Review

IMGD 2905

What are two main sources for data for game analytics?
What are two main sources for data for game analytics?

• Quantitative – instrumented game
• Qualitative – subjective evaluation

What steps are in the game analytics pipeline?
What steps are in the **game analytics pipeline**?

- **Game** (instrumented)
- **Data** (collected from *players* playing game)
- **Extracted data** (e.g., from scripts)
- **Analysis**
  - Statistics, Charts, Tests
- **Dissemination**
  - Report
  - Talk, Presentation

What is **population** versus **sample**?
What is population versus sample?

- Population – all members of group pertaining to study
- Sample – part of population selected for analysis

What is probability sampling?
What is probability sampling?

- Probability sampling – sampling considering likelihood of selection
  – Likelihood as part of population

What is a Pareto chart? When used?
What is a **Pareto chart**? When used?

- Bar chart, arranged most to least frequent
- Line showing cumulative percent
- Helps identify most common, relative amounts

When should you *not* use **pie chart**? 

[https://goo.gl/S7qDTj](https://goo.gl/S7qDTj)
When should you *not* use pie chart?

- When too many slices

When should you *not* use pie chart?

- (Often) when comparing pies
What is a heat map? Describe an example

• Map where data represented as colors
Provide three guidelines for good charts

1. Require minimum effort from reader
2. Maximize information
3. Minimize ink
4. Use commonly accepted practices
5. Avoid ambiguity
Which **Measure of Central Tendency** to Use? Why?

What are **Quartiles**?
What are **Quartiles**?

Three values that divide population into four equal sized groups

<table>
<thead>
<tr>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>24, 25, 26, 27, 30, 32</td>
<td>40, 44, 50</td>
<td>52, 55, 57</td>
<td></td>
</tr>
</tbody>
</table>

Describe how to Compute **Variance**
Describe how to Compute Variance

1. Compute mean.
2. Take a sample and compute how far it is from mean. Square this.
3. Repeat #2 for each sample.
4. Add up all.
5. Divide by number of samples (-1).