Coursera Assignment 2

November 23, 2014

Franco D.
Student

Introduction

```
## Error: object 'opts_chunk' not found
```

We developped an app plotting some of the probability density functions available in R.

The parameters necessary for each distribution adapt to the distribution chosen. \

For example, if you want to draw a normal curve, the app asks for mean and sd. I you wnat to draw a Poisson curve, it asks for lambda.

Densities are drawn by generating observations (x) and calculating the density (d- function in R). Cumulative densities curves work by providing the plot with a the p- function.

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Probability Density Functions

R pseudo and parameters:

```
-     binom = size, prob
-     chisq = df, ncp
-     f     = df1, df2, ncp
-     norm  = mean, sd
-     hyper = m, n, k
-     pois  = lambda
-     t     = df, ncp
-     unif  = min, max
```

URL

http://coursera.shinyapps.io/densities

The next 2 slides are trying some of slidify new functionalities.

R Base

Which one is true about the Poisson distribution?

- Defined as the number of successes in a sequence of n independent yes/no experiments.
- Mean and Variance define the distribution, which is symetrical around the mean.
- Defined as as the ratio of two scaled chi-squared variates.
- The λ parameter is equal to the expected value of X and also to its variance.
- Defined as the sum of the squares of k independent standard normal random variables.

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R Base

What is the base R function or operator that concatenate 2 character vectors?

- +
- paste
- glue
- stick
- concatenate

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