Gyanmanjari Innovative University

Course Syllabus
Gyanmanjari College of Computer Science
Semester-2 (BSC IT)

Subject: Design & animation tool - BSCIT12307

Type of course: Skill Enhancement course

Prerequisite: Basic Knowledge of Computer

Rationale:

Selecting the right design and animation tools and justifying your choice is essential for any creative project. The rationale for choosing specific tools can impact the project's success and efficiency.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
CI	T	P	C	SEE	CCE			
					LWA	V	ALA	
0	0	4	2	50	20	10	20	100

Legends: CI-Class Room Instructions; T – Tutorial; P - Practical; C – Credit; SEE - Semester End Evaluation; MSE- Mid Semester Examination; LWA - Lab Work Assessment; V – Viva voce; CCE- Continuous and Comprehensive Evaluation; ALA- Active Learning Activities.

Course Content:

Sr. No	Course content	Hrs	% Weightage
1	**Introduction of design & animation tool** • Introduction to Designing tool • Overview of Designing tool and its features. • Installation and system requirements.	4	10%
2	**Drawing and Painting** • Working with raster and vector layers. • Using the various drawing tools, such as brushes, pencils. • Managing color palettes and creating custom color swatches. • Understanding the vector and raster workflows.	10	20%

3	**Animation Basics** • Key frames, frames, and the animation timeline. • Creating, moving, and duplicating frames.	16	25%
4	**Vector & Raster Animation** Vector • Creating vector-based drawings and characters. • Shape interpolation and manipulation. Raster • Creating hand-drawn animations with raster levels. • Using the plastic tool for deformation. • Frame-by-frame animation techniques.	10	25%
5	**Importing and Exporting** • Importing image and audio files. • Exporting your animations in various formats. • Configuring project settings.	16	20%

Continuous Assessment:

(For each activity maximum-minimum range is 5 to 10 marks)

Sr. No.	Active Learning Activities	Marks
1	**Cartoon Making :** Create a cartoon animation in Designing tool.	10
2	**2D Animation** : Create a 2D animation in Designing tool as per your choice.	10
	Total	20

Suggested Specification table with Marks (Theory):00

Distribution of Theory Marks **(Revised Bloom's Taxonomy)**						
Level	Remembrance (R)	Understanding (U)	Application (A)	Analyze (N)	Evaluate (E)	Create (C)
Weightage	00 %	00 %	00 %	00 %	00 %	00 %

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcome:

After learning the course the students should be Able to :	
CO1	Produce 2D animations, including character animations, motion graphics, and storyboards.
CO2	Create animations using both raster and vector graphics, understanding the strengths and weaknesses of each approach.
CO3	Use Set key frames and create animations with smooth transitions between them.
CO4	Enhance animations with effects and adding visual interest and depth to the work.
CO5	Acquire the ability a portfolio of animation projects that showcase their skills and creativity, which can be used for job applications or freelance work.

List of Practical

(Minimum 20 Practical will be performed) :

Sr. No.	Descriptions	Unit No.	Hrs
1.	Installation of Designing tool.	1	1
2.	Introduction of design & animation tool.	1	1
3.	Explain basic animation tools in Designing tool.	1	2
4.	How to connect FFMPEG (Fast Forward Moving Picture Experts Group) with Designing tool.	2	2
5.	Apply basic animation in Designing tool.	2	2
6.	How to use Color palette in Designing tool.	2	2
7.	Give introduction of tools of Designing tool.	2	2
8.	Describe and apply levels and columns in Designing tool.	2	2
9.	How to import images in Designing tool.	3	2
10.	How to Export GIF and MP4 files in Designing tool.	3	2
11.	Apply Key frames in Designing tool.	3	2
12.	Apply copy frame and grouping in Designing tool.	3	2
13.	Apply Polygon tool in Designing tool.	3	2
14.	Apply Skeleton tool in Designing tool.	3	2

15.	How to use SPline in Designing tool.	3	2
16.	How to use Scale tool in Designing tool.	3	2
17.	How to add Layer in Designing tool.	4	2
18.	Introduction of Vector and Raster animation in Designing tool.	4	2
19.	Perform a Vector animation in Designing tool.	4	4
20.	Perform a Raster animation in Designing tool.	4	4
21.	Create a football animation in Designing tool.	4	2
22.	Create a simple sunset animation in Designing tool.	5	4
23.	How to create 2D animation in Designing tool.	5	4
24.	How to Render animation in Designing tool.	5	4
25.	Create a 2D animation video in Designing tool.	5	4
		Total	60

Instructional Method:

Instructional methods for learning animation tools vary widely to cater to the diverse needs and preferences of learners. Animation tools such as Adobe Animate, Toon Boom Harmony, or Designing tool offer a vast array of features, making the choice of instructional approach important. Online tutorials and courses are popular options, providing step-by-step video guides and structured lessons for learners of all skill levels. Books, documentation, and user manuals can serve as comprehensive references.

Video platforms like YouTube offer a wealth of free video tutorials, where experts in the field guide viewers through the software's features. Classroom and workshop training provide hands-on experience, while online forums and communities offer opportunities to seek advice and connect with other users. Interactive tutorials within the software itself are also available, allowing users to practice while learning.

Reference Books:

[1] "The Animator's Survival Kit" by Richard Williams
[2] "Designing tool: Getting Started Guide" by Designing tool Community
[3] "The Animator's Reference Book" by Les Pardew and Dave Coleman
[4] Web Reference Link: https://Designing tool.github.io/e/