Repository and Mining of Temporal Data

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Goals

To simplify data collection and analysis into one location.

Create a program that analyzes data and compares it to data already stored in the system and visualize data for easy explanations.

Approach

There are three questions the program answers:

- Q1: Is there a significant change in the target variable?
- Q2: What are the top-k variables that affect the target?
- Q3: What is the value of the next timestamp?

Novel Features

The program collects, stores, and analyzes data in one place.

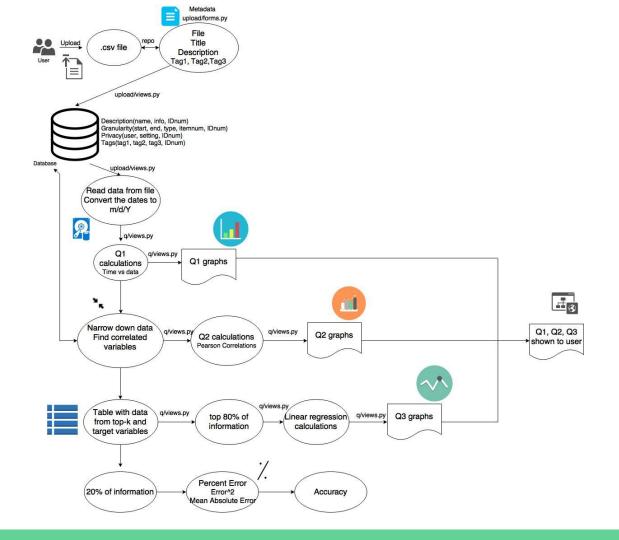
Program will be able to convert uploaded data into a specific format for users and the program to use.

Visualization for every question answered.

Optional download of analysis.

Technical Challenges

- Lack of experience with Django and a lack of documentation
- Website Display
- Optimization and accuracy with results; LocalHost
- Issues with implementing NarrowData and using a Database to get the Metadata
 - Description, Tags, File name, etc



Progress Summary

Module/Feature	Completion %	То Do
Main Page	90%	Webpage Design, Redirect navigation bar
User Upload	85%	Webpage design, metadata forms for user, redirect to Q1, Q2, Q3
Q1	90%	Website Application
Q2	60%	NarrowData.py, ParseData.py, Website Implementation, Database
Q3	0%	Plan, Implementation, Website, Testing
NarrowData	70%	Refine method of NarrowData, research on how to handle different granularity, finish parsing and testing
Database	50%	Rework database, connect database to Django, web application

Task Matrix - Milestone 4

Task	Jessica	Siomara
Q3	75%	25%
NarrowData	85%	15%
Django Website	10%	90%
Save File Uploads	25%	75%
Database Input Handling	50%	50%
Improve Current Code	30%	70%
Evaluation Document, Presentation	50%	50%

Milestone 5 and 6

Milestone 5 (Mar. 19):

- Q2 with k-number of variables picked by user
- Improve Visualization
- User Registration, Public/Private tags
- Q3 Add additional forecast points
- Q3 app on website
- Search for past results
- Download uploaded files of official data
- Testing
- Evaluation Document, Presentation

Milestone 6 (Apr 16):

- Final Design of website
- Save results in account (provider/user)
- Optimization
- Test/Demo Entire System
- Create User Manual
- Create Demo Video
- Evaluation Document, Presentation