# How Do I…? sample

This sample provides an app part that can be used to ask questions and search for answers. The interface provides a simple text field for entering a question. When submitted, a list is queried for matching terms and questions. After the query is run, questions and answers are displayed to the user.

## Description of the sample

This sample demonstrates how to deploy a list, content type, and list item data programmatically using the JavaScript Client Object model. It also demonstrates how to query the list using CAML from an app part. The app is written entirely in JavaScript as a SharePoint-hosted app.

## Prerequisites

This sample requires the following;

A SharePoint 2013 development environment.

Visual Studio 2012 and Office 2013 Tools for Visual Studio 2012.

## Key components of the sample

The sample is a SharePoint-hosted app written entirely in JavaScript. The app is structured using the Model – View-ViewModel (MVVM) architecture with the knockout-2.1.0.js providing support for binding elements to the web page. The library wingtip.viewmodel.js contains the ViewModel code for binding list items to the main page of the app and the app part.

One of the major functions of the app is to demonstrate the deployment of a list, site columns, site content types and data programmatically. The library App.js contains all of the code for creating these items when the app is initially launched. The libraries wingtip.lists.js and wingtip.listitems.js are included in the app to encapsulate standard list and content type operations.

Once the list is set up, it is queried using an app part. The main functionality of the app part is located in the library Part.js.

## Run and test the sample

1. Open HowDoI.sln solution in Visual Studio 2012.
2. Edit the Site URL property to refer to a test site where you will deploy the solution.
3. Press F5.
4. When the app first appears, it will attempt to create the site columns, content type, and list. If the initialization is successful, then the list of questions and answers will be displayed.
5. After the initialization is complete, navigate to the host web.
6. Select to add an app part to the page.
7. Add the “How Do I…?” app part to the page.
8. Test the app part by entering the question “How do I access Outlook from home?”.
9. You should receive several questions and answers in response.

## Troubleshooting

If the app has been run previously, then the list will not be set up again. Generally, this should work fine, but if you have trouble then explicitly retract the solution to remove the site columns, content type, and list. After retraction, hit F5 again to reconfigure the app.

## Change log

First release April 3, 2013

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