## Decision Trees and Random Forests

In this Kernel we work through several methods to predict the survival of Titanic passengers, following the lead of Yassine Ghouzam, but ending up with our own---hopefully better---variables and models.

```
# Input data files are available in the "../input/" directory.
# For example, running this (by clicking or running the next cell) will list the files in the input directory
ls -lh ../input/
# Any files you save will be written in the current directory, to persist across sessions have them output to the /output directory
ls -lh .
# Install fastai v0.7 (v1 is still in development)
conda install -y -c pytorch -c fastai fastai=0.7.0
# Install Kaggle CLI
pip install -U kaggle
# Configure Kaggle CLI for your username and key
mkdir -p ~/.kaggle
echo '{"username":"YOUR_USERNAME","key":"YOUR_KEY"}' > ~/.kaggle/kaggle.json
# Download the Titanic data
kaggle competitions download -c titanic
# Unzip the data
unzip -o -q train.csv
unzip -o -q test.csv
# Install Graphviz
apt-get install -y graphviz
# Install dtreeviz
git clone https://github.com/parrt/dtreeviz.git /tmp/dtreeviz
cd /tmp/dtreeviz
git checkout master
git pull origin master
pip install -U .
```

```
total 4.0K
drwxr-xr-x 2 root root 4.096K Jan 1 1970 titanic
# conda environments:
#
base                  *  /opt/conda
fastai                   /opt/conda/envs/fastai
# Collecting package metadata (current_repodata.json): done
# Solving environment: done
# Collecting package metadata (repodata.json): done
# Solving environment: done
# All requested packages already installed.
# Collecting package metadata (current_repodata.json): done
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