**IBM Instance Comparator**

**About:**

IBM Instance Comparator is a tool developed for comparing instances on prod, QA and DEV servers. The aim of this tool is to check whether the instances are up to date or not.

**Views:**

The UI is developed in HTML/CSS and Javascript. A fair knowledge is required to understand the UI especially Javascript, since datatables are handling most part of the UI.

It has 2 Views.

1. Form:

The form consists of 6 fields which are categorized under two instances. The first instance has url, username and password. The second instance has the same fields.

1. Business Process:

Contains 3 accordians: Missing workflows, Mismatched workflows and matched workflows. The accordians contain data in a tabular format which is obtained using datatables.

1. Trading Partners:

Similar as BP. Except the trading partners value are filled.

Backend:

There are two main packages that consists of the back-end code:

1. com.instance.comparator.controller

Consists of the controller class that helps in mapping JSP pages to the browser. Handles both Get and Post requests. Currently supports 4 mapping:

* Viewing the form
* Showing results after submitting the form (first screen will be of business process).
* Showing results of business process.
* Showing results of trading partners.

1. com.instance.controller.model

The package consists of the core logic that drives the UI. There are two classes defined for the same. One is for the business process, the other is for trading partners. The data structure used is Concurrent HashMap. The reason of using this is that the read operations are super-fast and also it thread safe. Memory leaks have been taken care off. If the developer is adding a new DS, kindly make sure no memory leakage is there. Also keep most of the logic in these files only. Use JSP only for viewing purpose. This helps in maintaining the code for the future.

**Developer’s Config:**

Framework: Spring MVC

JRE Version: 1.8.0\_201 or above

JDK Version: 1.8.0\_111 or above

OS: Windows 10 32-bit

IDE: Eclipse Java 2018-12

Database: API