**Objectives:**

Please follow the below objectives as closely as you can

* Develop a pair of API methods – 1 x Get & 1 x Set
  + Develop both SOAP & REST interfaces for the same business methods with minimal code duplication. The test will be reviewed for a clear stack within the web services to separate out layers of concern
  + Ensure WSDLs and/or XSDs are created as appropriate for the SOAP interface
    - If auto generated WSDL’s & XSD’s – please attach the generated files with the test for review.
    - Auto generated request/response parameters should have meaningful names – nothing like arg0, arg1, etc
* Use the Java programming language
* Use, whichever frameworks are preferable / suitable
* There should be persistence between the Get & Set methods using some form of DB and appropriate persistence frameworks
  + For simplicity, please feel free to use some form of in memory db
* The solution should be a self contained war file and able to be deployed easily in a simple container such as Tomcat – and it should be able to run!
  + Please provide example requests and responses in a document as well to aid in the review
* If possible, produce a diagram showing the architecture of the solution – clearly demonstrating the different layers and their corresponding responsibilities

**Notes:**

Your solution will be tested for:

* Structure and code
* Completeness of solution (please pay specific care to the requirements detailed above and below)
* Adherence to objectives

Please zip up your test solution retaining the folder structure (source code and binary) and email it to your recruitment agent who will forward it on for consideration

**Step 1 – Create a GetCustomerDetails method.**

* The input to this method should be
  + CustomerID (Number) (Mandatory)
* This method should return the following details for the associated customer ID – if any field is null, it should still be returned but with a null value
  + Name (String)
  + PhoneNumber (String)
  + Email (String)
  + DOB (Date)
* If this customer ID doesn’t exist in the persistence storage, return an error code saying customer not found (error code and error message)
* If mandatory fields aren’t passed in, return an invalid input error (error code and error message)
* If any other issues occurs, return an error code saying generic error (error code and error message)

**Step 2 – Create a SetCustomerDetails method.**

* The input to this method should be (optional fields could either be passed in or not or passed in with a null value)
  + CustomerID (Number) (Optional – if this is not passed in, a new customer record should be created – if it is passed in and matches an existing record, update it)
  + Name (String) (Mandatory)
  + PhoneNumber (String) (Optional)
  + Email (String) (Optional)
  + DOB (Date) (Optional)
* This method should return the following details for either the newly created or updated customer record
  + CustomerID (Number)
  + Name (String)
  + PhoneNumber (String)
  + Email (String)
  + DOB (Date)
* If a customer ID is passed in and it doesn’t exist in the persistence storage, return an error code saying customer not found (error code and error message)
* If mandatory fields aren’t passed in, return an invalid input error (error code and error message)
* If any other issues occurs, return an error code saying generic error (error code and error message)