

Unit 01: Introduction to App Inventor and Event-Driven Programming

Content Area: **Business**
Course(s): **Introduction to Mobile App Development**
Time Period: **Semester 1 & 2**
Length: **4 weeks**
Status: **Published**

Standards

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

Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.

Programs can be developed to solve problems (to help people, organizations, or society); for creative expression; to satisfy personal curiosity or to create new knowledge.

People write programs to execute algorithms.

Programs are developed, maintained, and used by people for different purposes.

Essential Questions

What is graphical blocks-based programming?

How does one use App Inventor and event-driven programming to build a mobile app?

Knowledge and Skills

Learn the mechanics of using App Inventor to build apps.

Learn how to design an app's user interface with the App Inventor Designer, and its behavior with the Blocks Editor.

Understand that an app's behavior consists of event handlers-- blocks that specify how an app responds to

each event.

Understand that an app can make decisions using a conditional (if) block.

Understand that a component has a set of properties and that a property is a memory cell that can be changed to modify how a component looks and behaves.

Learn how to test an app, how to deploy it to a device, and how to publish it on a portfolio and the App Inventor Gallery.

Transfer Goals

Students will be able to describe the features of a mobile phone, tablet or other mobile device that makes them a computer.

The bulk of computer programming is explaining to a computer how to react to events.

Resources

App Inventor development environment found at appinventor.mit.edu