Skill Certification, Testing, SSML

Skill Certification

Airport Info
Big Nerd Ranch
★★★★★

Disable Skill

"Alexa, ask Airport Info for delays at ATL"

"Alexa, tell Airport Info to give delay info at ATL"

"Alexa, open Airport Info"

About this Skill

Description
Airport Info allows you to get flight delay information and weather conditions at an Airport you specify by it's code. Before leaving for the airport, try asking Airport Info about the conditions to expect before arriving for your flight. Airport Info uses the FAA Airport Status API to provide the information you will be given.

Skill Details
- Invocation Name: **airport info**
- Developer Privacy Policy

Skill Certification Process - Publishing Info

- Example Phrases

- Short and Full Description

- Category

- Keywords

- Skill Icon

Skill Certification Process - Privacy & Compliance

- Does this skill allow users to make purchases or spend real money? *

- Does this Alexa skill collect users' personal information? *

- Privacy Policy URL

- Terms of Use URL

- Export Compliance

Approval Pitfalls - Required Handlers

Skills **MUST** implement intent handlers for:

- AMAZON.HelpIntent

- AMAZON.StopIntent

- AMAZON.CancelIntent

Approval Pitfalls - Closing the Stream

```
skillService.intent('delayinfo', {
  'slots': {
    'AIRPORTCODE': 'FAACODES'
  },
  'utterances': ['{|flight|airport} {|delay|status} {|info|information} {|for|at} {-|AIRPORTCODE}']
},
function(request, response) {
  var airportCode = request.slot('AIRPORTCODE');
  var reprompt = 'Tell me an airport code to get delay information.';
  if (_.isEmpty(airportCode)) {
    var prompt = 'I didn\'t hear an airport code. Tell me an airport code.';
    response.say(prompt).reprompt(reprompt).shouldEndSession(false);
  } else {
    var faaHelper = new FAADataHelper();
    faaHelper.requestAirportStatus(airportCode)
     .then(function(airportStatus) {
     //REJECTED!!
     response.say(faaHelper)
        .formatAirportStatus(airportStatus))
        .reprompt(reprompt)
        .shouldEndSession(false)
        .send();
     return true;
    });
    return false;
  }
}
```

Approval Pitfalls - Security Holes

- If hosting a skill on anything other than AWS Lambda an approved SSL certificate must be installed on the server

- SSL certificate needs to be an Amazon-approved certificate authority

- Service responds on Port 443

- Stores restricted data on a 3rd party server

See https://wiki.mozilla.org/CA:IncludedCAs for the approved list

Other Reasons for Rejection

Unit Testing a Skill

```
→  faa-info ✗ mocha
   FaaDataHelper
     #getAirportStatus
       with an invalid airport code
         ✓ returns invalid airport code (314ms)
       with a valid airport code
success — received airport info for SFO
         ✓ returns airport code (276ms)
     #formatAirportStatus
       with a status containing no delay
         ✓ formats the status as expected
       with a status containing a delay
         ✓ formats the status as expected
```

Introducing Mocha and Chai Test libraries

Testing the FAADataHelper

test/test_faa_data_helper.js

```javascript
var chai = require('chai');
var FAADataHelper = require('../faa_data_helper');
describe('FaaDataHelper', function() {
    var subject = new FAADataHelper();
    var airport_code;
    describe('#getAirportStatus', function() {
        context('with an invalid airport code', function() {
          it('returns invalid airport code', function() {
            airport_code = 'PUNKYBREWSTER';
            return expect(subject.requestAirportStatus(airport_code))
            .to.be.rejectedWith(Error);
          });
        });
    });
});
```

Running the Test

```
→  faa-info ✗ mocha
       FaaDataHelper
         #getAirportStatus
           with an invalid airport code
             ✓ returns invalid airport code (314ms)
```

Testing the FAADataHelper

```
var chaiAsPromised = require('chai-as-promised');
chai.use(chaiAsPromised);

describe('FaaDataHelper', function() {
...
  context('with a valid airport code', function() {
    it('returns airport code', function() {
      airport_code = 'SFO';
      var value = subject.requestAirportStatus(airport_code).then(function(obj) {
        return obj.IATA;
      });
      return expect(value).to.eventually.eq(airport_code);
    });
  });
});
```

Testing the FAADataHelper

Tests Example:

https://github.com/bignerdranch/alexa-airportinfo

Speech Synthesis Markup Language

```
"outputSpeech": {
    "type": "SSML",
    "ssml": "<speak> you say
    <phoneme alphabet="ipa" ph="təˈmeɪtəʊ">
     tomato
    </phoneme>,
    i say
    <phoneme alphabet="ipa" ph="təˈmɑtəʊ">
     tomato
     </phoneme>!
    </speak>"
    }
```

Embedding Audio

```
"outputSpeech": {
  "type": "SSML",
  "ssml": "<speak> you say
  <audio src="https://s3.amazonaws.com/bucket/OceanWaves.mp3">
  </speak>"
}
```