



# **2D Animation for Game Design Class**

## **Introduction to 2D Animation**

- Definition of 2D Animation
- Advantages of 2D Animation
- Examples of 2D Animation in Games

## **Creating a 2D Animation**

- Drawing the Characters and Backgrounds
- Preparing the Assets
- Animating the Characters
- Adding Sound Effects and Music

## **Traditional 2D Animation Techniques**

- Hand-drawn Animation
- Cut-out Animation
- Rotoscoping
- Flipbook Animation

## **Digital 2D Animation Techniques**

- Vector Animation
- Bitmap Animation
- Puppet Animation
- Motion Graphics Animation

## **Principles of 2D Animation**

- Squash and Stretch
- Anticipation
- Staging
- Follow-Through and Overlapping Action
- Timing

## **Tools for 2D Animation**

- Adobe Animate
- Toon Boom Harmony
- Synfig Studio
- OpenToonz
- Pencil2D

## **Planning and Storyboarding**

- Importance of Planning
- Creating a Storyboard
- Timing and Pacing
- Animatics



## **Character Design for 2D Animation**

- Designing a Character
- Defining the Personality
- Drawing the Poses and Expressions
- Creating the Turnaround

## **Background Design for 2D Animation**

- Defining the Art Style
- Sketching the Layouts
- Creating the Backgrounds
- Adding Details and Textures

## **Color Theory and Palette Design**

- Importance of Color Theory
- Choosing the Color Palette
- Creating Harmony and Contrast
- Adding Lighting and Shadows

## **Exporting and Integrating Animations into Games**

- Exporting the Animations as Spritesheets
- Integrating the Spritesheets into the Game Engine
- Creating Animation Controllers
- Triggering Animations with Game Events

## **Best Practices for 2D Animation in Games**

- Optimizing the Animation Performance
- Using Consistent Art Style
- Balancing the Animation with Gameplay
- Adding Visual Feedback
- Polishing the Animation

## **Conclusion**

- Recap of the Topics Covered
- Importance of 2D Animation in Games
- Next Steps for Learning and Practicing 2D Animation in Game Design