Clueless Idiots

CPTS 415

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Project Statement for Milestone 2

Clueless Idiots

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In this report you should focus on the datasets description, dataset preparation and

formatting, description of data collection tools you use. Typically, the process

involves writing a parser to extract the information you need, using data structures

to store the data in memory and uploading / ingesting the date to a database of

choice. Your report should cover the following subtopics and answer the questions

Listed:

1. Data Model and Database tools:

• Describe the data model you will be use to represent the dataset?

Justify why the data model is an appropriate one for the dataset.

• What database will you be using to store the data?

2. Dataset Statistics:

• How large is the dataset you will be dealing with? Report the

following statistics for your datasets:

i. If you are using a key-value data model, how may key-value

pairs? How many unique keys? What are the data types for keys

and values? Are these basic data types or data structures?

What’s the physical storage size (in KB/MB/GB).

ii. If you are using a graph data set: how many nodes and edges?

How many attributes are there for the nodes/edges? Is it

labelled? Directed? What’s the average degree of the nodes?

What’s the density of the graph/network data? What’s the

physical storage size (in KB/MB/GB).

iii. If you are using a document data model, how may documents

does your model contain? How many elements / sub-elements

does each document has? What are the attributes? What’s the

physical storage size (in KB/MB/GB).

iv. If you are using another non-relational data model, describe

your dataset statistics based on this non-relational data model.

What’s the physical storage size (in KB/MB/GB).

Note: You would need to present and demonstrate a ‘Big Data’

solution. This means that you should be choosing distributed

database / datastore that are readily (freely) available. For this reason,

I recommend against choosing a Relational database.

• In data processing, you may need to develop a parser to transform the

raw data into the format/tools you are using. Briefly describe the

functions of the parser you have implemented so far.

• You should have successfully loaded the data into the database

management software of your choice. What’s the estimated loading

time, if you have the result?

3. Data structure and auxiliary structure.

• What data structure have you developed of your own to represent the

data, if any? For example, if you are using graphs, put up pseudo code

that represent the data. If you are using a collection to represent the data,

provide pseudo code on collection definition. Do you use any types of

indexes? If so, briefly describe the indexes you developed for fast

access the data.

4. Project Plan and Contributions:

• List each team member’s contribution in Milestone 2.

• What’s your plan for Milestone 3?