Unit 5

Description of Material:

This unit participants will learn about APIs and how to use the Web in an app, storing data in Fusion Tables, and making apps with multiple screens. This unit's material will include tutorials and readings.

Learning Objectives:

- incorporate FusionTables into an app
- construct an app with multiple screens
- utilize an API within your MIT App Inventor app

Let's Begin!

This unit has a lot of App Inventor content that will add functionality and flexibility to your apps.

App Inventor Concepts -- Multiple Screens

There are many apps that have multiple screens. Some have a login screen, a home screen, a menu screen, and more. App Inventor allows you to make apps with multiple screens. To practice using multiple screens in your app, play around with Colored Dots app:

- [Colored Dots Source Code](#)
- [Colored Dots Tutorial](#).

App Inventor Concepts -- FusionTables

Recall that apps have data and need ways to store it. The Fusion Tables component is an additional way that App Inventor helps users to build apps with data. Fusion Tables are spreadsheets created by Google. Google Fusion Tables lets you create, store, share, modify, query and visualize data tables.   FusionTables are best for creating an app that collects or modifies data such as a survey app.

To practice using FusionTables, complete the PizzaParty app and make a modification to it. [Here's a starting source code](#) and [here's the corresponding tutorial](#). Note that the source code we are providing you still needs to be completed. You will need to supply your own API KEY, your own Table ID, and your own TABLE URL in the global variables in the blocks editor. This source code will not work without these additions. Follow along the tutorial for guidance.

Programming Concepts -- Communicating with the Web, APIs

The Web is a powerful tool that we all use today. Many websites know that and want to make it even easier to use their information via the phone. That's why they create something called APIs: Application Programming Interface. Essentially this means that web applications can create tools to help you easily use the information they create or collect. Facebook has APIs you can use to view all of your friends in an external app. Read more about APIs in the App

Inventor chapter: [Chapter 24: Web/APIs](#)

App Challenge -- Using the Web component

Now that you're all caught up on what an API is and how powerful the Web can be. Let's build an app that uses the Web component and an external API.

We have provided a tutorial and source code for an app called Stock Quotes that uses an API from Yahoo Finance. This API allows you to make an app that uses information about different stocks.

- [StockQuotes Tutorial](#)
- [StockQuotes Source Code](#)

This unit your assignment to create a new app that uses an API and more than one screen. To find an API to use, check out some from this [list of free APIs](#).

Products

When you are finished you should have:

- A modification of the Fusion Tables app
- A web API app with multiple screens