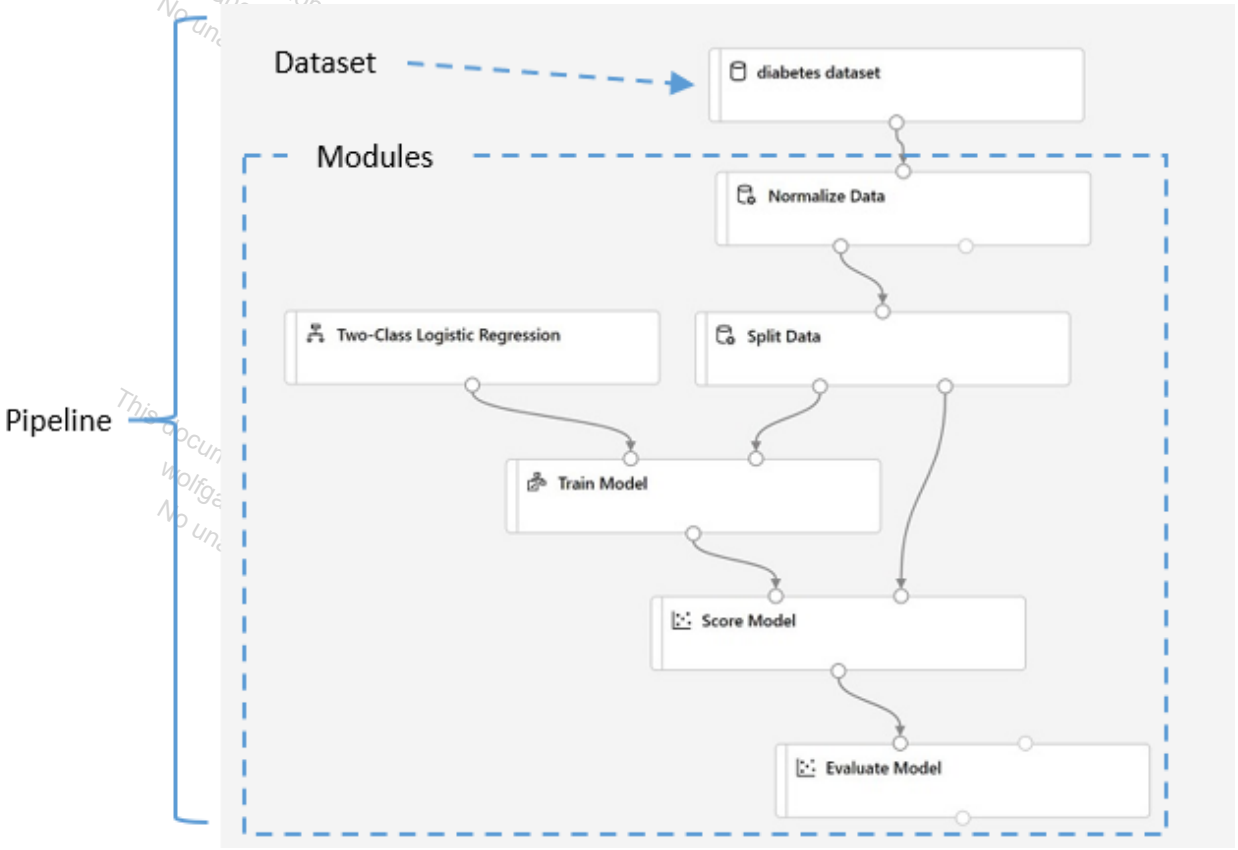
What is Azure Machine Learning Designer?

Azure Machine Learning Designer is a graphical environment for creating machine learning models, and publishing them as services that can be consumed by client applications.

In Azure Machine Learning Designer, you define a dataflow for training a machine learning model as a *pipeline*. This pipeline includes all of the steps that are required to ingest and process the data, before using it to train a model. Each step is independently executable, and can be run on any valid compute target. The pipeline will manage the flow of execution, starting compute targets for each step as required.



Most pipelines to train models begin with a *dataset* from which the training data is ingested, and then each step in the pipeline is encapsulated in a module with *inputs* and *outputs* through which the data flows.

The main benefit of using the designer is that it allows for “no-code” development of machine learning solutions through its drag-and-drop interface. The tool includes a wide range of pre-defined modules for data ingestion, feature selection and engineering, model training, and validation. Additionally, there are modules that enable you to add custom Python, R, and SQL logic to a data flow.

To run a designer pipeline, you must create a **Compute Cluster** in your workspace and specify it as the compute target for the pipeline.

Note: Don't worry too much about compute targets for the moment - you'll explore them in more detail later in the course.