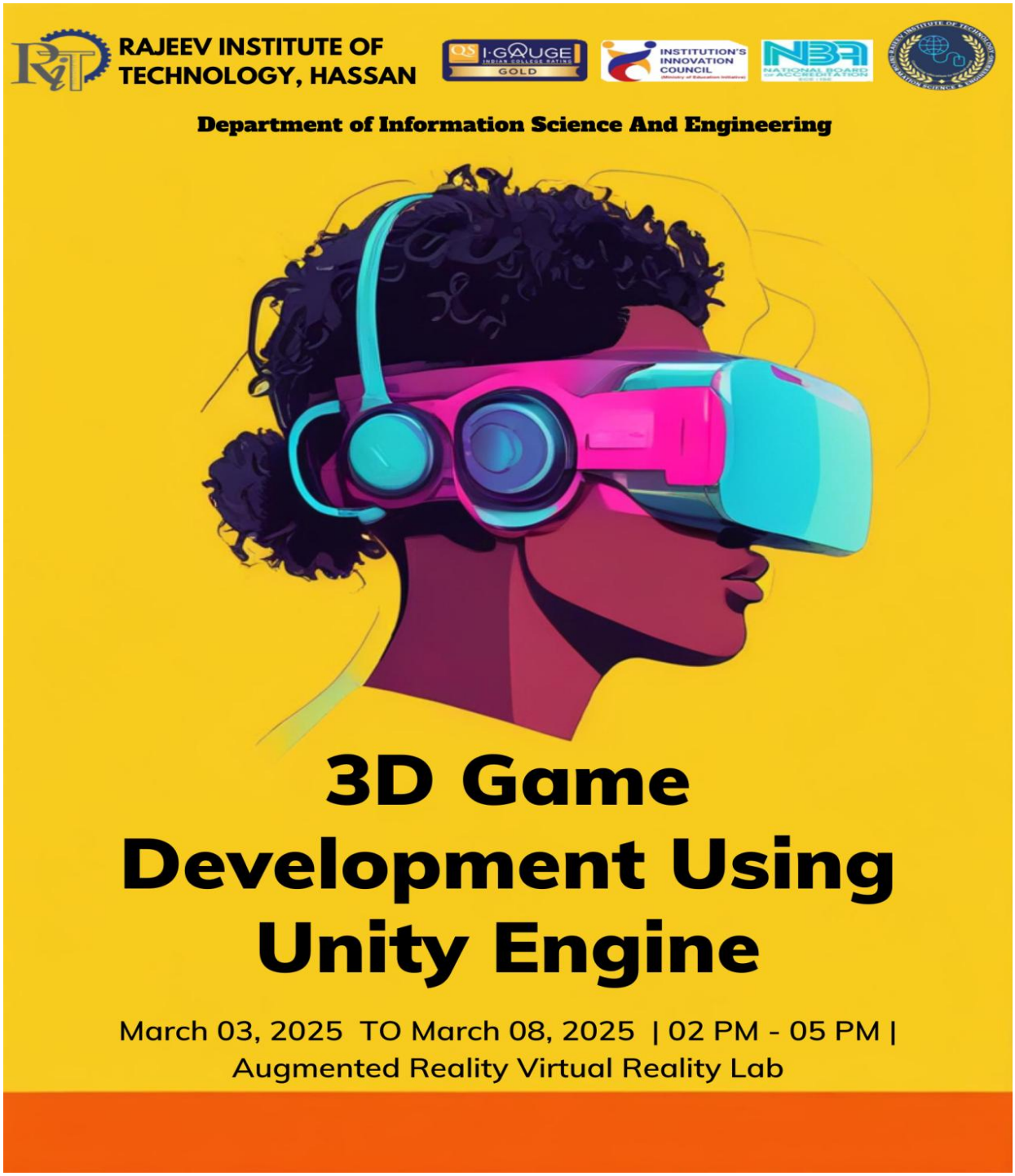
Thanking you

Yours Sincerely
Sahana R S
28/02/25.

Forwarded for kind consideration
28/2/25

Approved
28/2/2025

Plot #1 (D), Growth Centre, Bangalore-Mangalore Bypass Road, HASSAN-573201, KARNATAKA
Principal : 08172-243180 | Registrar : 08172-243181 | E-mail : principal@rithassan.ac.in | web : www.rithassan.ac.in


RAJEEV INSTITUTE OF TECHNOLOGY, HASSAN
Department of Information Science And Engineering
3D Game Development Using Unity Engine
March 03, 2025 TO March 08, 2025 | 02 PM - 05 PM |
Augmented Reality Virtual Reality Lab

Workshop

Hands-on Report

"3D Game Development Using Unity Engine"

From

03- March-2025 to 08- March -2025

Organized by

Department of Information Science and Engineering

Rajeev Institute of Technology

Hassan

In association with

2025-2026

Introduction

The "3D Game Development using Unity Engine" workshop was held from 3rd March to 8th March to introduce participants to game development using Unity. The objective was to provide hands-on experience in scripting, environment design, physics, AI, and game mechanics. The workshop covered essential topics like player movement, object interactions, and scene creation. Participants gained practical skills by developing a small 3D game. The scope included understanding Unity's interface, scripting in C#, and deploying a game. In conclusion, the workshop was highly interactive and helped participants build a strong foundation in 3D game development.

Objective

- To provide a fundamental understanding of game development using Unity.
- To introduce participants to C# scripting for game mechanics.
- To enable hands-on experience in designing 3D environments and physics-based interactions.
- To familiarize attendees with AI and game mechanics for interactive gameplay.
- To guide participants through the process of building and deploying a 3D game.

Scope

This workshop covered essential aspects of 3D game development, including:

- Introduction to Unity and its interface.
- Scripting in C# for player movement and object interactions.
- Designing realistic 3D environments and implementing game physics.
- Implementing AI-based enemy behavior.
- Debugging, optimizing, and deploying a fully functional 3D game.

Workshop Schedule

The workshop was structured into six sessions, each covering essential aspects of 3D game development.

Day 1: Introduction to Unity and Game Development

- Overview of the Unity Engine and its capabilities.
- Installation and setup of Unity Hub and Unity Editor.
- Introduction to the Unity interface: Hierarchy, Scene, Game, Inspector, and Project panels.
- Basics of Game Objects, Components, and Transformations.
- Creating and manipulating simple objects in a scene.

Day 2: Scripting and Player Movement

- Introduction to C# scripting in Unity.
- Understanding MonoBehaviour and scripting essentials.
- Implementing player movement using Rigidbody and Character Controller.
- Handling input controls for player navigation.
- Debugging and testing scripts.

Day 3: Environment and Scene Design

- Designing a 3D environment using Unity's Terrain Tool.
- Importing and using assets from Unity Asset Store.
- Lighting and shadows for realistic rendering.
- Adding skyboxes and environmental effects.
- Basic level design principles.

Day 4: Physics and Interactions

- Understanding Unity's physics system: Colliders, Rigidbodies, and Forces.
- Implementing object interactions like picking, throwing, and triggering events.
- Introduction to Particle Systems for visual effects.
- Creating simple animations using Unity Animator.
- Testing physics interactions in a scene.

Day 5: Enemy AI and Game Mechanics

- Basics of Artificial Intelligence in Unity.
- Implementing NavMesh for enemy pathfinding.
- Adding enemy behavior and basic attack mechanics.
- Creating health and damage systems.
- Managing game states and UI elements.

Day 6: Final Project and Deployment

- Building a small 3D game using learned concepts.
- Enhancing gameplay with sound effects and UI.
- Debugging and performance optimization.
- Exporting and deploying the game.
- Feedback session and Q&A with participants.

Snapshots of Workshop

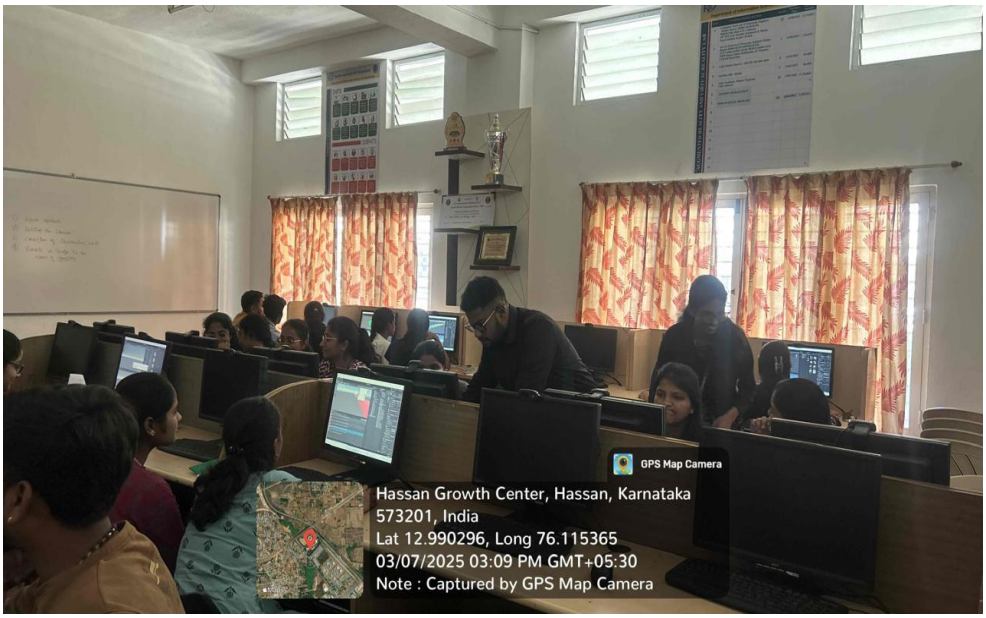


Fig 0.1 Snapshots of Sections

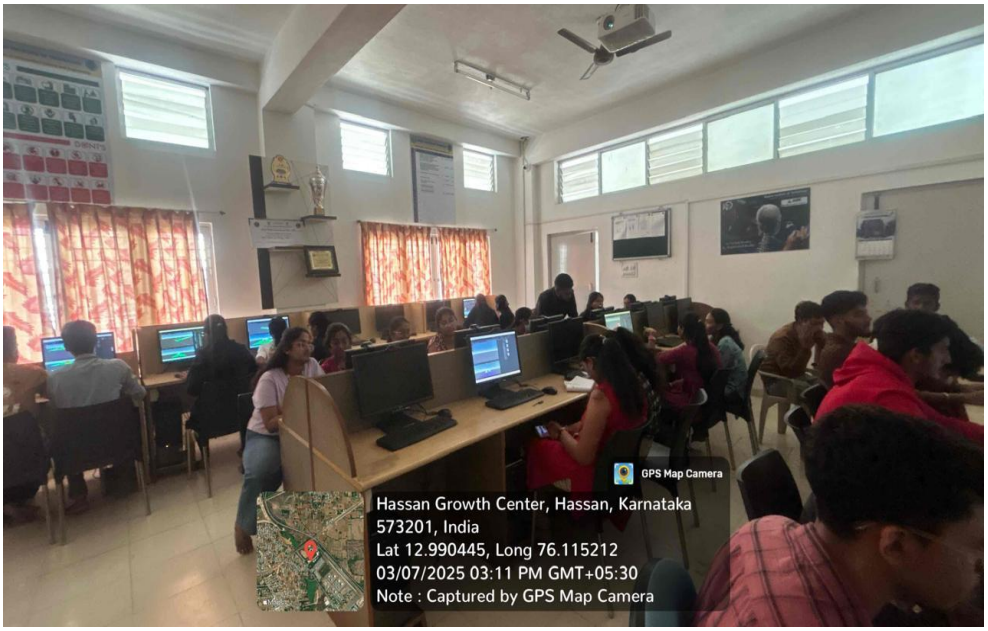


Fig 0.2 Snapshots of Sections



Fig 0.3 Snapshots of Sections

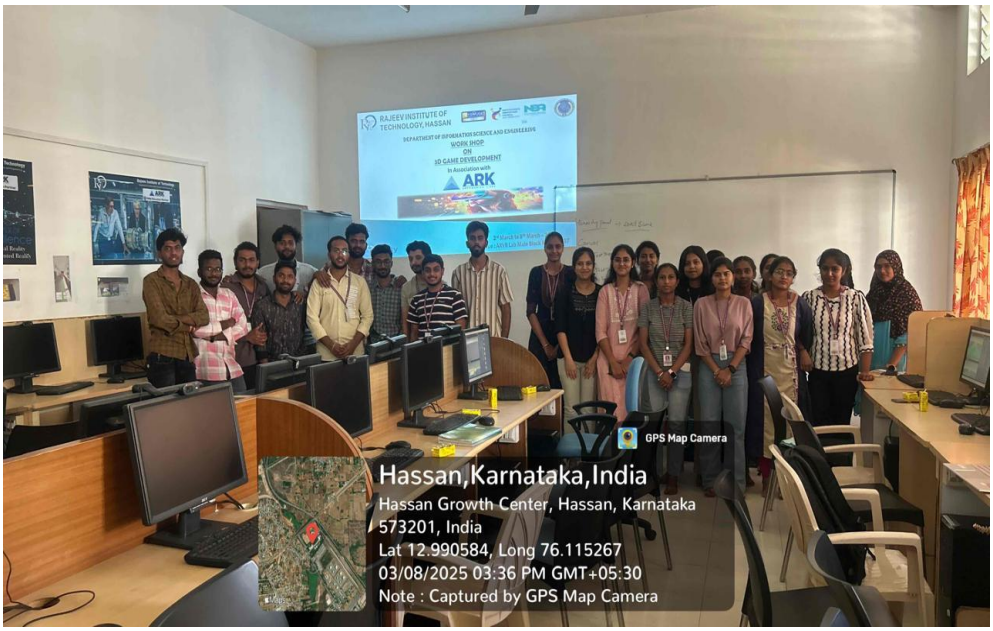


Fig 0.4 Group Photo

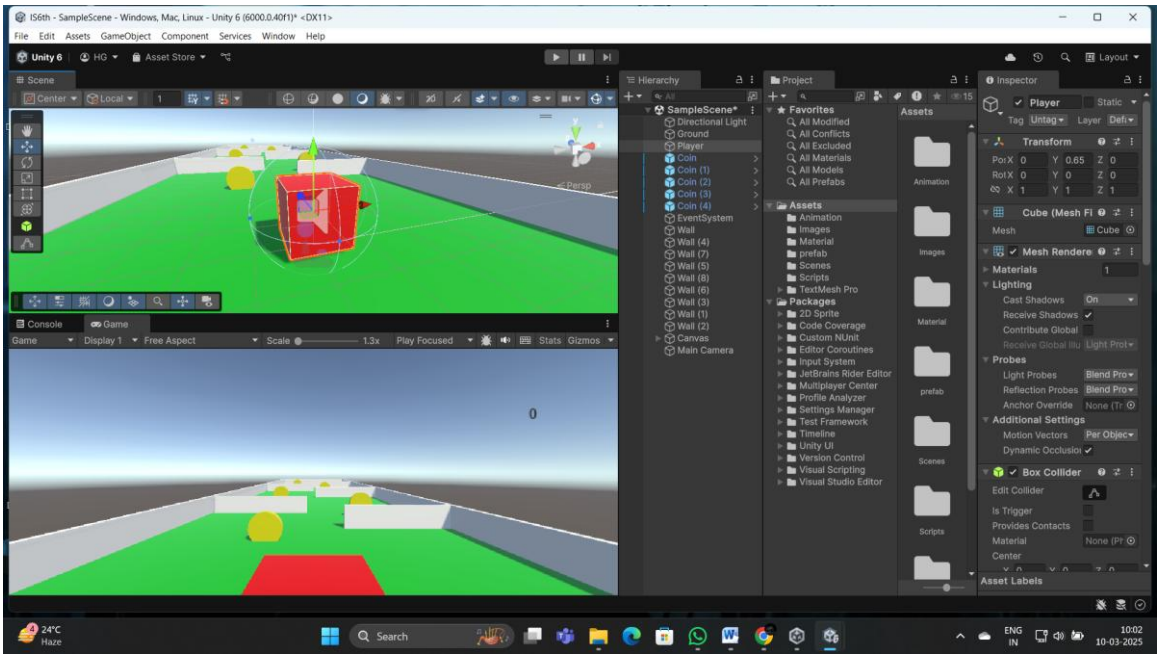


Fig 0.5 Snapshots of Game Developing.

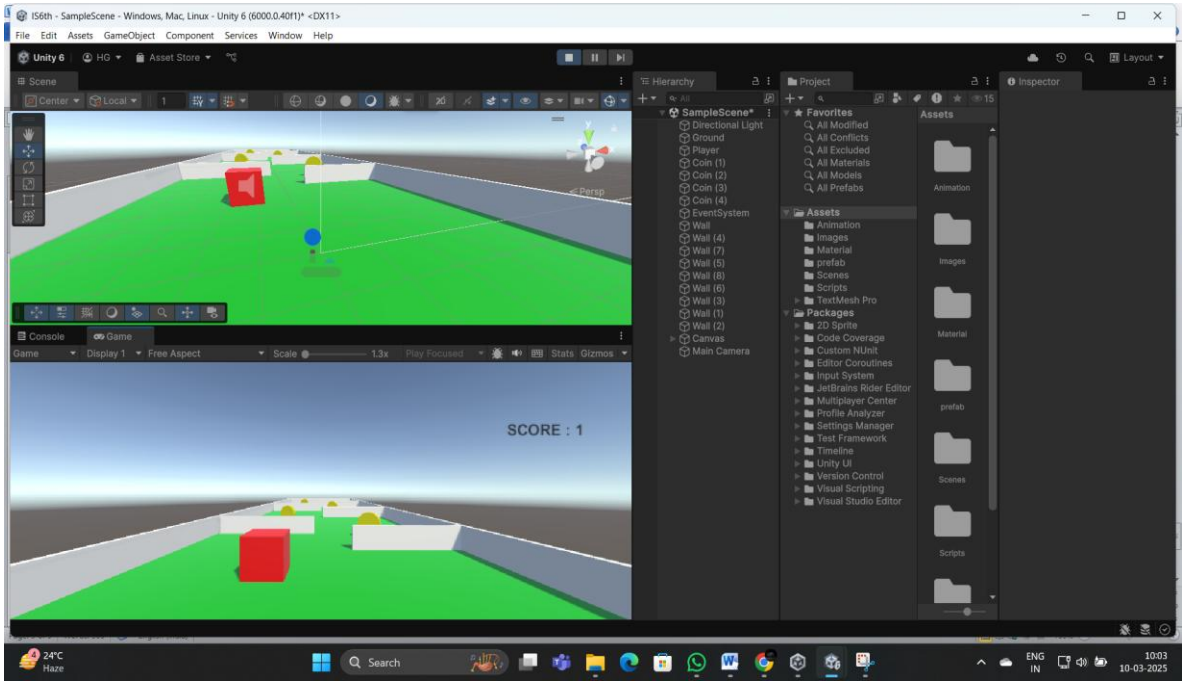
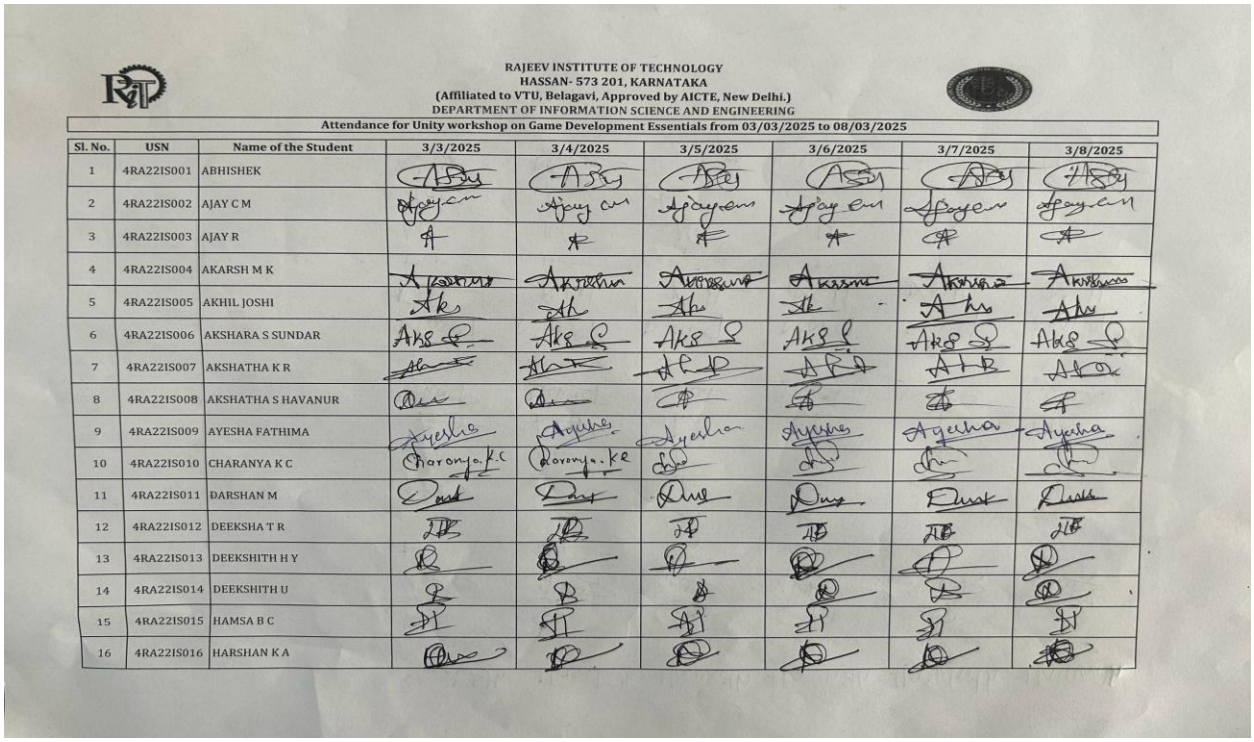


Fig 0.6 Snapshots of Game Developing-2 .

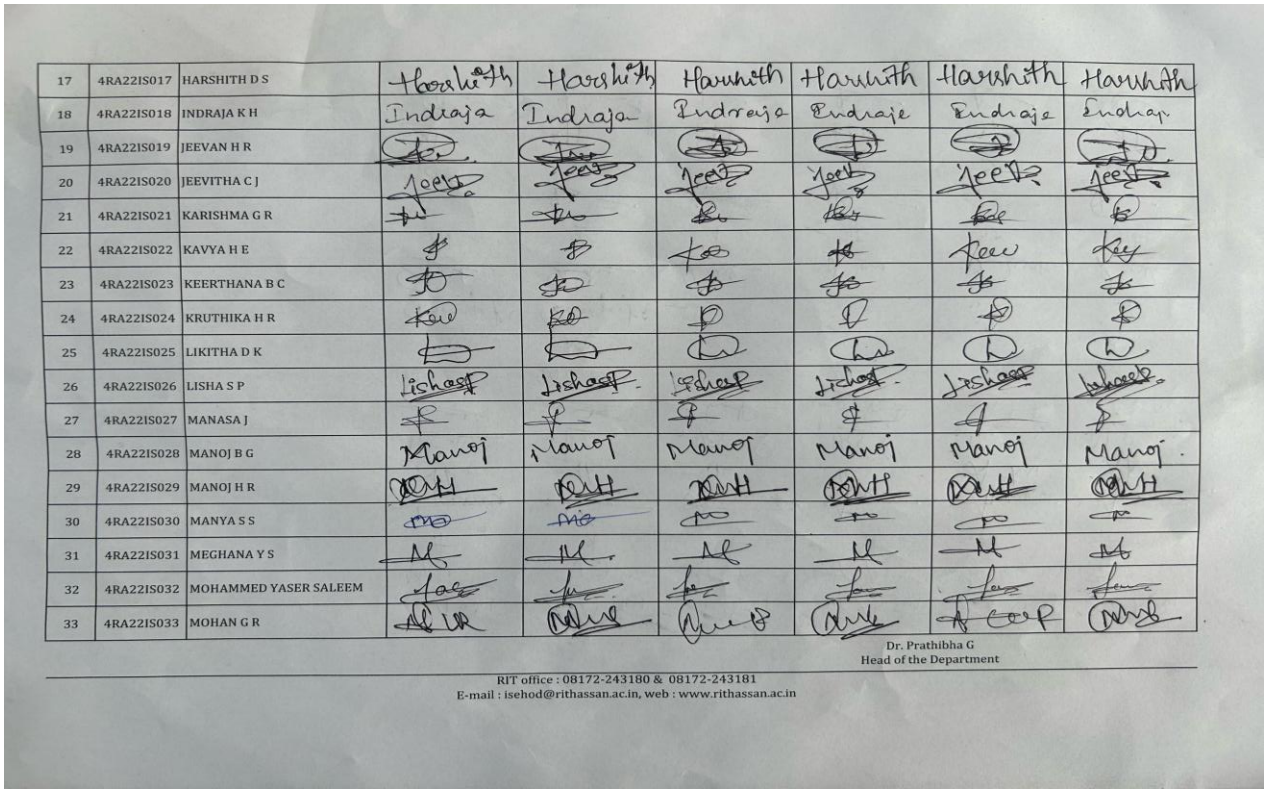
Student Attendance



RAJEEV INSTITUTE OF TECHNOLOGY
HASSAN- 573 201, KARNATAKA
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi.)
DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Attendance for Unity workshop on Game Development Essentials from 03/03/2025 to 08/03/2025

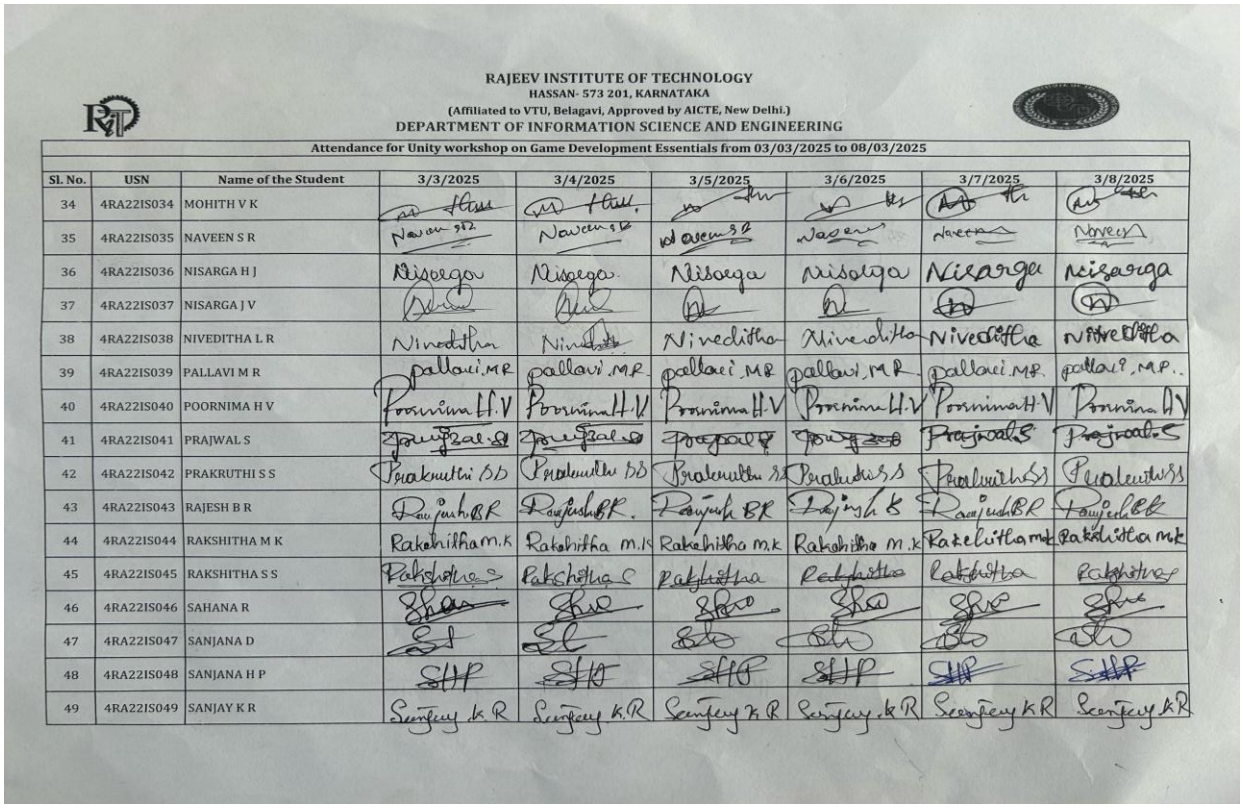
Sl. No.	USN	Name of the Student	3/3/2025	3/4/2025	3/5/2025	3/6/2025	3/7/2025	3/8/2025
1	4RA22IS001	ABHISHEK						
2	4RA22IS002	AJAY C M						
3	4RA22IS003	AJAY R						
4	4RA22IS004	AKARSH M K						
5	4RA22IS005	AKHIL JOSHI						
6	4RA22IS006	AKSHARA S SUNDAR						
7	4RA22IS007	AKSHATHA K R						
8	4RA22IS008	AKSHATHA S HAVANUR						
9	4RA22IS009	AYESHA FATHIMA						
10	4RA22IS010	CHARANYA K C						
11	4RA22IS011	DARSHAN M						
12	4RA22IS012	DEEKSHA T R						
13	4RA22IS013	DEEKSHITH H Y						
14	4RA22IS014	DEEKSHITH U						
15	4RA22IS015	HAMSA B C						
16	4RA22IS016	HARSHAN K A						



17	4RA22IS017	HARSHITH D S						
18	4RA22IS018	INDRAJA K H						
19	4RA22IS019	JEEVAN H R						
20	4RA22IS020	JEEVITHA C J						
21	4RA22IS021	KARISHMA G R						
22	4RA22IS022	KAVYA H E						
23	4RA22IS023	KEERTHANA B C						
24	4RA22IS024	KRUTHIKA H R						
25	4RA22IS025	LIKITHA D K						
26	4RA22IS026	LISHA S P						
27	4RA22IS027	MANASA J						
28	4RA22IS028	MANOJ B G						
29	4RA22IS029	MANOJ H R						
30	4RA22IS030	MANYA S S						
31	4RA22IS031	MEGHANA Y S						
32	4RA22IS032	MOHAMMED YASER SALEEM						
33	4RA22IS033	MOHAN G R						

Dr. Prathibha G
Head of the Department

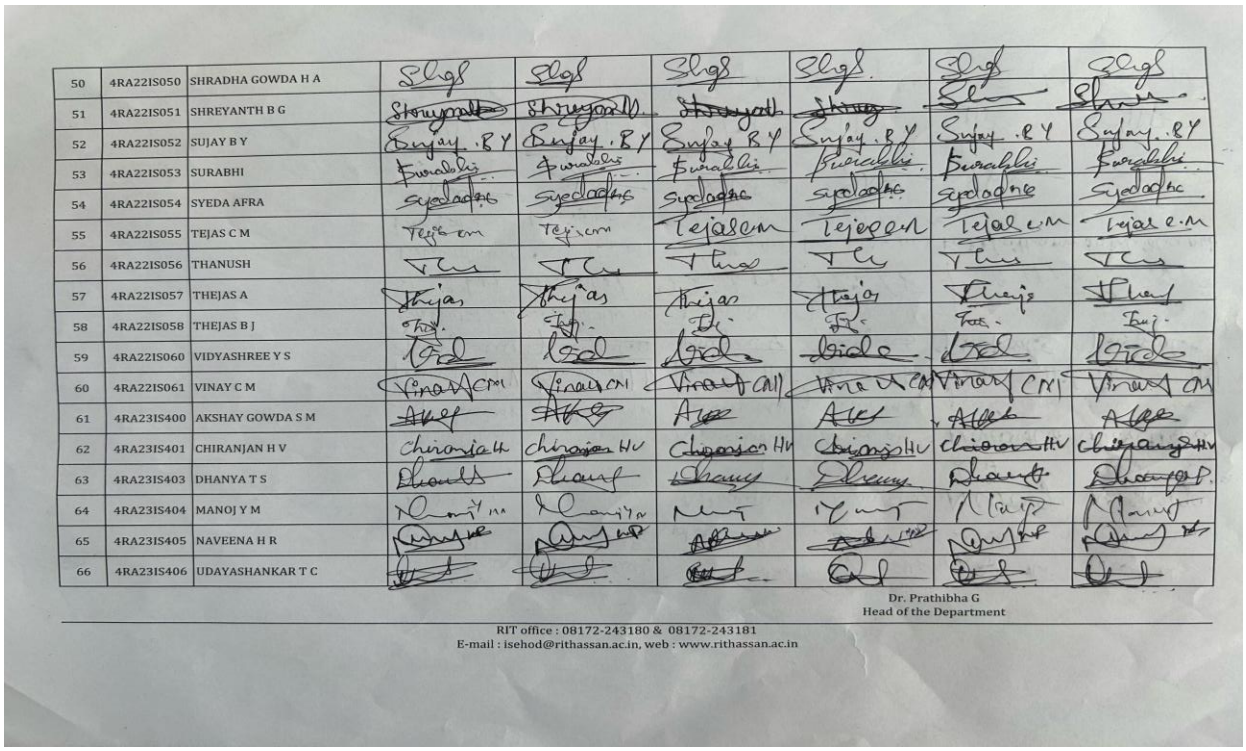
RIT office : 08172-243180 & 08172-243181
E-mail : isehod@rithassan.ac.in, web : www.rithassan.ac.in



RAJEEV INSTITUTE OF TECHNOLOGY
HASSAN- 573 201, KARNATAKA
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi.)
DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Attendance for Unity workshop on Game Development Essentials from 03/03/2025 to 08/03/2025

Sl. No.	USN	Name of the Student	3/3/2025	3/4/2025	3/5/2025	3/6/2025	3/7/2025	3/8/2025
34	4RA22IS034	MOHITH V K						
35	4RA22IS035	NAVEEN S R						
36	4RA22IS036	NISARGA H J						
37	4RA22IS037	NISARGA J V						
38	4RA22IS038	NIVEDITHA L R						
39	4RA22IS039	PALLAVI M R						
40	4RA22IS040	POORNIMA H V						
41	4RA22IS041	PRAJWAL S						
42	4RA22IS042	PRAKRUTHI S S						
43	4RA22IS043	RAJESH B R						
44	4RA22IS044	RAKSHITHA M K						
45	4RA22IS045	RAKSHITHA S S						
46	4RA22IS046	SAHANA R						
47	4RA22IS047	SANJANA D						
48	4RA22IS048	SANJANA H P						
49	4RA22IS049	SANJAY K R						

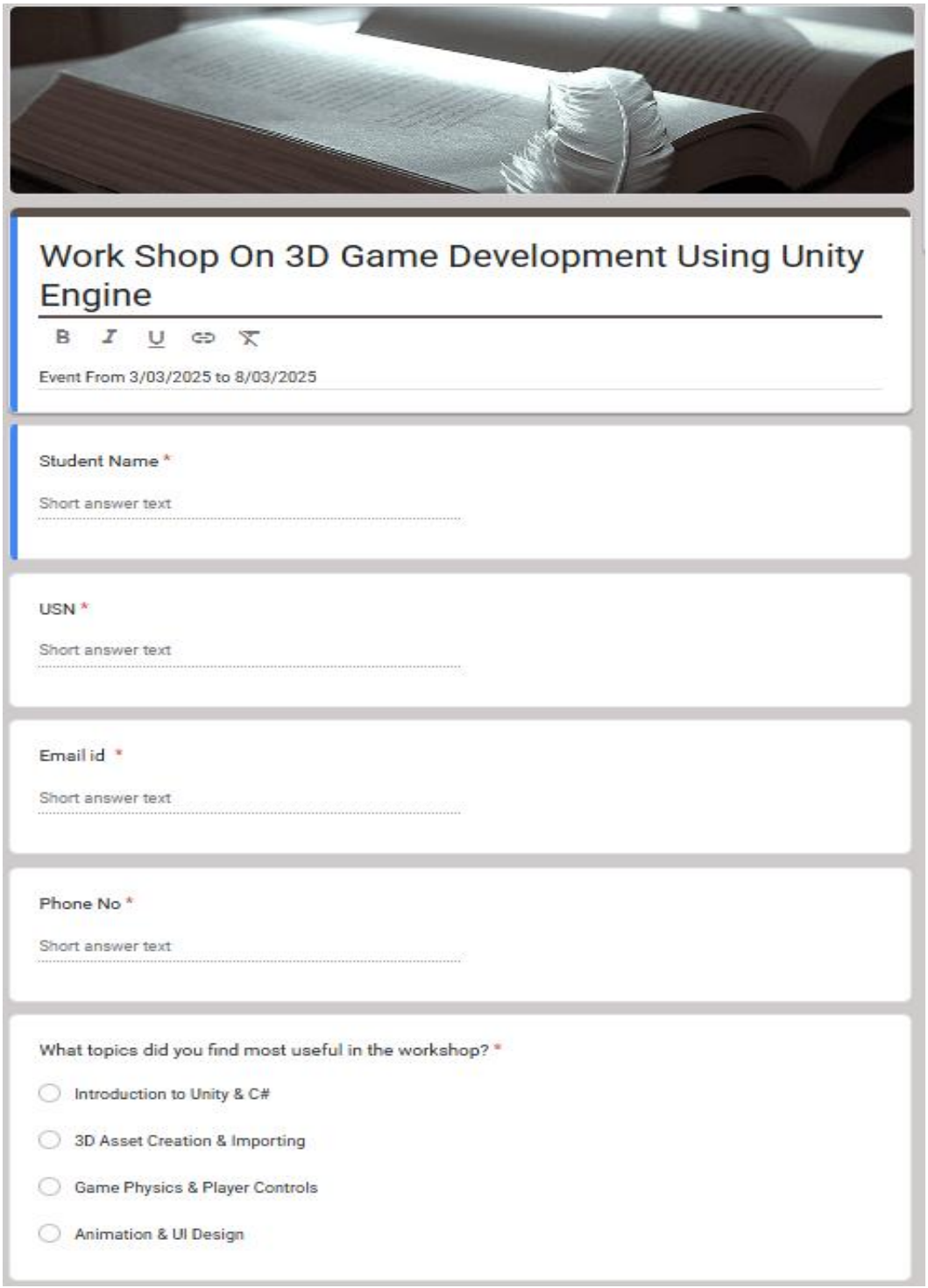


50	4RA22IS050	SHRADHA GOWDA H A						
51	4RA22IS051	SHREYANTH B G						
52	4RA22IS052	SUJAY B Y						
53	4RA22IS053	SURABHI						
54	4RA22IS054	SYEDA AFRA						
55	4RA22IS055	TEJAS C M						
56	4RA22IS056	THANUSH						
57	4RA22IS057	THEJAS A						
58	4RA22IS058	THEJAS B J						
59	4RA22IS060	VIDYASHREE Y S						
60	4RA22IS061	VINAY C M						
61	4RA23IS400	AKSHAY GOWDA S M						
62	4RA23IS401	CHIRANJAN H V						
63	4RA23IS403	DHANYA T S						
64	4RA23IS404	MANOJ Y M						
65	4RA23IS405	NAVEENA H R						
66	4RA23IS406	UDAYASHANKAR T C						

Dr. Prathibha G
Head of the Department

RIT office : 08172-243180 & 08172-243181
E-mail : isehod@rithassan.ac.in, web : www.rithassan.ac.in

Feed Back Form



Work Shop On 3D Game Development Using Unity Engine

Event From 3/03/2025 to 8/03/2025

Student Name *

Short answer text

USN *

Short answer text

Email id *

Short answer text

Phone No *

Short answer text

What topics did you find most useful in the workshop? *

- Introduction to Unity & C#
- 3D Asset Creation & Importing
- Game Physics & Player Controls
- Animation & UI Design

were the examples provided in the workshop helpful in understanding the concepts? *

- yes
- NO

How well did the speaker address audience questions and concerns? *

- Excellent
- Good
- Fair
- Poor
- Other...

How would you rate your overall experience in this workshop? *

1	2	3	4	5
○	○	○	○	○

Was the content of the workshop well-structured and easy to understand? *

- [ ] Yes, it was well-organized
- [ ] Somewhat, but a few topics were difficult
- [ ] No, it was confusing and needed better structure

How would you rate the speaker's knowledge and presentation? *

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

Was the content of the workshop well-structured and easy to understand? *

- [ ] Yes, it was well-organized
- [ ] Somewhat, but a few topics were difficult
- [ ] No, it was confusing and needed better structure

How would you rate the speaker's knowledge and presentation? *

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

Was this Event useful for your learning *

- ○ Extremely useful
- ○ very useful
- ○ No

What additional topics would you like to learn in future workshops?

- [ ] Multiplayer Game Development
- [ ] Virtual Reality (VR) & Augmented Reality (AR)
- [ ] AI & Machine Learning in Games

Were the learning materials (presentations, resources, code samples) helpful? *

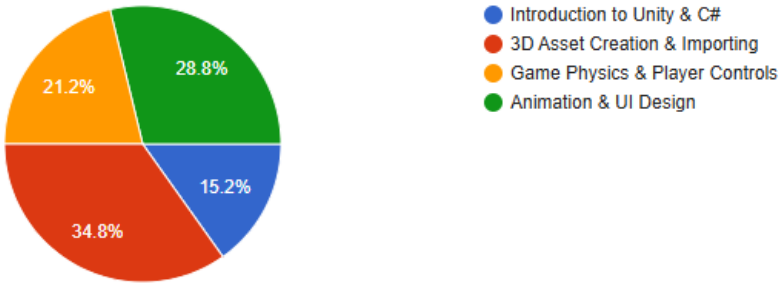
- ○ Yes, very useful
- ○ Somewhat useful
- ○ Not useful

Department of Information Science and Engineering

What topics did you find most useful in the workshop?

Copy chart

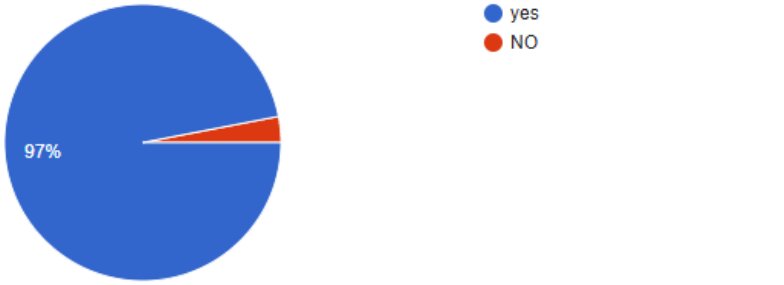
66 responses



were the examples provided in the workshop helpful in understanding the concepts?

Copy chart

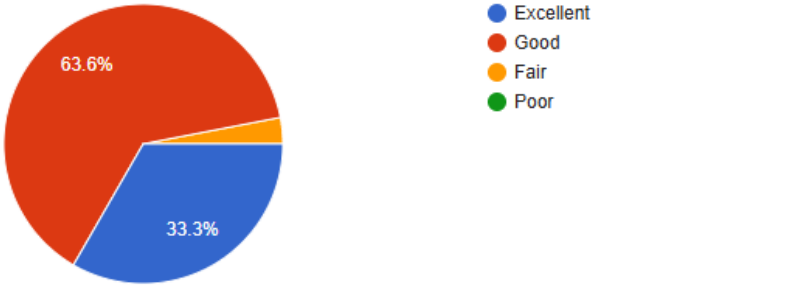
66 responses



How well did the speaker address audience questions and concerns?

Copy chart

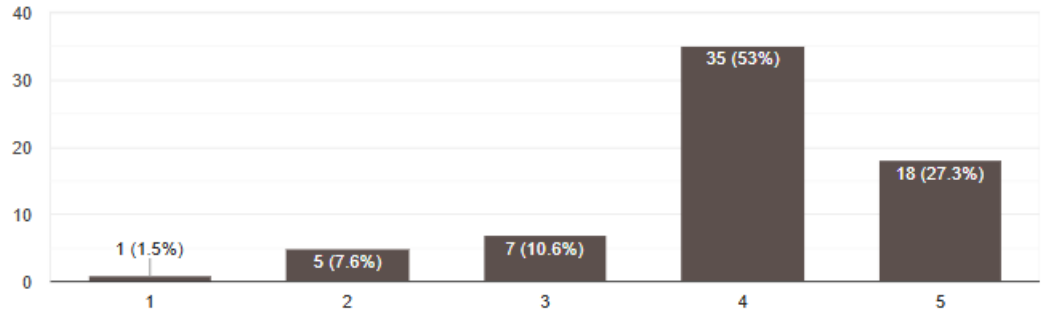
66 responses



How would you rate your overall experience in this workshop?

Copy chart

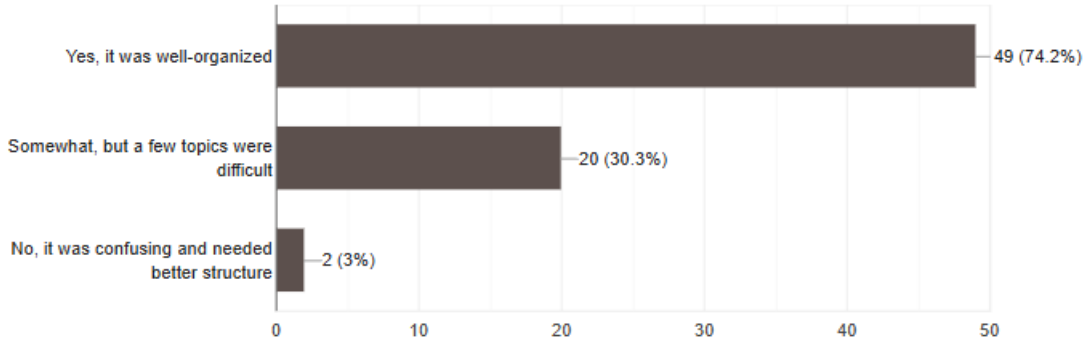
66 responses



Was the content of the workshop well-structured and easy to understand?

Copy chart

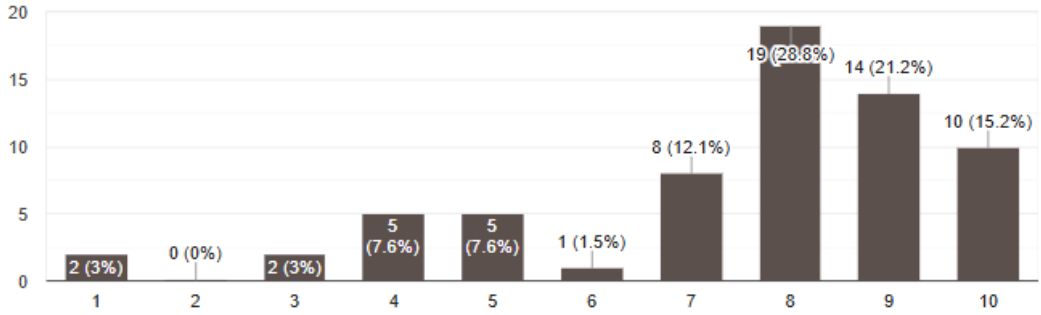
66 responses



How would you rate the speaker's knowledge and presentation?

Copy chart

66 responses

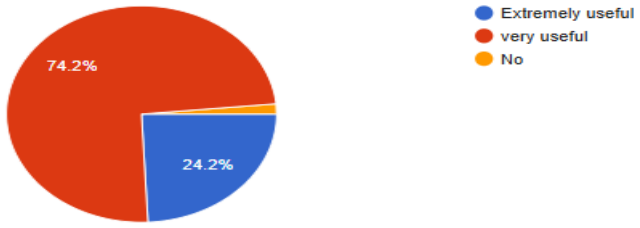


Department of Information Science and Engineering

Was this Event useful for your learning

66 responses

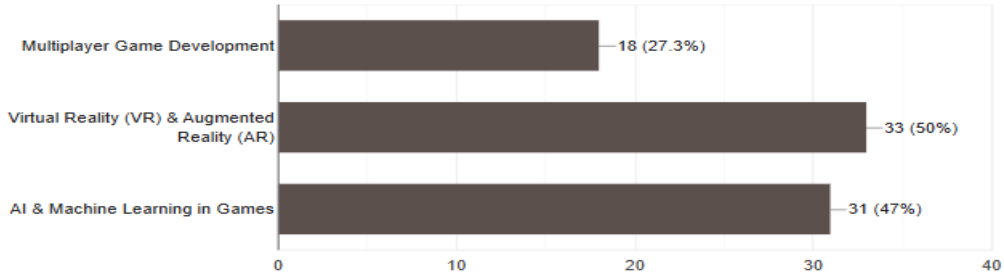
Copy chart



What additional topics would you like to learn in future workshops?

66 responses

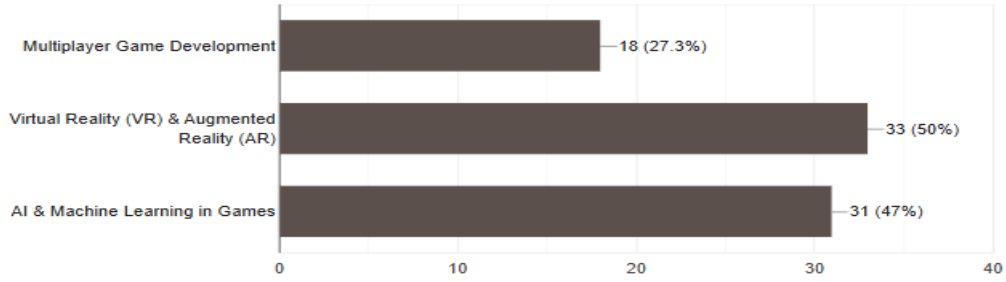
Copy chart



What additional topics would you like to learn in future workshops?

66 responses

Copy chart



Were the learning materials (presentations, resources, code samples) helpful?

66 responses

Copy chart

