

SAW UF #datastory Phosdex Summary 1 - Jan 16, 2020

Summary of Phosdex Datastory:

Stat Cat wants to find the Fountain of Youth. Because he has discovered some data regarding the appearance of Illudium Phosdex (IP) in Florida Water Systems. A story of this substance has been passed down through his family for generations; this substance is the key to eternal kitty life.

Data Dog sees Stat Cat using old, inefficient and eventually unethical methods to gain his results. Data Dog using correct data analysis corrects the story and invalidates the hypothesis.

Introductory notes and suggestions:

- Perhaps Stat Cat is manic and sloppy. Data Dog is obsessed, cold and ethical. Moods can swap, but keeping a contrast is important to keeping the story moving and comprehensible.
- Characters exhibit specific *cat and dog behaviors* occasionally, make jokes about the other's behaviors and habits.
- Language of each character needs to be specific to each.
 - Word balloons can/should be different. Data Dog rectangular (though soft), Stat Cat more wild.
- Suggestion that Stat Cat is searching not to merely validate family story or redeem family honor, but also meet or return to a long lost ancestor. "Great great great grandfather was lost and presumed dead looking for the fountain of youth. What if he is still alive...? He'd be a billion years old... ! Or: maybe my grandfather really wasn't my grandfather but my great great great great great great grandfather who had lived forever. Where is he now?"
- Suggestion that Data Dog thinks it would be cool to live forever and thus seeks to validate the hypothesis. When the data disproves it, she no longer wants to live forever.
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Scene breakdown with notes of potential alterations, embellishments, jokes, etc.

SCENE 1:

Stat Cat's work room with old Univac computer and family photos, **litter box / kitty cushion**. He is spitting out papers, cutting pasting. He is looking for the evidence that IP is nearby.

Data Dog see his old style of working, finds it funny. Stat Cat convinces her that living forever would be cool (*Don't you want to live forever?*). She begins to work on the computations, and soon discovers a way to work.

Possible jokes, motifs, visualizations, story ideas (some of these are global, could go anywhere) :

- Reference: Sherman and Peabody, Mad Scientist
Use Data Dog reaction shots.
- Stat Cat wants to FIND/meet ancestor as well as vindicate family honor
- Each character has a visualization of what it means to live forever...
- It's about the MODERN ERA vs the FELINE TOUCH
- **DATA DOG NEEDS A FOIL? - Talking to Rubber CHICKEN**
- Houston, we have a problem, break 4th wall...
- Stat Cat holds up LYING WITH STATISTICS BOOK
- He's just licking his own butt! Hey, that's species-ist!!
- Stat Cat family members? Garfield-like, Bill the Cat, etc.
- Likewise, Data Dog's text book is blurbed by Scooby Do, Gromit, etc.

SCENE 2:

Stat Cat is napping (or something.)

Data Dog finds Stat Cat's two data sets, **US Census Data** and **environmental measurements** of Illudium Phosdex. And begins working on the data.

Note: There are very many specifics learning objectives here.

Long sequence of Data Dog working the data, and editing down the results

Switches from "Console View" to "Spreadsheet View"

#EXERCISE based on above data word- Import and Summarize the Illudium Phosdex environmental file**

Possible jokes, motifs, visualizations, story ideas:

- If we do exuberant Data Dog “doing battle” then we do it with a funny image of biting rubber chickens, dog toys, etc.

SCENE 3:

Data Dog working more.

Stat Cat is looking at old photos, etc. His connection to his family’s story is firmed up here.

#Exercise

(1) Set working directory using setwd()

(2) Import data using read.csv() and name the dataframe as phosdex2018_df

(3) Summarize the structure of data using str()

(4) Visualize the data using View()

Possible jokes, motifs, visualizations, story ideas:

- What is this, a hairball?

SCENE 4:

Data Dog begins making an analysis plan. Stat Cat overhears this and returns to the game to explain and take over.

Stat Cat explains his family has been collecting this kind of data for years.

Merging of data sets based on overlapping parts or points

Need to merge two datasets into one.

Stat Cat: “A simple correlation test should do the trick!”

Data Dog begins while Stat Cat is packing bags.

Merging and more.

Three variables now in one dataset

Learning Objective: 9 different functions.

Ginsu Knives...

#EXERCISE

Possible jokes, motifs, visualizations, story ideas:

- Stat Cat: “Are you as bored by this as I am?”
- Stat Cat licking paws and bathing
- Stat Cat chasing tail around (tail () function)
- Stat Cat, when explaining his family has been working on this for years, we “pan” across old photos of LOL Cats or other similar ridiculous cats.
- TOM SUGGESTION: (4 LOL CATS , with strainer on head, cat in box, cat in rug, cat in toilet) (HOW DO YOU MERGE THEM? In rug, in toilet, in box with strainer on head, etc.)
- Stat Cat sees that: “GRANDPA!!”
- THESE ARE THE TOYS IN THE TOY KIT?? ***COMMERCIAL BREAK? GINSU KNIVES - LINCOLN LOGS—
- Words on screen can be literal, images can be funny.
 - IE, **DataDog:** Now that I have everything in one dataset (FOOD BOWL), I can use a whole set of functions to calculate descriptive statistics among our three variables (FLAVORS- BEEF, CHICKEN, FISH) of interest. This is important because these numbers will help us decide the appropriate inferential statistical methods to use. (GRAVIES.)
- Is a function a RECIPE? (continuing on food bowl motif...)

SCENE 5:

Data Dog hist() summary() and plot() functions

#EXERCISE

Scene 6: Data Dog reveals Scatterplot showing no correlation of the kind Stat Cat was seeking
Stat Cat disappointed.

Verification

#EXERCISE

Possible jokes, motifs, visualizations, story ideas:

- Stat Cat packing cat-related objects for trip to Fountain of Youth

Scene 6:

Stat Cat is surprised and unhappy. Goes to find other “missing” data.

Final student **#EXERCISE**

Possible jokes, motifs, visualizations, story ideas:

- **Data Dog: You just want to get to the fun stuff!**
- **Garbage in, garbage out!**
- **DATA PROVINENCE . Who did the data ?? Who touched it? Etc...**

Scene 7:

WRAP - UP

Possible jokes, motifs, visualizations, story ideas:

- **Data Dog no longer wants to live forever. Remembers all bad things about being a dog. (lost favorite bone, sniffing wrong butts)**
- **There's no correlation, you're roadkill!**