

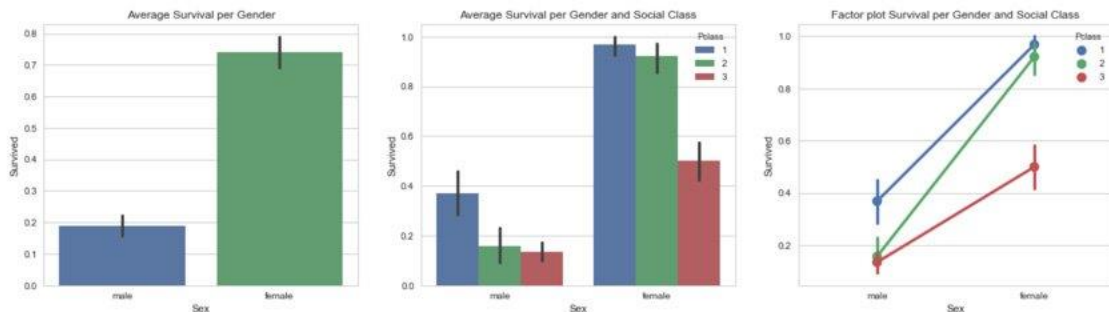
# Some Of The Topics Covered

Here's a taste of some incredible data science lessons you'll learn in Data Science .

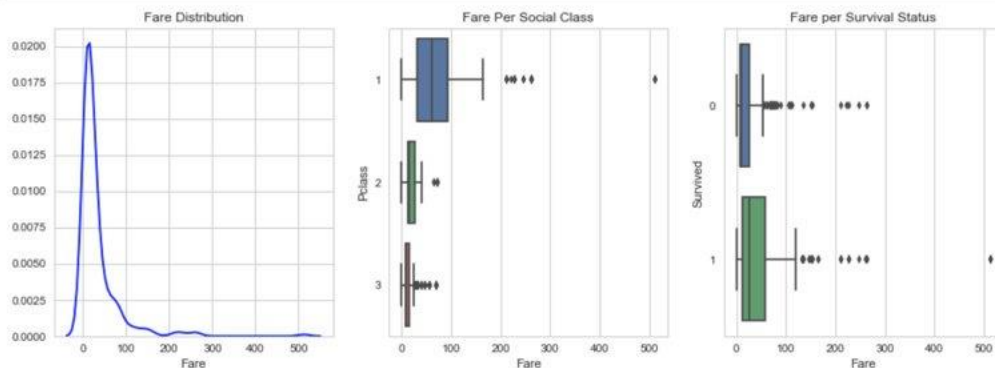
## Data Cleansing

The very first step of data science involves acquiring raw data and getting it into a form ready for analysis.

Learning how to diagnose your data for problems, dealing with missing values and outliers ensure quality results from your analysis. You'll apply all of the techniques you've learned by gathering data from different types (CSV, Excel, API).



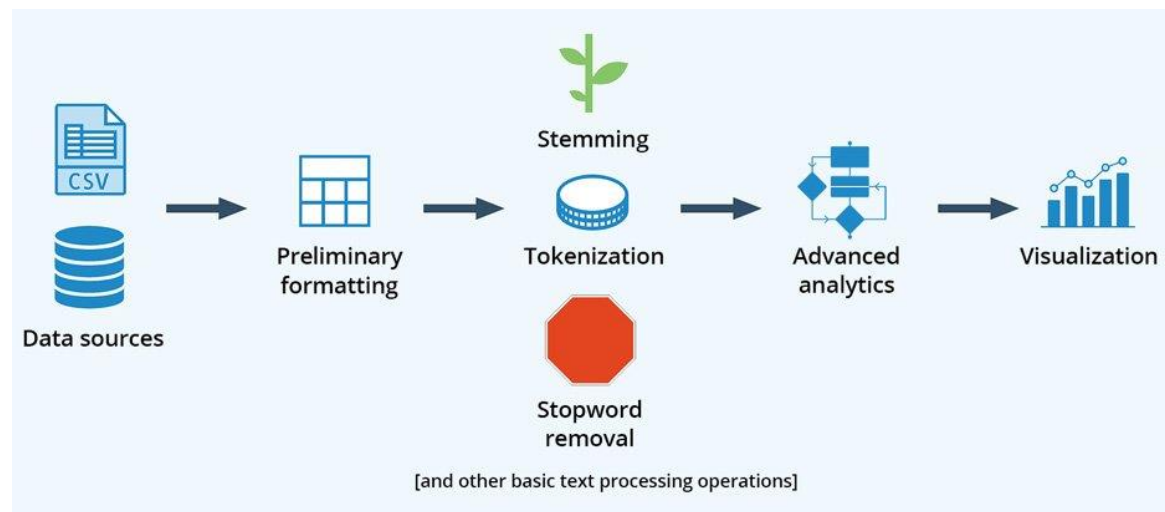
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In [15]: f, (g1, g2, g3) = plt.subplots(1, 3, figsize=(15,5))
sns.distplot(original_train_data.Fare.dropna(), ax=g1, hist=False, color='b').set_title("Fare Distribution");
sns.boxplot(x='Fare', y='Pclass', data=original_train_data, orient='h', ax=g2).set_title("Fare Per Ticket Class");
sns.boxplot(x='Fare', y='Survived', data=original_train_data, orient='h', ax=g3).set_title("Fare per Survival Status");
```



## Gathering External Data

Most data in the world do not come in a ready format. You'll learn methods & work with APIs (Application Programming Interface), to access data from Facebook and Twitter, and then build your own analysis around it.

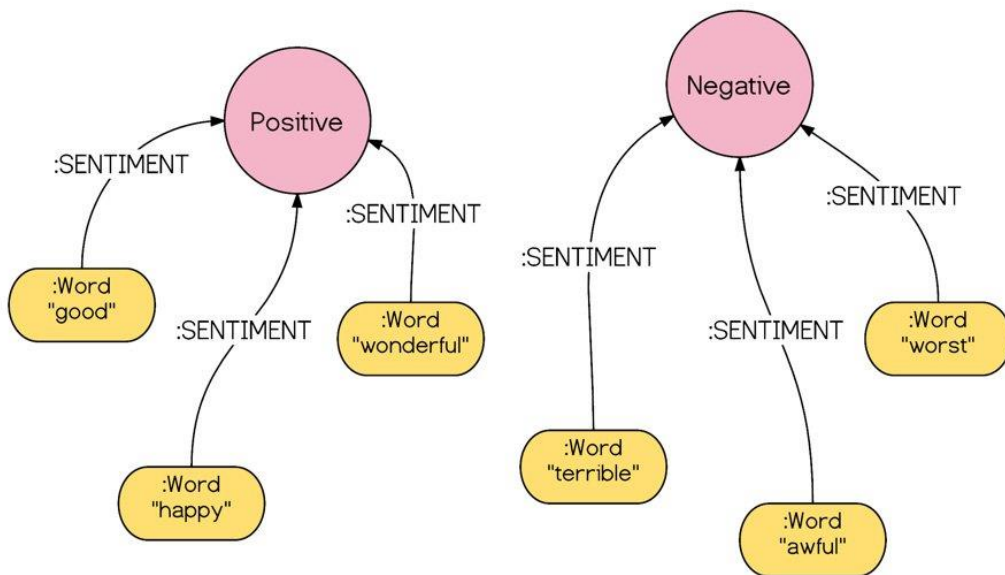
For cases where APIs are not available, (e.g. news articles) you'll learn how to BeautifulSoup (a Python library) to scrape information out of web pages, and turn them into an analysis-ready format.



## Sentiment Analysis

Sentiment analysis is an application of Natural Language Processing (NLP), text analysis and computational linguistics – to quantify subjective information. Here you will learn how to analyze sentiments in text data to understand the attitudes and opinions.

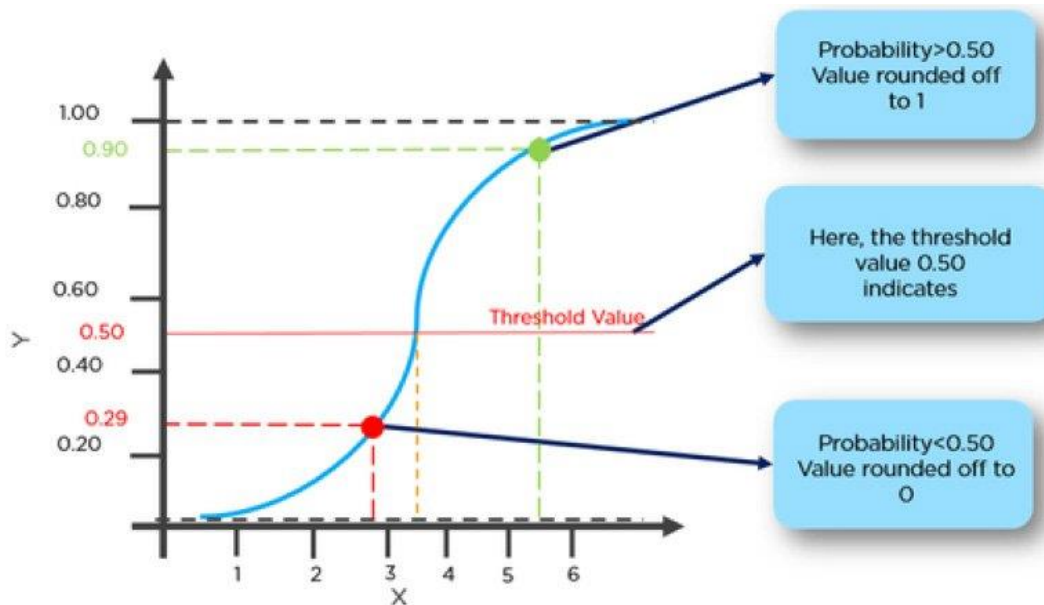
Then apply these techniques to extract relevant insights, from real data from Twitter, product reviews, news articles & more.



## Machine Learning

Machine learning is about teaching computers how to make decisions. Here you will learn how to extract features, build supervised and unsupervised machine learning models.

You will learn three key machine learning tasks: classification, regression, and clustering, to identify patterns and make predictions



# Forecasting

Here you will learn how to fit ARIMA models to time series data. First, you will explore the nature of time series data and fit them into various ARIMA models to simulate data.

Once you have mastered the basics, you will learn how to apply ARIMA models to various real data sets, to perform forecasting.

