



FOSSEE Summer Fellowship 2025 Report

Graphics & Animation (Using Open-Source Softwares)

Submitted by

Abhishek Kumar Shakya

Madan Mohan Malaviya University of Technology, Gorakhpur

Under the guidance of

Prof. Kannan M. Moudgalya

Chemical Engineering
Department IIT Bombay

Acknowledgement

I would like to express my sincere gratitude to **Prof. Kannan Moudgalya**, Principal Investigator of the FOSSEE project at IIT Bombay, for his visionary leadership that made the **FOSSEE Summer Fellowship 2025, IIT Bombay** a truly enriching experience.

My heartfelt thanks to my project mentor, **Mr. Khushalsingh K. Rajput**, Project Lead (FOCAL) & Senior Software Engineer (FOSSEE), for his continuous guidance, insightful feedback, and unwavering support throughout the fellowship.

I also appreciate the mentorship and assistance provided by the FOSSEE team, reviewers, and coordinators, whose inputs greatly enhanced my learning.

As part of the **Animate Hackathon 2025**, I contributed to promotional content including posters, web pages, and an animated video aimed at encouraging collaboration among students, educators, and artists. I also had the opportunity to assist in a **two-day Synfig Studio workshop** at **Byte Lab, IIT Bombay**, attended by **40 school principals and teachers from across India**—an experience that deepened my appreciation for open-source outreach in education.

I am especially thankful to the **FOSSEE fellows**, the **IIT Bombay community**, and my **friends and colleagues**, whose support, teamwork, and enthusiasm made this journey inspiring and memorable.

This fellowship has been a significant milestone in my academic and personal growth. I look forward to applying these experiences in my future endeavours and continuing my association with the FOSSEE community.

Sincerely,
Abhishek Kumar Shakya

Content	Pg.NO
Acknowledgement	2
Introduction	4
About the Fellowship	4
Duration of the Fellowship	4
Aim & Objectives	5
Software Used	6
Project Outcome	7
Task 1- Create a Poster for FDP on Open FOAM using Inkscape	7
Task 2- Design a Certificate for FDP on Open FOAM	8
Task 3- Create Brochure for FDP using Scribus	9
Task 4- Create a Flowchart for Python using Inkscape & Scribus	10
Task 5- Create a Flowchart for Scilab using Inkscape & Scribus	11
Task 6- Create a Poster for Animate Hackathon 2025	12
Task 7- UI design for Homepage of Animate Hackathon 2025	13
Task 8- UI design for Theme page of Animate Hackathon 2025	13
Task 9- Social Media posts for Animate Hackathon 2025	14-16
Task 10- Create a Certificate for Animate Hackathon 2025	17
Task 11- Create a GIF file for Animate Hackathon 2025	17
Task 12- Workshop Assistance – 2D Animation Using Synfig Studio	18-20
Task 13- Create a Certificate for Semester Long Internship	20
Future Plans and Follow-Ups	21
Reference	21

Introduction

About the Fellowship

The **FOSSEE (Free/Libre and Open-Source Software for Education)** project, an initiative by **IIT Bombay** under the **National Mission on Education through ICT**, Ministry of Education, Government of India, promotes the adoption and development of open-source software for education and research. I was selected as a **Graphic Designer** in the **Graphics and Animation** category of the fellowship under **FOCAL (Free and Open-source Creative Arts and Learning)** and worked under the mentorship of **Mr. Khushalsingh K. Rajput**, Project Lead (FOCAL) and Senior Software Engineer at FOSSEE.

During the fellowship, I worked with a range of open-source tools including **Inkscape, Scribus, Penpot, and Synfig Studio** to design and develop diverse digital content such as **posters, brochures, flowcharts, animated videos, web pages**, and more. These creative assets were developed to support educational outreach and promote the use of open-source tools in design and communication.

FOCAL encourages the creation of high-quality educational and creative resources using open-source software. All content developed under the initiative is published under a **Creative Commons license**, ensuring it remains freely accessible and reusable by educators, students, and the wider community.

Duration of the Fellowship

I participated in the **Full-time FOSSEE Summer Fellowship 2025**, which spanned from **15th May 2025 to 30th June 2025**.

Aim & Objectives

AIM:





To utilize open-source tools for designing creative and promotional content for Animate 2025 Hackathon. This includes crafting posters, certificates, webpages, and animated videos to enhance outreach and engagement.

OBJECTIVES:

1. **To design visually appealing posters and certificates** using *Inkscape* for effective branding and recognition of the Animate 2025 Hackathon.
2. **To develop user-friendly and responsive web interfaces** using *Penpot* to showcase event details and attract participants.
3. **To create engaging animated promotional videos** using *Blender for 3D* and *Synfig for 2D*, highlighting the theme and spirit of the hackathon.
4. **To promote collaboration and creativity** among students, educators, and artists through open-source tools.
5. **To gain hands-on experience with open-source design software** and demonstrate its capabilities in real-world creative projects.

Software

The following FOSS tools are used in this project:

	Inkscape	Vector graphics editor
	Penpot	Open-source collaborative UI/UX design platform
	Scribus	Desktop Publishing (DTP) Software
	Synfig Studio 2D	2D Animation Open-Source Software

Project Outcomes-

Task 1- Create a Poster for FDP on Open FOAM using Inkscape:

Faculty Development Program on OpenFOAM

by FOSSEE, IIT Bombay

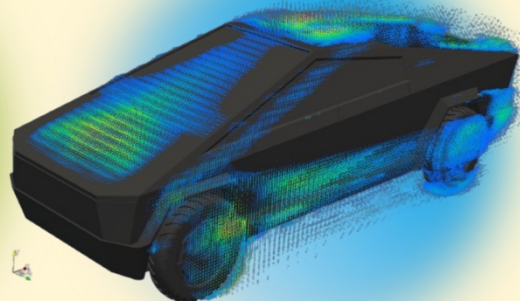
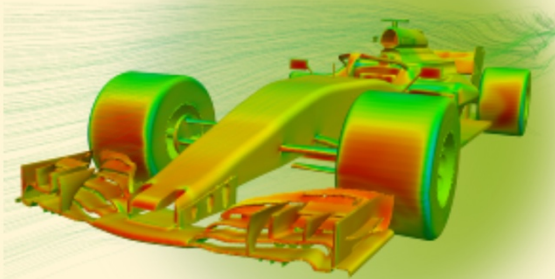


10-13 June 2025

10:30 am to 5:30 pm

Mode: Online

- Live interaction with experts of OpenFOAM from eminent institutes of India and abroad
- Hands-on training sessions on OpenFOAM
- Certificates



FOSSEE, IIT Bombay, is inviting Faculty Members who are interested in Computational Fluid Dynamics (CFD) to learn OpenFOAM by joining a four day online workshop. The workshop will begin from the basic level and enable the participants to learn upto the intermediate level of OpenFOAM

For any queries related to OpenFOAM contact us at:
contact-cfd@fossee.in



Scan
the QR code
for registration



Indian Institute of
Technology Bombay

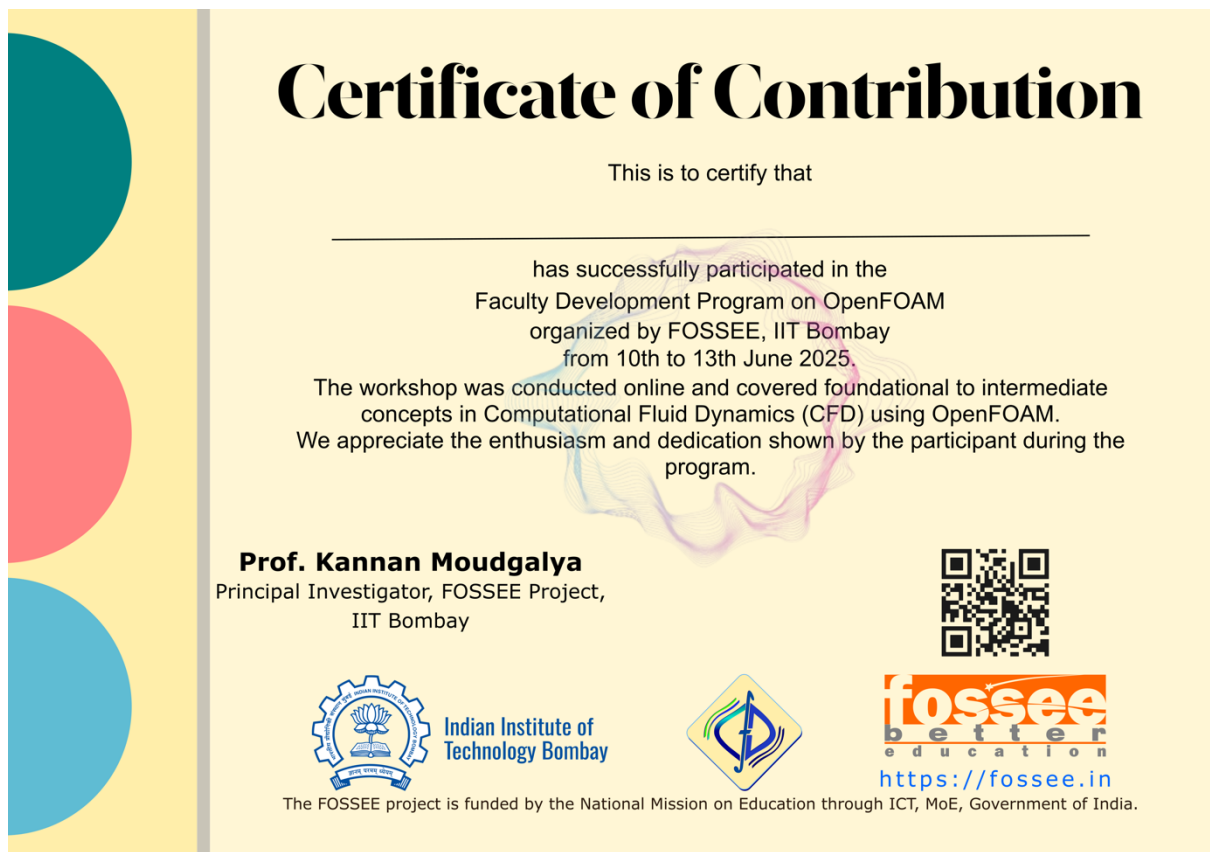
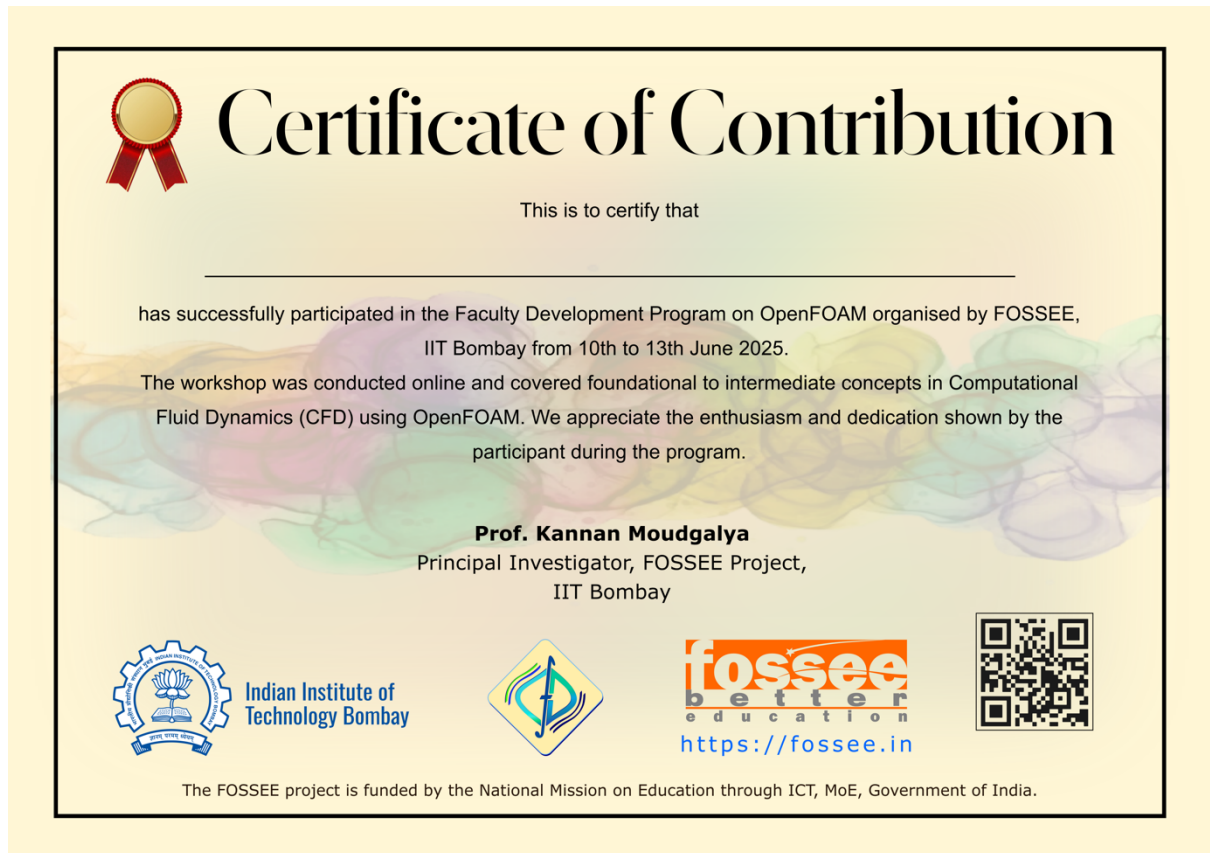


fossee
better
education

NMEICT
National Mission on Education Through ICT

The FOSSEE project is funded by the National Mission on Education through ICT, MoE, Government of India.

TASK 2- Design a Certificate for FDP on Open FOAM:



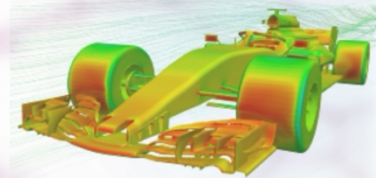
TASK 3- Create Brochure for FDP using Scribus:

Faculty Development Program on Computational Fluid Dynamics (CFD) using OpenFOAM



**10-13 June 2025
10:30 am to 5:30 pm**

Mode: Online



FOSSEE, IIT Bombay, is inviting Faculty Members who are interested in Computational Fluid Dynamics (CFD) to learn OpenFOAM by joining a four day online workshop.

The workshop will begin from the basic level and enable the participants to learn upto the intermediate level of OpenFOAM.

Topics to be covered:

- learn how to set up, view the files and run a case in OpenFOAM
- become familiar with pre-processing tools and will be able to generate mesh, set the boundary & initial conditions, learn simulation control etc.
- learn how to plot and visualise the results in ParaView
- learn how to use a turbulence model in a simulation and to compare the results from a simulation using different turbulence models
- learn how to apply higher-order numerical schemes in CFD simulations
- learn to simulate multiphase flows
- learn about Dynamic meshing
- learn to add a scalar transport equation in a solver
- learn how to use a GUI for OpenFOAM

Benefits:

- Certificate
- Live interaction with the Faculty Members from the CFD field from renowned institutions
- Hands-on learning of OpenFOAM



For any queries related to OpenFOAM contact us at:
contact-cfd@fossee.in



Indian Institute of
Technology Bombay



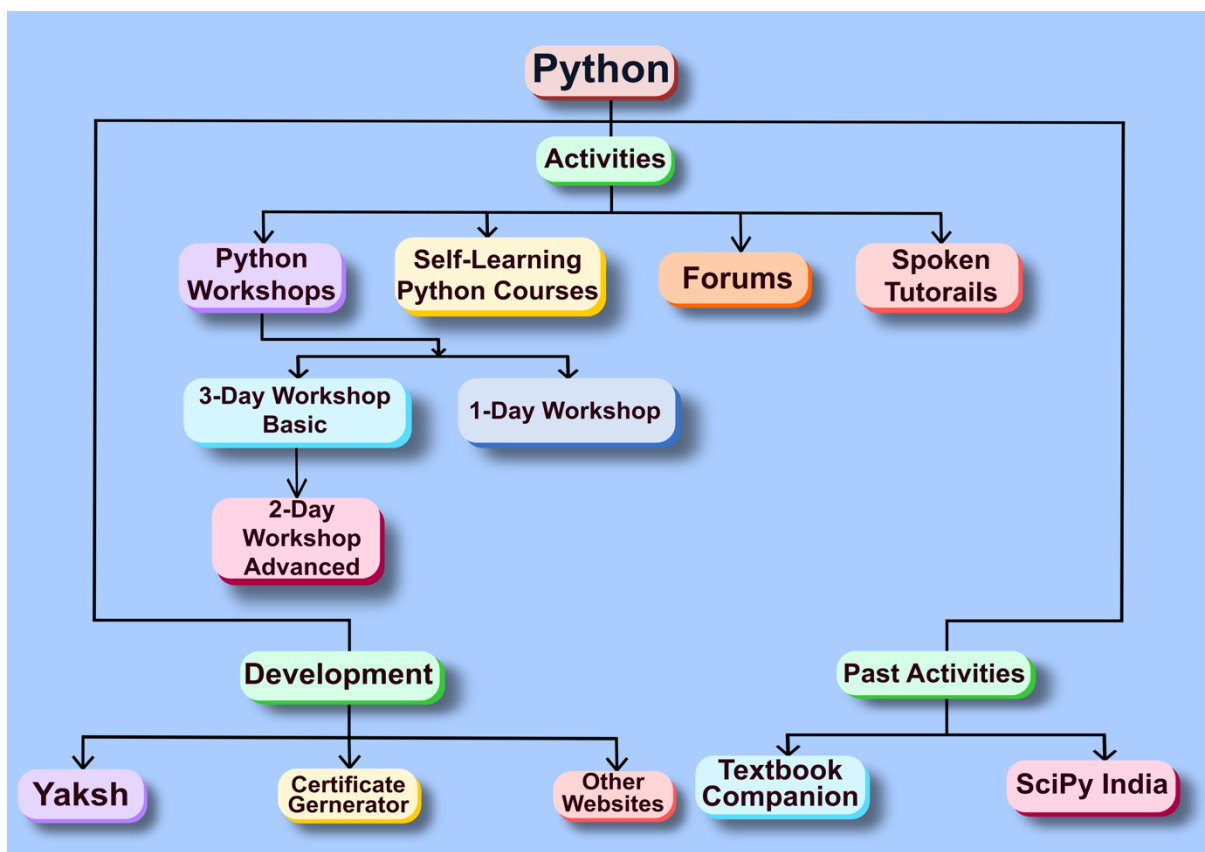
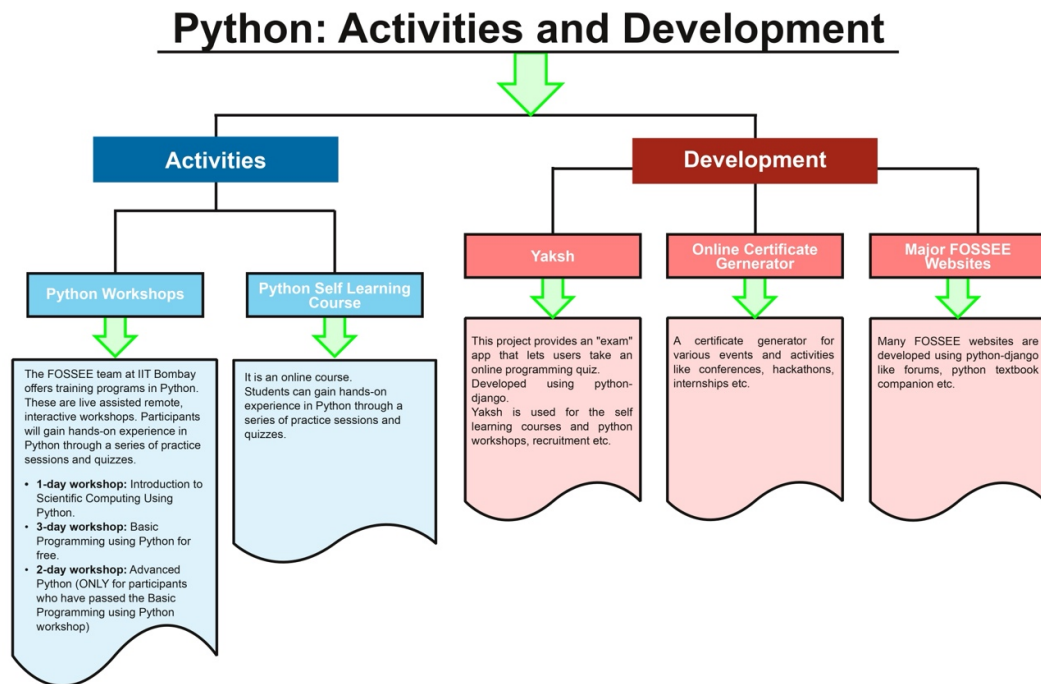
fossee
better
education

NMEICT

National Mission on Education Through ICT

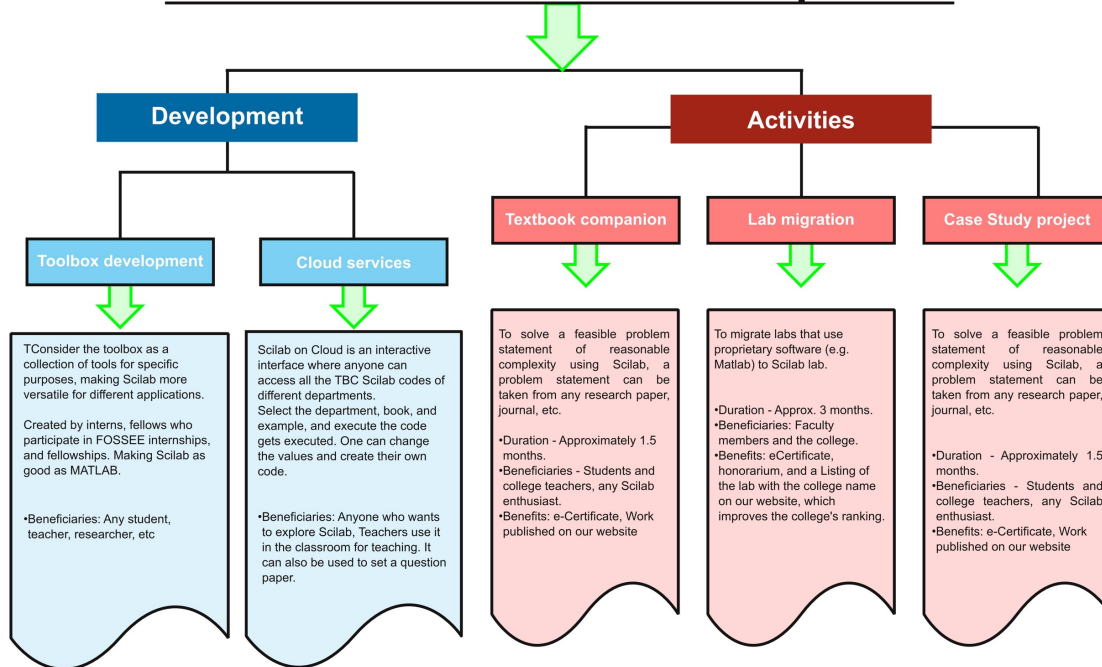
The FOSSEE project is funded by the National Mission on Education through ICT, MoE, Government of India.

TASK 4- Create a Flowchart for Python using Inkscape and Scribus:

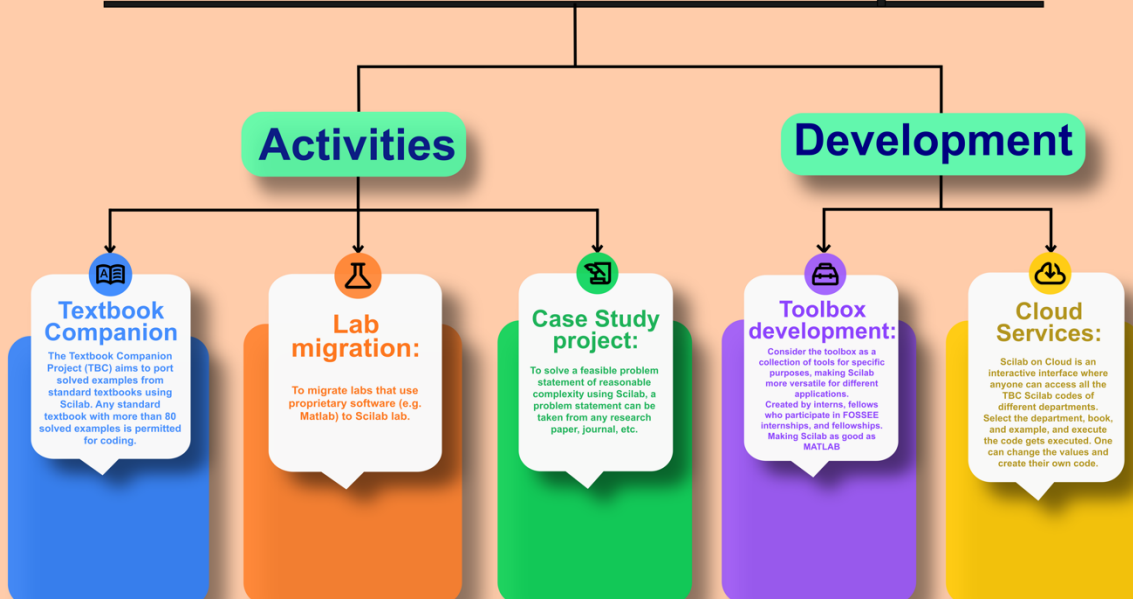


TASK 5- Create a Flowchart for Scilab using Inkscape and Scribus

Scilab: Activities and Development



Scilab: Activities and Development



TASK 6- Create a Poster for Animate Hackathon 2025

Unleash Imagination with the Power of Animation Creativity



FOSSEE, IIT BOMBAY
Presents

ANIMATE 2025

Create | Express | Inspire



Last date of registration
and submission
18th July 2025



Registrations are in progress

FOSSEE, IIT Bombay invites you to participate in
Animate 2025, a 2D/3D animation hackathon utilizing open-source software.

Exciting Prizes to be
won and an opportunity to intern
with FOSSEE, IIT Bombay

FREE Access of online
Learning tutorial about Blender for 3D
and Synfig studio for 2D Animation

Attend Free of cost
online workshops from IIT Bombay
to help during the hackathon

Contact: info@fossee.in | contact-focal@fossee.in



Indian Institute of
Technology Bombay



- Knowledge Partners -



SRISHTI MANIPAL
INSTITUTE OF ART, DESIGN
AND TECHNOLOGY
(A Constituent Unit of MAHE, Manipal)



MANIPAL
ACADEMY OF HIGHER EDUCATION
(Bengaluru Campus)
(Institution of Eminence Deemed to be University)



MANIPAL
ACADEMY OF HIGHER EDUCATION
(Bengaluru Campus)
(Institution of Eminence Deemed to be University)

- Learning Partner -



Spoken Tutorial Project

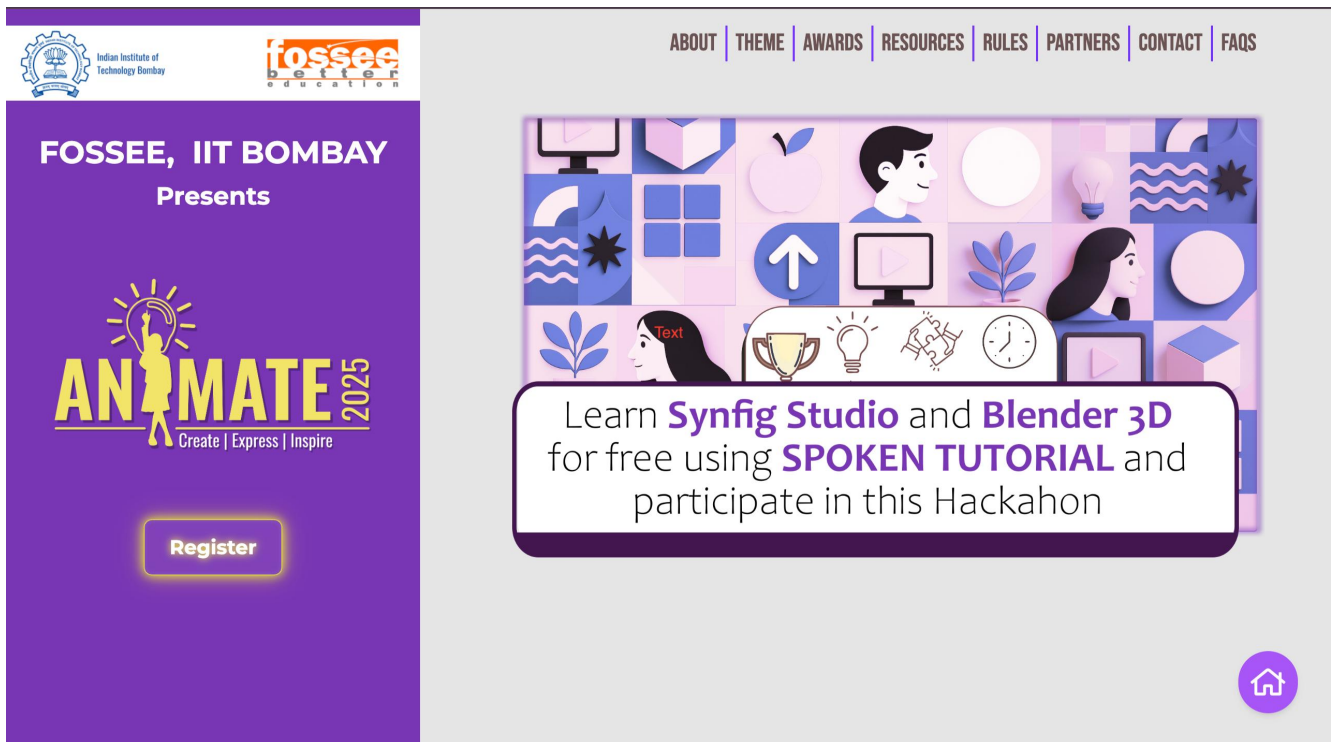
- Resources Partner -



FOCAL
Free and Open-source
Creative Art Library

For more detail: <https://animate2025.fossee.in>

TASK 7- UI Design for Homepage of Animate Hackathon 2025

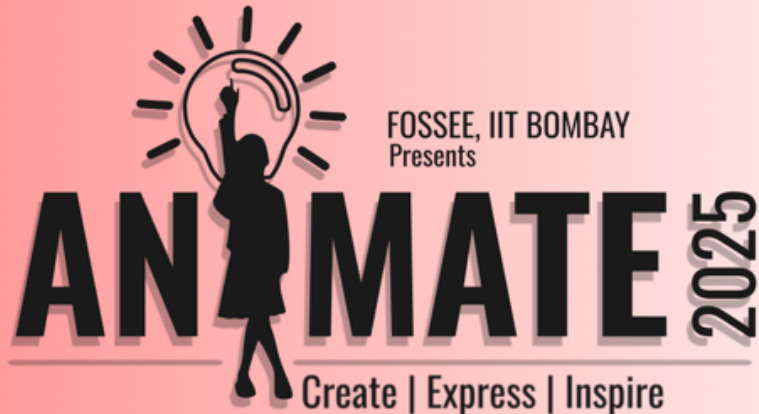


TASK 8- UI Design for Theme page of Animate Hackathon 2025



TASK 9- Social Media Posts for Animate Hackathon 2025

**Unleash Imagination with
the Power of Animation Creativity**



2D and 3D Animation Hackathon

***Journey
of a Hero***



Scan for registration

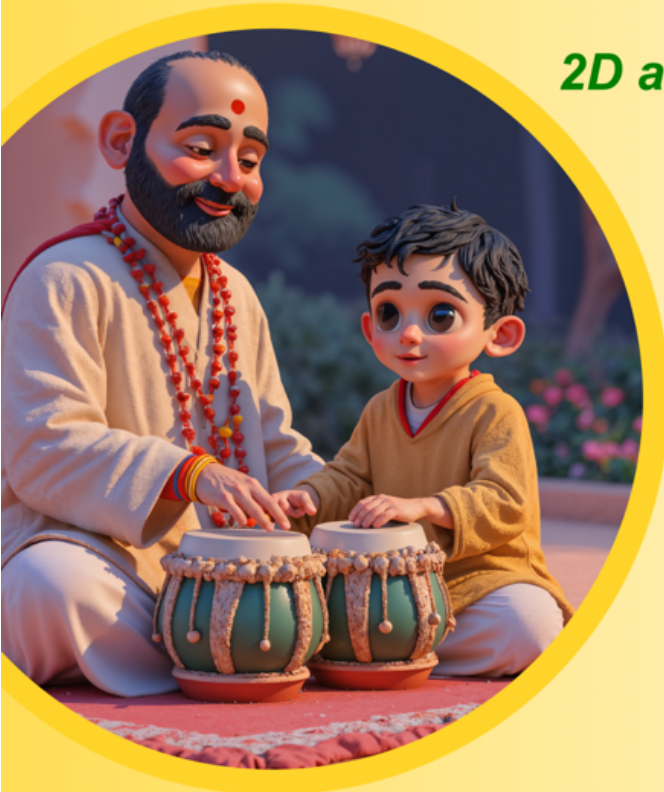


**Unleash Imagination with
the Power of Animation Creativity**



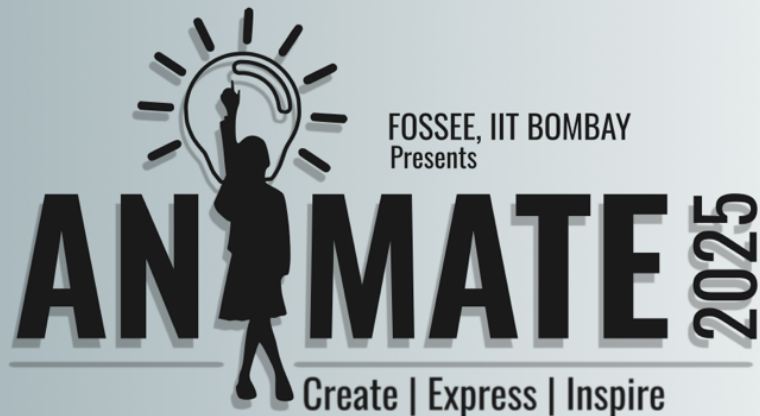
2D and 3D Animation Hackathon

***Cultural
Celebration***



Scan for registration

**Unleash Imagination with
the Power of Animation Creativity**



2D and 3D Animation Hackathon

***Nature's
Symphony***



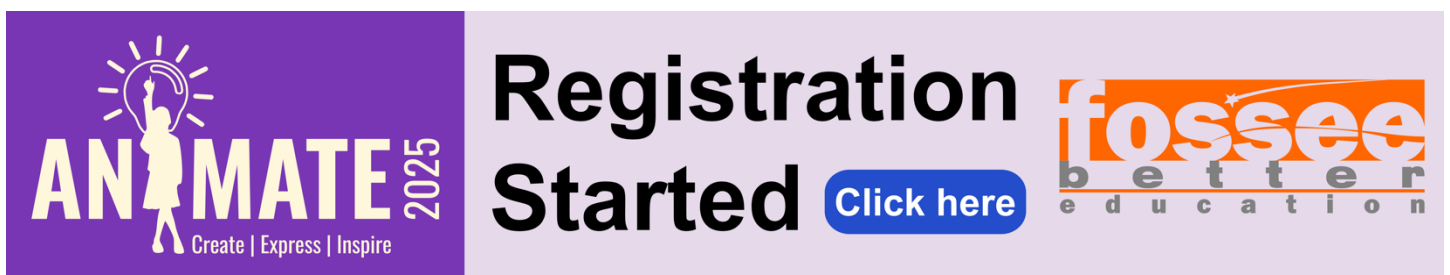
Scan for registration



TASK 10- Create a Certificate for Animate Hackathon 2025



TASK 11- Create a GIF file for Animate Hackathon 2025



Task 12- Workshop Assistance – 2D Animation Using Synfig Studio

Provided assistance during a **two-day hands-on workshop** on **Synfig Studio**, conducted at **Byte Lab, IIT Bombay**, with participation from **40 school principals and teachers** across India.

The workshop focused on introducing educators to the fundamentals of 2D animation using this open-source software. The sessions emphasized practical learning—guiding participants through the interface, core tools, and simple animation techniques—while promoting the use of open-source tools in academic content development.

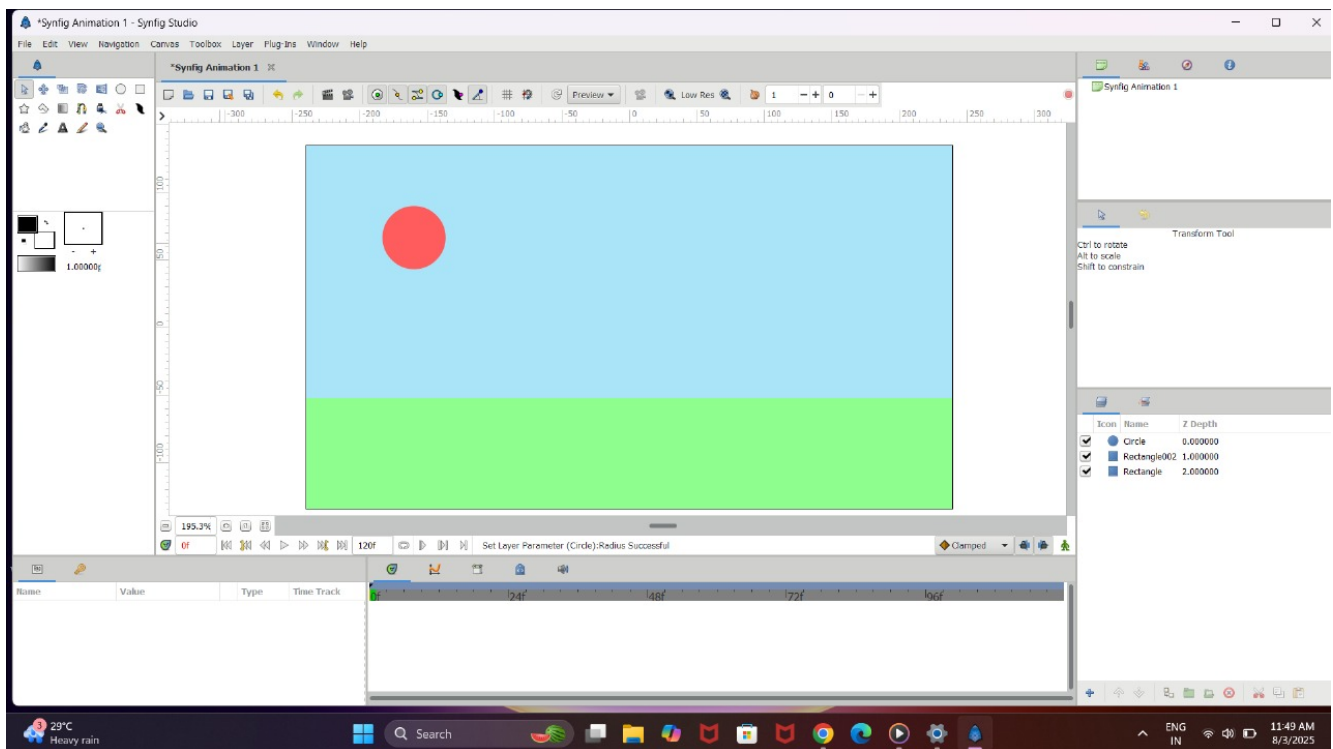
Core Focus Areas:

- Familiarization with the Synfig Studio interface
- Use of essential animation tools and techniques
- Creation of basic vector-based animations
- Integration of digital animation in classroom teaching

Professional Skills Gained

- Acquired practical experience in demonstrating Synfig Studio features to a diverse audience.
- Enhanced the ability to simplify and communicate technical concepts effectively.
- Strengthened public speaking and presentation skills through live educator engagement.
- Reinforced personal understanding of 2D animation workflows and toolsets.
- Developed time management and coordination skills for live training environments.
- Increased confidence as a facilitator by addressing real-time participant queries.





TASK 13- Create a Certificate for Semester Long Internship



Future Plans and Follow-Ups:

The FOSSEE Summer Fellowship has been a pivotal experience in strengthening both my technical and design skills. Through active participation in this fellowship, I gained hands-on exposure to open-source development, improved my ability to work collaboratively in a structured environment, and enhanced my proficiency in designing and executing user-centric solutions.

Going forward, I aim to stay connected with the FOSSEE community by contributing to ongoing initiatives and supporting future development efforts. I also plan to apply the practical skills and knowledge acquired during the fellowship to future academic and project-based work.

In parallel, I am keen to pursue research opportunities that allow me to further explore and apply my technical and design capabilities in innovative ways. I am particularly interested in roles that involve solving real-world challenges, contributing to impactful outcomes, and learning under the guidance of experienced mentors.

This fellowship has not only shaped my approach to problem-solving but also reinforced my commitment to continuous learning, interdisciplinary collaboration, and meaningful contribution.

Reference:

- Google
- Freepik
- Pinterest
- Wikipedia
- Unsplash