RDM 102: The Instructor Experience

Tess Grynoch
University of Massachusetts Medical School

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RDM 102: The Instructor Experience

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Beyond Research Data Management for Biomedical & Health Sciences Librarians
Details

- Feb. 20 – Apr. 12, 2019
  - 5 content weeks
  - 1 catch up week
  - 1 final project presentation week

- NNLM Training Office based out of the University of Utah

- 35 Students

- Other Instructors:
  - Shirley Zhao
  - Margaret Henderson
  - Leah Honor
Objective of the Course

Provide an introduction to the support of data science and open science with the goal of developing and implementing or enhancing data science training and services at the students’ institutions.
Modules

1. Open Science and Data Science
2. Data Literacy
3. Data Wrangling
4. Data Visualization
5. Leadership
My Role as Instructor

- Develop data visualization module
- Primary instructor for data literacy and data visualization modules

Visualization should match the data’s story
My takeaways

- New tools: Moodle and Jupyter Hub
Week 2 Assignment

Calculating Mean, Median, Mode in R

In [2]:
#Use a hashmark to comment - this code will not run
#The first step is to import the data. We'll be using titanic passenger data in this demo.
titanic <- read.csv("titanic.csv") #In this function, I'm importing the data and assigning it to an object, titanic
#Which acts as a type of nickname for the data (I just added a comment to the end of a function's line!)

In [4]:
#Let's see what the titanic dataset looks like using the head function to look at the first 6 rows
head(titanic)

<table>
<thead>
<tr>
<th>PassengerId</th>
<th>Survived</th>
<th>Pclass</th>
<th>Name</th>
<th>Sex</th>
<th>Age</th>
<th>SibSp</th>
<th>Parch</th>
<th>Ticket</th>
<th>Fare</th>
<th>Cabin</th>
<th>Embarked</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>3</td>
<td>Braund, Mr. Owen Harris</td>
<td>male</td>
<td>22</td>
<td>1</td>
<td>0</td>
<td>A/5 21171</td>
<td>7.2500</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>Cumings, Mrs. John Bradley (Florence Briggs Thayer)</td>
<td>female</td>
<td>38</td>
<td>1</td>
<td>0</td>
<td>PC 17599</td>
<td>71.2833</td>
<td>C85</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>3</td>
<td>Heikkinen, Miss. Laina</td>
<td>female</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>STON/O2. 3101287</td>
<td>7.9250</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1</td>
<td>Furbelle, Mrs Jacques Heath (Lily May Peel)</td>
<td>female</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>113803</td>
<td>53.1000</td>
<td>C123</td>
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<tr>
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<td>0</td>
<td>3</td>
<td>Allen, Mr. William Henry</td>
<td>male</td>
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<td>0</td>
<td>0</td>
<td>373450</td>
<td>8.0500</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>3</td>
<td>Moran, Mr James</td>
<td>male</td>
<td>NA</td>
<td>0</td>
<td>0</td>
<td>330877</td>
<td>8.4583</td>
<td></td>
<td>Q</td>
</tr>
</tbody>
</table>

In [3]:
#We can also see all the data by simply typing titanic

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<td>S</td>
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My takeaways

• New tools: Moodle and Jupyter Hub
• Weekly feedback form and summary post
• Mixture of learning activities
• Synchronous, recorded office hours
• Starting module weeks on a Wednesday
Future improvements to the course

• More videos about how to use Jupyter Notebook
• More defined syllabus
• More complex data to work with for the data visualization assignment
• More examples/perspectives
• Moving office hours to Monday