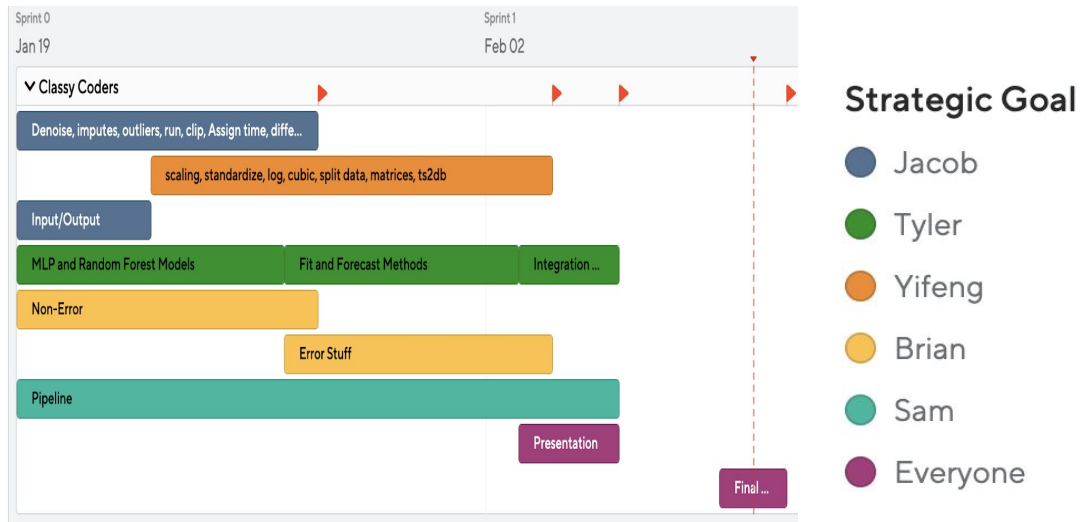


Initial Project Plan

Project Plan

- Organization: Adhocracy group structure
 - Jacob Rammer: File input / output & preprocessing
 - Sam Peters: Tree transformation and tree methods
 - Tyler Christenson: Modeling and Forecasting
 - Yifeng Cui: Preprocessing
 - Brian Gunnarson: Stats and visualization
 - Documentation: All
- Work between team members is split by component of the project (i.e. one person did the transformation tree, another person did modeling and forecasting, etc.)
- Decisions made by the group as a whole unless it has to do with specific functionality between two components, then the group members assigned to those specific components will come to an agreement
- Team Meetings: Team meetings were conducted over Zoom. During these meetings we discussed progress as well as pair programming.
 - Meeting 1 (Jan 18, 2021, 5-6pm): Initial meeting to establish roles, divide functionality, and come up with questions for our first meeting with the professor
 - Meeting 2 (Jan 27, 2021, 5-5:30pm): Progress check-in for each person
 - Meeting 3 (Feb 1, 2021, 5-6pm): Progress check-in. Combine some parts. Those who were done with a large part of their section offered help elsewhere. Discussed future plans.
 - Meeting 4 (Feb 3, 2021 5-6:50pm): Come up with questions for our second meeting with the professor.
 - Meeting 5 (Feb 4, 2021 6-10pm): Integration of all components with bug fixes. Worked on project presentation. Came up with a working demo to show the class.
 - Meeting 6 (Feb 9, 2021 5pm-12am): Collaborative work on documentation. Progress update on last elements of the code. Final wrap-up/putting it all together.

- Communication: Group communication was done over Zoom and in Slack.
- Work breakdown and milestones



- Box 1 - Denoise, imputes, outliers, run, clip, Assign time, difference: Jacob Rammer. Final completion date by Jan 27, 2021
- Box 2 - Scaling, standardize, log, cubic, split data, matrices, ts2db: Yifeng Cui. Final completion date by Feb 3, 2021.
- Box 3 - Input/Output: Jacob Rammer. Final Completion date by Jan 22, 2021.
- Box 4 - MLP and Random Forest Models: Tyler Christenson. Final Completion date by Jan 26, 2021.
- Box 5 - Fit and Forecast Methods: Tyler Christenson. Final Completion date by Feb 2, 2021.
- Box 6 - Integration with preprocessing and visualization: Tyler Christenson. Final Completion date by Feb 5, 2021.
- Box 7 - Non-Error: Brian Gunnarson. Final Completion date by Jan 27, 2021.
- Box 8 - Error: Brian Gunnarson. Final Completion date by Feb 3, 2021.
- Box 9 - Pipeline: Sam Peters. Final Completion date by Feb 5, 2021.
- Box 10 - Presentation: Everyone. Final Completion date by Feb 5, 2021.
- Box 11 - Final Delivery: Everyone. Final Completion date by Feb 10, 2021.

- Monitoring and Reporting: We will be monitoring everything through weekly meetings and tracking when exactly individual parts of the project are done using GitHub. Additionally we will try to stick to the road map provided above in the “Work Breakdown and Milestones” section.
- Building Plan: Each person will follow the project specification for their own individual components and stay on schedule with the road map provided in the “Work Breakdown and Milestones” section. When they are all done, we will work on integrating each part of the system together as a whole.
- A Rationale for the Plan: We decided to split the project into these parts since they all seem to work somewhat independently from each other. This makes it easier for testing individual components to make sure they’re working properly before the integration stage.
- Risks included problems with integration between parts, and the potential for lack of communication about software changes
 - We reduced these risks by actively communicating changes on Github and we collaboratively worked to integrate each part

SRS

See SRS.pdf

SDS

See SDS.pdf