Nintex Developer - Programming Task

# Technical Requirement

* You need to create a **web application** to fulfill business needs described in sections below
* You must submit **executable source code**
* You are **NOT** required to write any **Document**. We only need source code.
* You must use **ASP.net MVC**, and **C#**.
* You are free to use any other third party libraries.
* Your app should be globalized, allowing support for other languages.
* Data validation should be performed.
* Unit tests **must** be provided.
* Consider this application as a sub system of a wider enterprise application. You should design your classes and structure your solution as such.

# Description

This programming task requires you to create a small web application that will simulate a flight search website. The website needs to **capture flight information from the user, pass this information to external REST services and then displays the results to the user**.

Information you need collect from the website user:

· **Departure airport code**: a three-character string. Characters can be any alphanumeric value and does not have to be a valid airport code. This field does not need to support auto complete or suggestion.

· **Arrival airport code**: a three-character string. Characters can be any alphanumeric value and does not have to be a valid airport code. This field does not need to support auto complete or suggestion.

· **Departure date**: a date only field.

· **Return date**: a date only field.

Then you will need to submit the information above to each of the airline’s REST services (providers) and display the search result. Those provider REST services are provided and available for you to consume at any time, please see more information on these REST services in **REST Services Technical Information** at the end of the document.

You need to display the following information back to the user.

· **Airline logo**

· **Airline name**

· **Outbound flight duration**

· **Inbound flight duration**

· **Total amount in USD**

# Important Notes:

· Both REST services accept the same request data.

· Both REST services are publicly available.

· The REST services are just simulations and always return the same data irrespective of the request.

# REST Services Technical Information

## Airline One (first provider)

· **Url**: <http://nmflightapi.azurewebsites.net/api/AirlineOne>

· **Sample request**:

"DepartureAirportCode" = "MEl",

"ArrivalAirportCode" = "LHR",

"DepartureDate" = "2012-12-24T00:00:00+11:00",

"ReturnDate" = "2013-01-03T00:00:00+11:00"

· **Sample response**:

[{

"AirlineLogoAddress": "<http://nmflightservice.cloudapp.net/Images/AirlineLogo/CZ.gif>",

"AirlineName": "China Southern Airlines",

"InboundFlightsDuration": "24:10",

"ItineraryId": "",

"OutboundFlightsDuration": "26:20",

"Stops": 2,

"TotalAmount": 2903.84

},

{

"AirlineLogoAddress": " <http://nmflightservice.cloudapp.net/Images/AirlineLogo/EK.gif>",

"AirlineName": "Emirates Airline",

"InboundFlightsDuration": "42:55",

"ItineraryId": "",

"OutboundFlightsDuration": "25:40",

"Stops": 2,

"TotalAmount": 2954.14

},

{

"AirlineLogoAddress": " <http://nmflightservice.cloudapp.net/Images/AirlineLogo/EK.gif>",

"AirlineName": "Emirates Airline",

"InboundFlightsDuration": "42:55",

"ItineraryId": "",

"OutboundFlightsDuration": "27:40",

"Stops": 2,

"TotalAmount": 2954.14

}]

## Airline Two (second provider)

· **Url**: [http://nmflightapi.azurewebsites.net/api/AirlineTwo](http://nmflightapi.azurewebsites.net/api/airlinetwo)

· **Sample request**:

"DepartureAirportCode" = "MEl",

"ArrivalAirportCode" = "LHR",

"DepartureDate" = "2012-12-24T00:00:00+11:00",

"ReturnDate" = "2013-01-03T00:00:00+11:00"

· **Sample response**:

{

"CarrierCodes":[

],

"Id":null,

"Results":[

{

"AirlineLogoAddress":"http://nmflightservice.cloudapp.net/Images/AirlineLogo/QF.gif",

"AirlineName":"Qantas",

"InboundFlightsDuration":"22:00",

"ItineraryId":"",

"OutboundFlightsDuration":"25:25",

"Stops":3,

"TotalAmount":4929.4

},

{

"AirlineLogoAddress":"http://nmflightservice.cloudapp.net/Images/AirlineLogo/QF.gif",

"AirlineName":"Qantas",

"InboundFlightsDuration":"22:00",

"ItineraryId":"",

"OutboundFlightsDuration":"25:25",

"Stops":3,

"TotalAmount":4929.4

},

{

"AirlineLogoAddress":"http://nmflightservice.cloudapp.net/Images/AirlineLogo/QF.gif",

"AirlineName":"Qantas",

"InboundFlightsDuration":"22:00",

"ItineraryId":"",

"OutboundFlightsDuration":"25:25",

"Stops":3,

"TotalAmount":4929.4

}

]

}