## **Initial Project Plan**

## **Project Plan**

Organization: Adhocracy group structure

Jacob Rammer: File input / output & preprocessing

Sam Peters: Tree transformation and tree methods

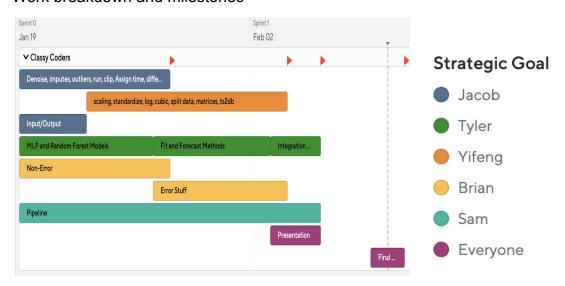
Tyler Christenson: Modeling and Forecasting

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.
- 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.
- o 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

## <u>SRS</u>

See SRS.pdf

## <u>SDS</u>

See SDS.pdf