Exercise (Instructions): Using the Camera Plugin

Objectives and Outcomes

In this exercise, you will continue exploring more Cordova plugins. In particular, you will use the Cordova camera plugin to access the device's built-in camera to retrieve image data and use it within your application. At the end of this exercise, you will be able to:

- Use the Cordova camera plugin together with the ngCordova wrapper to access the device's native camera to retrieve image data
- Make use of the image data within your application

Adding the Cordova Camera Plugin

- First, add the Cordova camera plugin by typing the following at the command prompt:

```
ionic plugin add cordova-plugin-camera
```

- Or use the following command at the command prompt, if your Cordova version is below 5.0:

```
ionic plugin add org.apache.cordova.camera
```

Updating sidebar.html

- Add the following additional list item to the sidebar menu in *sidebar.html*:

```
          <ion-item menu-close ng-click="register()">
            Register
          </ion-item>
```

Updating AppCtrl Controller

- Open controllers.js and update the AppCtrl controller definition as follows:

```
  .controller('AppCtrl', function ($scope, $ionicModal, $timeout, $localStorage,
    $ionicPlatform, $cordovaCamera) {
```

- Then add in an empty JavaScript variable named *registration* as follows:

```
      $scope.registration = {};
```

- Then add the code to set up the registration modal as follows:

```
      // Create the registration modal that we will use later
      $ionicModal.fromTemplateUrl('templates/register.html', {
          scope: $scope
      }).then(function (modal) {
          $scope.registerform = modal;
      });

      // Triggered in the registration modal to close it
      $scope.closeRegister = function () {
          $scope.registerform.hide();
      };

      // Open the registration modal
      $scope.register = function () {
          $scope.registerform.show();
      };

      // Perform the registration action when the user submits the registration
        form
      $scope.doRegister = function () {
          // Simulate a registration delay. Remove this and replace with your
            registration
          // code if using a registration system
          $timeout(function () {
              $scope.closeRegister();
          }, 1000);
      };
```

- Add the following code to AppCtrl to make use of the Cordova camera plugin within our application:

```
    $ionicPlatform.ready(function() {
        var options = {
            quality: 50,
            destinationType: Camera.DestinationType.DATA_URL,
            sourceType: Camera.PictureSourceType.CAMERA,
            allowEdit: true,
            encodingType: Camera.EncodingType.JPEG,
            targetWidth: 100,
            targetHeight: 100,
            popoverOptions: CameraPopoverOptions,
            saveToPhotoAlbum: false
        };
         $scope.takePicture = function() {
            $cordovaCamera.getPicture(options).then(function(imageData) {
                $scope.registration.imgSrc = "" +
                  imageData;
            }, function(err) {
                console.log(err);
            });

            $scope.registerform.show();

        };
    });
```

Add the register.html Template

- In the *templates* folder, create a new file named *register.html,* and add the following code to it:

```
<ion-modal-view>
  <ion-header-bar>
    <h1 class="title">Register</h1>
    <div class="buttons">
      <button class="button button-clear" ng-click="closeRegister()">Close
        </button>
    </div>
  </ion-header-bar>
  <ion-content>
    <form ng-submit="doRegister()">
      <div class="list">
       <label class="item item-input">
       <span class="input-label">Your Picture</span>
       </label>
       <label class="item item-input">
       <img class="padding" ng-src="{{registration.imgSrc}}">
       </label>
       <label class="item item-input">
       <button class="button button-block button-positive" type="button" ng
         -click="takePicture()">
            Take Picture
        </button>
        </label>
        <label class="item item-input">
          <span class="input-label">First Name</span>
          <input type="text" ng-model="registration.firstname">
        </label>
         <label class="item item-input">
          <span class="input-label">Last Name</span>
          <input type="text" ng-model="registration.lastname">
        </label>
         <label class="item item-input">
          <span class="input-label">Username</span>
          <input type="text" ng-model="registration.username">
        </label>
       <label class="item item-input">
          <span class="input-label">Telephone Number</span>
          <input type="tel" ng-model="registration.telnum">
        </label>
       <label class="item item-input">
          <span class="input-label">Email</span>
          <input type="email" ng-model="registration.email">
        </label>
        <label class="item">
          <button class="button button-block button-positive" type="submit"
            >Register</button>
        </label>
      </div>
    </form>
  </ion-content>
</ion-modal-view>
```

- Save the changes, build and deploy the application and see the changes.

Conclusions

In this exercise, you learnt to use the Cordova camera plugin within your application to retrieve image data from the device's camera.

✓ Complete