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Group - Keyboard Warriors
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Document that keeps track at what was accomplished and discussed during group meetings

Group Meeting Documentation

Prior to 1st Meeting

Cameron set up a group channel on Slack

Group decided to use Discord instead of Slack for meetings/organization

Cameron set up a Discord server for the group

JT set up a Google Calendar to help organize the team's schedules to better coordinate our available meeting times.

Meeting 1: (1-13-21) 4pm-5:30pm

Distributed functions amongst team members (arbitrarily for now, will adjust as we get more into the project and see the weight of individual pieces)

Assigned "roles"

Set up Trello, Google Drive Folder, Bitbucket Repo

Basic tutorial on how to use Trello

Cameron set up Trello/Bitbucket bots on the Discord server to better track project updates made by group members

Meeting 2: (1-14-21) 12pm-1:30pm

Brainstorm and decide upon team name

New team member, got him caught up to speed on what we discussed in the prior meeting and gave him a rundown on the resources we've set up (e.g. Trello, Discord, etc)

Discussed project design - Went over Noah's initial Tree code implementation

Meeting 3: (1-17-21) 10am-11:45am

Going over project PDF's

Redistributing workloads around roles, documentation, and writing functions

Created plan to use "Task and Assignment Breakdown" excel spreadsheet in conjunction w/ Google Drive Folder to track each members Task Status'

Created plan for a Group Standard regarding Docstrings in code

Discussed the amount of information to use in docstrings/comments and decided to expand upon the simplicity used in docstrings/comment in other documentation locations

Cameron and Nick unavailable for meeting. JT will get in contact to make sure they're informed on what we discussed today

***Decided on a weekly meeting time: Wednesdays at 4pm*.** Impromptu meetings will continue to happen, but all 5 are available to be "in the room" together on Wednesdays based on all of our busy schedules

JT + Noah planned meeting for tomorrow (1-18-21) @ 11am to start work on SDS

Looked at the timeline for group project + midterm, planning to get group project as complete as possible earlier rather than later to leave time to study for midterm. There are only 3 more weekly meetings before the due date. Will set up benchmarks for completing certain tasks at the next weekly meeting (1-20-21)

Meeting 4: (1-20-21) 4pm - 5:30pm

Agenda:

Briefly skim the changes to Roles/Responsibilities to make sure we're all on the same page

Look back over our list of questions for Prof Flores, add any additional questions, and (most importantly) highlight the questions of highest priority to ensure the best use of our time w/ Prof Flores. *We can schedule subsequent meetings, but this meeting will only be*

20 minutes... so let's make the most of it

Set goals/benchmarks for each member to complete before the next weekly meeting

Noah found functions that weren't previously assigned. These functions were then noted and assigned to team members.

Collected list of phone numbers if we have difficulty contacting anyone

Discussed the following

2nd weekly meeting (potentially friday afternoons)? concept is to hold space for the group to gather and work on their individual tasks during a scheduled time when we can ask each other questions in real time

Architectural style (**object oriented** vs functional)? dictionaries vs arrays?

NumPy module for data analysis and preprocessing

Repo organization - creating folders for time series files and tree save files

Decided to us Nosetests for our test suite(s)

Discussing time series class and how to process the .csv files

Motivational quote of the day:
Computer science is no more about computers than astronomy is about telescopes

Meeting 5: (1-21-21) 11:50am-12:20pm "Progress Meeting 1" w/ Prof Flores

Discussed current progress, how we assigned roles and what responsibilities we've tentatively given to each member. Got answers to questions we had in "Questions" doc here in the google drive folder under "Week 1"

Meeting 6: (1-27-21) 3:30pm-5:30pm

Discussing how to store info for the application. Talked about the benefits of using Pandas.

Brainstorming structure of the architecture. Functions as part of the time series object? Leaning

towards having them as standalone functions so that when we execute pipelines in the tree we can pass it the time series object and have it used as an argument for each of the functions called in the pipeline.

Talking about how to execute pipelines. Noah walked us through his implementation of how the input functions (that a user is calling) would be called in his code.

Discussing how to handle functions with multiple parameters, and how to cleanly/efficiently handle cases of functions with multiple parameters. Differing opinions, everyone will brainstorm how to handle this and we'll present our ideas in the next meeting.

Scheduled an additional group meeting for this week to grind out a significant amount of the remaining needed code. (Friday 5pm-10pm)

Decided to scrap the idea of using a time_series object. Reasoning is to remove a layer of abstraction from the code. Instead of storing a Pandas dataframe inside of a time_series object, we've decided to pass the Pandas dataframe directly to functions as an argument.

Meeting 7: 2nd group meeting w/ Prof Flores (1-29-21) 3pm-4pm

Got answers to all questions in "Week 2" of "Questions" google doc.

Meeting 8: (1-29-21) 5pm-10pm

Reviewed info from meeting w/ Flores.

Discussed how we're going to pass multiple arguments in functions. Decided we're not using a list.

Talked about changes to a few function declarations. Keeping list in "Documentation Specs" under "FOR NOAH". Continued to add to this list throughout the meeting.

Created nosetests folder/files and did a quick tutorial for the group on how to implement/use nosetests for testing suite

Discussing how to make each person's functions work cohesively within Noah's tree structure (specific example: functions checking for improper input - Tree will not check for invalid inputs to specific functions upon calling Execute)

Troubleshooting/Debugging functions and nosetests as a group

Determined some of the functions that will be returning something *other* than a time series (they'll need to be handled differently for Noah's tree structure). Continued to add to this list throughout the meeting.

Cameron will be taking over the functions mlp.fit and mlp.forecast

Agreed on a standard for the application: the tree will be checking between "something" or None, but will not be checking what the "something" is, this type checking will be handled by individual functions.

Meeting 9: (2-1-21) 5pm-9:30pm

Each member briefed the group on their progress and what they still have to do. Specifically: what functions haven't been started yet, what functions still need to be tested, and which functions still need test cases written.

Placed a priority on finishing functions before worrying about finishing writing/passing test cases. Made a list of functions that haven't been started yet. Will get to testing later in the meeting if we get that far.

Discussed some of the PDF's in "Project Information", added question to "Questions" doc to clarify w/ Prof Flores regarding how strictly we'll need to follow both the "Comment Your Code" PDF and the "Presentations" PDF.

Figured out a way to represent the return value for design_matrix and agreed upon the following representation:
Tuple of 2 Numpy arrays (orange and green) which each contain multiple numpy arrays
= ([[1,2,3], [2,3,4], [3,4,5], … []], [[4,5], [5,6], [6,7], … []])

Decided we'll need another function that can take an mlp.forecast and turn it into a time series. This way we'll be able to plot it w/ our plotting functions and save it w/ our write_to_file function.

Wrote a standard for checks that each function needs to be making. Created "Function Checks" document in google drive folder to document these checks.

Meeting 10: (2-3-21) 5pm-8:30pm

Groupthink to problem solve git commit issue

Found "lost" function in old commits on bitbucket

Discussed Progress Meeting 2 w/ Prof Flores, JT will email Prof to request time pushed back to accommodate for group's availability

Reviewed application dependencies in requirements.txt and confirmed it is complete

Identified individual functions that still need to be tested. Writing tests for these functions before testing the system as a whole.

A few more functions still need to be tested, we decided to use the rest of the time during the group meeting to press on to other bullet points. The remaining functions are documented in "Agenda for 2-1-21 and 2-3-21".

Topics to touch on near the end of meeting:

> *Could use help determining what other documentation still needs to happen, trying to formalize a list*
>
> *Discuss presentation, plan how to present*
> Created a "presentation.txt" doc and brainstormed things for our presentation, grabbed some bullet points from the Presentations.PDF, added some questions for Prof Flores to ask during Progress Meeting 2
>
> *discuss when to meet next / what still needs to be done*
> *Finish testing, prepare presentation, complete documentation*
> *If there's time: more functionality for reading_in_files, more functionality with plotting*
>
> *Game plan for Progress Meeting 2*
> Added questions for Prof Flores in "Questions" doc

Meeting 11: (2-4-21) 12:20pm-1pm "Progress Meeting 2" (3rd meeting w/ Prof Flores)

Discussed current progress, what we still have to do, and got answers in our "Questions" doc for "Week 3"

Meeting 12: (2-8-21) 12pm-2pm (nick unable to make meeting)

Priorities for today/tomorrow:

Work distribution for the SDS: Noah is on section 4.1 (tree module), River is on section 4.2

(preprocessing module), Nick is on section 4.3 (visualization module), Cameron is on section 4.4 (forecasting module).

Wrap up “commenting your code” for individual functions. Here’s what Prof Flores had to say when I asked how closely we’d need to follow the “CommentYourCode.PDF” file from canvas: “ Define what every var is/represents. Description of what function performs (and how). Brevity is ok.”

Integration tests: Nick, Cameron, and River will need to meet w/ Noah individually sometime today/tomorrow to make sure their functions are integrating properly into the tree. He can’t do this part alone and needs to have 1-on-1 time with each of you.

Noah has filled out the installation guide and the README (both on bitbucket). JT will be running the install instructions on his machine to simulate what a user/grader will be doing in order to “test” the install instructions.

Worked out a couple bugs in test cases, notably an indexing error in design_matrix. Still need to figure out how to fix an issue with mlp_model

Meeting 13: (2-9-21) 12pm-2pm

Discussed priorities for each member in order to shoot for our new goal to finish the majority of remaining work by tonight.

Added items to “Agenda (final??)”