## Design thinking and IBM Watson Studio

This course combines modern business enterprise concepts with data science concepts. Design thinking is the framework we will use to understand the process of designing and implementing AI solutions for business.

IBM Watson Studio is a data science platform that is designed for collaborative work in large enterprises. Although most of the case studies in this course can be completed without it, we will incorporate IBM Watson Studio into this course to allow students to understand how AI solutions are deployed and tested in large organizations.

If you are not familiar with design thinking or IBM Watson Studio, the resources below will jump start your understanding so you may successfully complete this course.

## Important points about IBM Watson Studio!

IBM Watson Studio is based on open source tools such as Python, R, Apache Spark, and Jupyter notebooks.

You will not have the problems of having to learn an entirely new framework, or of "vendor lock-in" caused by creating code and data that only runs on one system.

Watson Studio gives you a web-based tool to run all of your open source data science tools. The main advantage to using Watson Studio is that you do not have to spend a lot of time setting up environments on your own computer to run your tools. Another advantage of Watson Studio is that it makes collaboration much easier by allowing you to share code and data via Watson Knowledge Catalog.

Most of the case studies in this course may be run in Watson Studio or your preferred platform. However if you are serious about learning how data science applies in a large enterprise setting, use Watson Studio. In a large enterprise, no one works alone, and Watson Studio will make collaboration and model deployment much easier.

## Running the course notebooks in Watson Studio

All of the notebooks in these courses are written to run locally on your computer running a Jupyter notebook server. If you wish to run the notebooks in Watson Studio in the IBM Cloud, you will need to add some modifications to each notebook.

We have written some guidance on making these modifications and will provide a link to the guidance when each notebook is presented.

## An introduction to design thinking

This course uses a design thinking framework to help organize the process of applying data science in industry. If you are entirely new to the <u>design thinking process</u> then you should take the time to view IBM's 10 minute introduction before we get into applying it to data science.



This is not a course in *design thinking*. This course is focused on best practices in AI and how to assemble them into a workflow. If you interested in learning more about design thinking, please visit IBM's site for <a href="Enterprise Design Thinking">Enterprise Design Thinking</a>.