

# Unit 03: Drawing and Animation

Content Area: **Business**  
Course(s): **Introduction to Mobile App Development**  
Time Period: **Semester 1 & 2**  
Length: **3 weeks**  
Status: **Published**

## Standards

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TECH.8.1.12	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
TECH.8.1.12.A.1	Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.

## Enduring Understanding

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Animation requires both creativity and planning.

Animation adds visual interest and excitement to a project.

## Essential Questions

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How do you make animated apps?

## Knowledge and Skills

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Understand how to build apps that let the user draw on a canvas.

Learn that a variable is used to remember information, and how to create and use variables in App Inventor.  
Understand how to program an app to do Math, e.g., incrementing a score.

Learn the basics of animation and how to use the Clock component and ImageSprite properties to animate objects.

Learn the basics of coding randomness, e.g., an object appearing in a random place.

Become familiar with the Canvas, ImageSprite, and Clock components.

## **Transfer Goals**

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Students will learn that useful computer programs and devices often rely on external systems (SMS or GPS).

Students will understand the coordinate system used in mobile app design and can apply this to other fields such as geometry or graphic design.

## **Resources**

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App Inventor development environment found at [appinventor.mit.edu](http://appinventor.mit.edu)