Session 0: Probability Overview (OPTIONAL)

Text from book, available online: Urban Operations Research, Richard C. Larson and Amedeo R. Odoni.
Chapter 2. Including:
- Experiment, sample space, events:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.1.html
- Event probabilities: http://web.mit.edu/urban_or_book/www/book/chapter2/2.2.html
- Random variables: http://web.mit.edu/urban_or_book/www/book/chapter2/2.3.html
- Probability mass function:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.4.html
- Conditional probability mass function and independence:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.5.html
- Expectation: http://web.mit.edu/urban_or_book/www/book/chapter2/2.7.html
- Often used probability mass functions
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.9.1.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.9.2.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.9.3.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.9.4.html
- Probability density functions:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.10.html
- Conditional probability density functions and independence:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.10.1.html
- Expectation: http://web.mit.edu/urban_or_book/www/book/chapter2/2.10.2.html
- Often used probability density functions:
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.11.1.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.11.2.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.11.3.html
  http://web.mit.edu/urban_or_book/www/book/chapter2/2.11.4.html

Example videos:
- Probability spaces and random variables [0:00 - 1:49] and [4:15-7:01]:
  https://www.youtube.com/watch?v=DqGUwoz4d4M
- Continuous and discrete random variables; probability mass functions; probability density function [0:00-6:55]: https://www.youtube.com/watch?v=hDjcxi9p0ak
- Useful probability distributions: [0:00-5:30]:
  https://www.youtube.com/watch?v=8OaNOCblGZY

- Marginal distribution, conditional distribution, Bayes' rule, expectation and variance of random variables, properties of expectations and variances [0:00-6:52]: https://www.youtube.com/watch?v=CQS4xxz-2s4
- Independence, conditional independence, use of chain rule [0:00-15:20]: https://www.youtube.com/watch?v=XtniA_N63z4
- Law of total probabilities: [0:00-3:32]: https://www.youtube.com/watch?v=F3y8qupFfUs