## Recruiting: Coding Exercise

You want to work at Mitchell? Great! We want you here, too. But first – we want to see your abilities in action. The following is a little programming challenge that will help us figure out where your strengths are and how we can best utilize your talents. If you finish and return this task, you will have a next round interview here at Mitchell.

We hope that you take this challenge seriously and work on it without the assistance of other developers. That said, developers don't work without resources, so feel free to leverage the internet or books if necessary.

Above all, this programming problem is less about IF you solve the problem and more about HOW. The elegance and extensibility of your solution is important. Let this be your chance to demonstrate your understanding of good software principles.

So enough talk – let's get to the fun stuff.

## **Challenge**

Implement a Claims Web-Service (preferably in Java/C#) that performs the following CRUD operations. *A portion of the challenge is optional.* 

- Create a claim and persist it to a backing store. The input to the create request should be a MitchellClaim XML.
- Read a claim from the backing store.
- Find a list of claims in the backing store by date range of the LossDate.
- *[optional]* Update a claim in the backing store. The input to the update request should be a MitchellClaim XML. Only the fields provided in the input should be updated.
- *[optional]* Read a specific vehicle from a specific claim.
- [optional] Delete a claim from the backing store.

Please utilize the provided sample XML files and XSD to understand the structure of the data being passed and to design and implement the interface accordingly.

Please remember that there are certain fields marked as \*required\* as defined in the XSD.

In addition to a working solution (with source), please provide your data model, test cases and test client.

## **Included Files:**

MitchellClaim.xsd – XML Schema that represents the data of a single claim.

create-claim.xml - Sample XML used to create a claim.

update-claim.xml – Sample XML used to update the created claim.