

## Response Summary:

### 1. Student Information \*

<b>First Name</b>	Connor
<b>Last Name</b>	Colbert
<b>Major</b>	Game Development and Design
<b>Course</b> (e.g. CGT 270-001)	CGT 270-003
<b>Term</b> (e.g. F2019)	SP2022

### 2. Email Address \*

(University Email Address is required.)

colberj@purdue.edu

### 3. Visualization Assignment \*

- Lab Assignment

## Analyze

### 4. Basic Descriptors: for each data component from the Parse Worksheet, identify basic descriptors (basic statistics). Explain \*

Year: The year in which the data was gathered/recorded

Punxsutawney Phil: If a record is indicated, it tells if a shadow was seen or not

February Average Temperature: The average temperature across the Northeast and Midwest in February

February Average Temperature (Northeast): The average temperature across the Northeast in February

February Average Temperature (Midwest): The average temperature across the Midwest in February

February Average Temperature (Pennsylvania): The average temperature in Pennsylvania in February

March Average Temperature: The average temperature across the Northeast and Midwest in March

March Average Temperature (Northeast): The average temperature across the Northeast in March

March Average Temperature (Midwest): The average temperature across the Midwest in March

March Average Temperature (Pennsylvania): The average temperature in Pennsylvania in March

### 5. Categorize: consider what is similar and what is different? Categorize the data. Are the variables categorical (normal, ordinal, or rank). Are they quantitative (discrete or continuous)? Show categories. Explain. \*

The data is largely structured by time, output, and temperature. It's almost all continuous, quantitative data.

### 6. Temporal: is the data streaming data? How is it stored (all at one time, over several years in years, days, minutes, seconds)? Explain. \*

It is streaming data as it is stored across many years. For each year, Phil's shadow result is recorded and the average temperature across the months.

### 7. Range and Distribution: what is the distribution of the data? Few values, small size, evenly spread, sparse or dense? Explain. \*

The distribution of the data is not very large. The data is evenly spread and dense. The largest standard deviation for the temperatures was ~5 and the smallest was ~3.

## Evaluate

**8. Questions and Assumptions: list at least 3 questions you plan to answer with the data or list the questions if they were provided. Must be complete sentences and end in a question mark. What assumptions are you making? \***

<b>Question 1</b>	How much more closely does the prediction correlate with Pennsylvania's weather in comparison to other regions?
<b>Question 2</b>	What percentage of the time does Phil correctly predict the seasonal change?
<b>Question 3</b>	Which decade was Phil the most accurate?
<b>Assumptions</b>	I believe there is no real correlation between Phil's response and the seasonal change. There may still be a slight correlation; however, that does not mean there is a direct connection.

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