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Sprint Meeting Minutes

Sprint 1

Sprint Planning

20190122 : Sprint 1 Planning Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus, Prof. Steven Luis, Dr Miguel Alonso, Team of graduate students.

Start time: 11:00am End time: 12:30pm

After discussion, the velocity of the team were estimated to be 50

Our goal for this sprint is to familiarize ourselves with the technologies that the team of graduate students used to get the data and crea te their data visualizations. We Also plan on creating a rough sketch of the user interface and decide on the technologies required for the implementation of the web application.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.



The team members indicated their willingness to work on the following user stories.

- Tomas Ortega

 ₩FMG-13 User Interface DONE

 ₩FMG-18 Create a template for organizing the graphs DONE

 ₩FMG-17 Create a Navigation Bar DONE

 ₩FMG-12 Display data as a line plot DONE
- Serge Metellus
 - WFMG-2 Display Distribution of data DONE
 WFMG-3 Filter data by time. DONE
 WFMG-4 Organize charts into columns to identify trends DONE

20190123- Daily Scrum

20190123- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

@Tomas Ortega:

- What was done since the last scrum meeting?
 - I have been reading the work of the graduate students and how they analyzed the data. I'm also familiarizing myself with the
 technologies that they have used in the past.
- What is planned to be done until the next scrum meeting?
 - I plan on working on the web application and the user interface side of the problem. I also plan on looking at the different data sets and search for an API and see if they exists for the desired data sets.
- · What are the hurdles?
 - No impediments so far.

@Serge Metellus:

- · What was done since the last scrum meeting?
 - I have been getting familiar with Jira software and setting up everything needed to begin the project.
- What is planned to be done until the next scrum meeting?
 - i plan on reading the work of the graduate students and their analysis of the data. I also plan working on the database and backend side of the problem.
- What are the hurdles?
 - · No impediments so far.

20190124- Daily Scrum

20190124- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I have been trying to learn pandas to manage the data and bokeh to be able to visualize it in python. I have started the implementation of a flask app for the user interface.
- What is planned to be done until the next scrum meeting?
 - I plan on learning more about panda and have at least one graph integrated with the user interface.
- · What are the hurdles?
 - learning about panda and numpy seems to be challenging since I'm not used to working with data in this format.

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been reading the work of the graduate students and their analysis of the data. I have also been familiarizing myself with technologies needed for data structures in python to begin analyzing the data.
- What is planned to be done until the next scrum meeting?
 - I plan on learning more about the technologies and i will continue to write code to analyze and display the data.
- What are the hurdles?
 - I am unfamiliar with the format in which the data is written so analyzing it with technologies that i am also not familiar with seems to be a little challenging.

20190125- Daily Scrum

20190125- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I've been working on an interactive bokeh app for visualizing some of the data from the DB1b database. I'm also looking into
 other data analysis websites to see how they are structured and to get some inspiration for our own user interface.
- What is planned to be done until the next scrum meeting?
 - I plan on working on the bokeh application and integrate it with flask eventually to form the user interface.
- What are the hurdles?
 - no impediments so far

Serge Metellus:

- What was done since the last scrum meeting?
 - I've been working on analyzing and filtering data from csv files using python and its data science technologies. I have been
 doing research on the different data science technologies in python and how to incorporate them in our application
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on the application and continuing to learn and incorporating the different python data science technologies in our application.
- · What are the hurdles?
 - Technologies like pandas and numpy seem to be challenging to learn and use.

20190128- Daily Scrum

20190128- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I have been working on a dash application for the ui. I decided to go with dash for the user interface because it has everything we need, it works on top of flask and uses react for the front end which is very nice.
- What is planned to be done until the next scrum meeting?
 - I plan on having a rough sketch of the ui for the next daily scrum meeting.
- What are the hurdles?
 - no hurdles right now.

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been working on analyzing and filtering data using pandas and python. I have been doing a lot of research on pandas and other python data science frameworks and how they can be useful to us.
- · What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on the analysis and visualization of the data.
- · What are the hurdles?
 - learning to use the different python data science frameworks seems to be challenging.

20190129- Daily Scrum

20190129- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I have developed a basic website that is capable of displaying graphs using the dash framework and regular HTML pages with flask. Right now the website has a home page and a dashboard that can display several graphs and tools.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the implementation of the other graphs specified by our product owner and include them in the website
- What are the hurdles?
 - No hurdles

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been working on the analysis and distribution of data using pandas and other python data science frameworks.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on analyzing data using python and i will begin working on the visualization of the data.
- What are the hurdles?
 - The analysis of data using python data science frameworks proves to be challenging.

20190130- Daily Scrum

20190130- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I'm currently working on some of the data visualizations that are going to be in the dashboard. Right now I'm focusing on graphs with multiple line plots.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the documentation of the user interface because it is almost done.
- What are the hurdles?
 - · Loading the data from DB1B is an impediment because of the amount of files and the size of each of those files.

Serge Metellus :

- What was done since the last scrum meeting?
 - I am still working on analyzing a massive amount of data and trying to figure out how to automate the process of filtering the data using pandas and other python data science.
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on the analysis and filtering of the data, and i will continue to research on how to automate the
 process.
- What are the hurdles?
 - Analyzing the massive amounts of data from the various sources seems to be challenging.

20190131- Daily Scrum

20190131- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

- What was done since the last scrum meeting?
 - I have been working on refactoring the code for the user interface to make it clearer and more manageable.
- · What is planned to be done until the next scrum meeting?

- I plan on finishing the charts and placing them on the UI
- What are the hurdles?
 - No hurdles

- What was done since the last scrum meeting?
 - I have been working on filtering the data with multiple criterion using pandas. I have also been working on displaying the filtered data in the UI.
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on filtering data with multiple criterion and I will begin working on displaying the distribution of data
- · What are the hurdles?
 - · Filtering data using multiple criterion seems to be challenging.

20190201- Daily Scrum

20190201- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I've been refactoring code to make it easier to read and to minimize any technical debt down the road. I have also been working on a design to accommodate for the model-view-controller design pattern.
- What is planned to be done until the next scrum meeting?
 - I plan on improving the readability of the code and the structure of the application to make it easier to add new features for the
 user interface.
- What are the hurdles?
 - No hurdles

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been working on filtering data with multiple criterion and displaying the distribution of data. I also began to work on organizing charts into columns.
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on organizing charts into columns and figuring out the different methods of filtering data.
- What are the hurdles?
 - Filtering and grouping data using pandas proves to be challenging.

Sprint 1 Review

20190204 - Sprint 1 Review Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas Ortega

Product Owners: Steven Luis, Miguel Alonso Jr.

• Team of graduate students

Start time: 10:00 AM End time: 11:00 AM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

User Story WFMG-12 - Display data as a line plot DONE

• User Story WFMG-13 - User Interface DONE

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

Sprint 1 Retrospective

20190204 - Sprint 1 Retrospective Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

• Team of graduate students

Start time: 11:00am End time: 12:00pm

What went wrong?

- · Communication between product owners and the developing team needs to be improved.
- The data from the DB1B database was too large to be processed using the pandas framework. This was a big impediment throughout a large part of the sprint.
- · The size estimation of the user stories could be improved since we had a couple of unfinished user stories at the end of the sprint.

What went right?

- The development team was able to successfully use the Bitbucket system to manage and collaborate on the code for the user interface.
- The design of the dashboard was accepted and we will continue to build on top of it in the next sprint.

How to address the issues in the next sprint?

- The development team needs to post more often on the hipchat report room to try to get immediate feedback on the work being done.
- If the team is unable to receive feedback from the Product owners through hipchat, then they should reach out through email to get additional information on user stories and issues.
- In the next sprint, the team should strive to complete every user story that was pulled into the sprint.

Sprint 2

Sprint 2 Sprint Planning

20190204 - Sprint 1 Planning Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- Product Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 11:00 AM End time: 12:00 PM

After discussion, the velocity of the team were estimated to be 50.

The goal for this sprint is to use the predictive model in the visualizations and finish the user stories from sprint 1

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.

User Story	WFMG-19 - Fare price visualization DONE
User Story	WFMG-2 - Display Distribution of data DONE
User Story	WFMG-3 - Filter data by time. DONE
 User Story 	WFMG-4 - Organize charts into columns to identify trends DONE

The team members indicated their willingness to work on the following user stories.

- Serge Metellus
 - WFMG-3 Filter data by time. DONE
 - WFMG-4 Organize charts into columns to identify trends DONE
- Tomas Ortega
 - WFMG-2 Display Distribution of data DONE
 - WFMC-19 Fare price visualization DONE

20190205 - Daily Scrum

20190205- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00pm End time: 12:15pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on fixing some styling issues related to conflicting css files inside of the dash application.
- What is planned to be done until the next scrum meeting?
 - I plan on fixing the style issue and if I receive the data from the team of graduate students I will start working on that visualization.
- · What are the hurdles?
 - No hurdles yet.

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been working on filtering data by time(date) and how to visualize the filtered data.
- What is planned to be done until the next scrum meeting?

- I plan on continuing to work on the visualization of filtered data and the subset of data to be received from the team of graduate students.
- · What are the hurdles?
 - No hurdles yet

20190206 - Daily Scrum

20190206 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:30pm End time: 12:45pm

Tomas Ortega

• What was done since the last scrum meeting?

- I have fixed the styling issues in the dashboard using a css file instead of using the external stylesheet that comes with the dash
 framework. I also started working on the fare price visualization with the data that I received yesterday from the graduate student
 team.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the fare price visualization and figure out how to make the distribution according to some inputs from the user.
- · What are the hurdles?
 - the user story for the data distribution is not very clear. I will have to ask for clarification soon.

Serge Metellus:

- What was done since the last scrum meeting?
 - I have been working on filtering data by time and visualizing the filtered data. I have also been working on allowing the user to
 choose the amount of columns to display the visualizations.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on filtering data by time and visualizing the filtered data.
- What are the hurdles?
 - no hurdles yet.

20190207 - Daily Scrum

20190207- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on displaying the distribution of data according to attributes specified by the user.
- What is planned to be done until the next scrum meeting?
- What are the hurdles?
 - The description of the user story is not clear so I need to wait for clarification.

Serge Metellus:

- What was done since the last scrum meeting?
 - I have made progress on the filtering of data by time and visualizing the filtered data.
- · What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on visualizing filtered data and allowing the user to choose to the amount of columns for the visualization.

- · What are the hurdles?
 - · No hurdles yet.

20190208 - Daily Scrum

20190208- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega:

- What was done since the last scrum meeting?
 - I was able to graph some of the distributions from the jupyter notebook and I've also been working on separating the dash callbacks from the view components
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on graphing the distributions in a single graph
- What are the hurdles?
 - no hurdles

Serge Metellus:

- What was done since the last scrum meeting?
 - I have made a lot of progress in filtering data(specifically by time) and i have began to work on the visualization of the filtered data.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the visualization of the filtered data and to allow the user to choose how they want the visualizations organized.
- What are the hurdles?
 - No hurdles yet.

20190211 - Daily Scrum

20190211- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I finished the visualizations for the Coupon Distribution, Fare Class Distribution, State of Departure Distribution, Market Share Distribution, and I created a dropdawn menu where you can select the graph to be displayed
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the distributions and also figure out a way to make the graph for the fare price.
- What are the hurdles?
 - no hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I am finished with the filtering of data by time and will continue to work on the visualization of the filtered data.
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on the visualization of filtered data. i also plan to begin working on allowing the user to choose how
 to display the visualizations.
- What are the hurdles?
 - · no hurdles yet.

20190212 - Daily Scrum

20190212- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I created a fare price visualization that takes input from a slider so that the user is able to see the range that he wants. It also has a line for the date of access.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the fare price visualization and hopefully finish it by the end of the week.
- What are the hurdles?
 - no hurdles right now

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the visualization of filtered data. I have also begun working on allowing the user to choose the amount
 of columns used to display the visualizations.
- What is planned to be done until the next scrum meeting?
 - I plan on finishing the visualizations today and i also plan on continuing to work on allowing user input on the layout of the visualizations.
- · What are the hurdles?
 - · no hurdles yet.

20190213 - Daily Scrum

20190213- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I finished the fare price visualization using the data from the arima model and the average fare price.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the documentation for the features and recording videos for the product owners.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the visualization of filtered data and i have began working on allowing user input on the organization of the visualizations.
- What is planned to be done until the next scrum meeting?
 - I plan on finishing the visualizations today and continuing to work on allowing user input on the organization of the visualizations.
- What are the hurdles?
 - I had a little bit of difficulty getting visualizations to display properly.

20190214 - Daily Scrum

20190214- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00 pm

End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on making the fare price visualization more attractive by changing the colors and the style of the sliders. I
 also added the titles for the distributions and added titles to them so that they are more visible.
- What is planned to be done until the next scrum meeting?
 - I plan to work on creating some user stories for the next sprint planning and finish the documentation for the completed user stories from this sprint.
- What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have finally finished the WFMG-3 Filter data by time. DONE feature. I have also began working on allowing user input on the organization of the visualizations.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on allowing user input on the organization of the visualizations
- What are the hurdles?
 - No hurdles.

20190215 - Daily Scrum

20190215- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega:

- What was done since the last scrum meeting?
 - I finished all my user stories for sprint 2 and fixed most of the issues in the user interface from the previous sprint
- What is planned to be done until the next scrum meeting?
 - I plan to work on the UML diagrams and work on some of the issues from the feedback received from the Product owners.
- · What are the hurdles?
 - · No hurdles.

Serge Metellus

- · What was done since the last scrum meeting?
 - · I have completed all of my user stories for sprint, but there are some styling issues and a possible bug.
- · What is planned to be done until the next scrum meeting?
 - I plan to keep working on the documentation and the user stories for the next sprint
- · What are the hurdles?
 - No hurdles.

Sprint 2 Review

20190218 - Sprint 2 Review Review Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- Product Owners: Steven Luis, Miguel Alonso Jr.
- Team of graduate students

Start time: 11:00 AM End time: 12:15 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

 User Story 	WFMG-19 - Fare price visualization DONE
User Story	WFMG-2 - Display Distribution of data DONE
User Story	WFMG-3 - Filter data by time. DONE
 User Story 	WFMG-4 - Organize charts into columns to identify trends DONE

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

• N/A The team was able to complete all the user stories this sprint.

Sprint 2 Retrospective

20190218 - Sprint 2 Retrospective Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas Ortega
Product Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 11:00 am
End time: 12:15 pm

What went wrong?

- Although we are receiving more feedback from the product owners, communication between the team and the product owners could still
 he improved
- · Some of the completed features still need some work so we need to include bugs on the next sprint.
- Some graphs will have to be changed due to the granularity of the data coming from the model implemented by the graduate student team

What went right?

- The team successfully estimated the velocity for sprint because we were able to complete all of the user stories assigned to sprint 2.
- The team did a good job on estimating the amount of hours for each user story and we were able to successfully complete most of them with just one bug which will be addressed in sprint 3.
- The team was able to meet regularly according to our schedule and we were able to deliver the features in time.
- · We were able to communicate successfully with the graduate student team and exchange data back and forth for the visualizations

How to address the issues in the next sprint?

- How to improve the process?
 - We can improve the process by increasing the rate of communication with the product owners to overcome impediments quickly and avoid wasting our time on unnecessary details.
 - We could improve the communication within the team so that impediments are resolved quickly and integration occurs smoothly.
- How to improve the product?
 - The product could be improved by solving some of the bugs with the columns.
 - Labels for the x and y axis should be added to every graph so that the user is aware of the type of data being visualized.

Sprint 3

Sprint 3 Sprint Planning

20190218: Sprint 3 Planning Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 11:00 AM End time: 12:00 PM

After discussion, the velocity of the team were estimated to be 52.

Goal: The goal for this sprint is to implement the necessary classes for the inference and visualization models and to include them in the view and controller of the application.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.

•	User Story		WFMG-24 - Visualization wrapper DONE
•	User Story		WFMG-23 - Model wrapper DONE
•	User Story		WFMG-22 - Adjust Prediction Parameters DONE
•	User Story		WFMG-25 - Fix column layout DONE
•	User Story	1	WFMG-26 - Modify the fare price visualization DONE

The team members indicated their willingness to work on the following user stories.

Tomas Ortega

 User Story
 WFMG-23 - Model wrapper DONE

 User Story
 WFMG-22 - Adjust Prediction Parameters DONE
 User Story
 WFMG-26 - Modify the fare price visualization DONE
 Serge Metellus
 User Story
 WFMG-24 - Visualization wrapper DONE
 User Story
 WFMG-25 - Fix column layout DONE

20190219 - Daily Scrum

20190219- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega:

What was done since the last scrum meeting?

- I have been improving the fare price visualization according to the feedback from Steve, and started working on the model architecture.
- What is planned to be done until the next scrum meeting?
 - I plan to improve some aspects of the graph such as changing it to a scatter plot and adding the difference between the model and the average price.
- What are the hurdles?
 - No hurdles.

- What was done since the last scrum meeting?
 - I have been working on fixing the column styling issues. I have also been reviewing the other user stories and their
 corresponding features that were pulled into the sprint
- What is planned to be done until the next scrum meeting?
 - I plan on continuing to work on fixing the column styling issues and i also plan to begin working on the other features for this sprint.
- What are the hurdles?
 - No hurdles.

20190220 - Daily Scrum

20190220 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I fixed some of the issues that were discussed during the review meeting for sprint 2 such as tilting the values of the x axis for the departure state distribution and adding the labels to the y and the x axis to all the graphs in the dashboard.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the fare price visualization and create a new segment for the difference between the actual price and the model. I also want to try to implement autoscaling for the y axis so that when the user zooms in, the y axis adjusts to show the appropriate scale.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on fixing the column styling issues discussed during the review meeting and have began setting up to work on the other features.
- What is planned to be done until the next scrum meeting?
 - I plan to fix the issues and to begin working on the other features pulled into the sprint.
- What are the hurdles?
 - No hurdles.

20190221 - Daily Scrum

20190221- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega:

· What was done since the last scrum meeting?

- I made some changes to the fare price visualization such as adding a new y axis so that the segment for the difference between the fare price and the model is clearer and at the right hight in the graph.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the visualization for the distributions and fix the labeling issues.
- · What are the hurdles?
 - · No hurdles.

- What was done since the last scrum meeting?
 - I have been working on fixing the column styling issues and should finish soon.
- What is planned to be done until the next scrum meeting?
 - I plan to complete the styling issues and to begin working on the visualization wrapper.
- · What are the hurdles?
 - No hurdles.

20190222 - Daily Scrum

20190222- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega:

- What was done since the last scrum meeting?
 - I worked with the graduate student team to create the classes and methods necessary to manage the data from the models and the data for data exploration. I also worked on the fare price visualization and changed the line plot to reflect that the data is not continuous.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the fare price visualization and start working on the implementation of the superclass for the machine learning models.
- What are the hurdles?
 - The specifications for the fare price visualization are not very clear and the product owners are not responding to my questions on Hipchat.

Serge Metellus

- What was done since the last scrum meeting?
 - I have fixed some issues pertaining to column styling and have met with the team of graduate students to get create the classes and methods necessary to handle data for exploration.
- What is planned to be done until the next scrum meeting?
 - I plan fix the remaining issues and begin working on the superclass of the processing models once all the information is received from the graduate students.
- What are the hurdles?
 - No hurdles.

20190225 - Daily Scrum

20190225- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I created a new graph with the error of the arima model and I also fixed labeling issues of the other graphs.
- · What is planned to be done until the next scrum meeting?

- I plan to start working on the model base class so that we can start the implementation of the lasses for specific models such as arima.
- · What are the hurdles?
 - No hurdles.

- What was done since the last scrum meeting?
 - I have fixed all issues related to columns and graph layout. I have also received all the information necessary to begin working
 on the superclass of the processing models.
- What is planned to be done until the next scrum meeting?
 - I plan to begin working on the implementation of the superclass for the processing models.
- What are the hurdles?
 - No hurdles.

20190226 - Daily Scrum

20190226- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the input and output handlers. They are about 60% done and I hope to finish them before next meeting.
- What is planned to be done until the next scrum meeting?
 - I will continue to work on the input and output handlers and then I'll start working on the model class.
- · What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the implementation of the superclass of the processing models.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the superclass of the processing model.
- What are the hurdles?
 - No hurdles.

20190227 - Daily Scrum

20190227 - Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - The InputStreamHandler class is done. It can open csv files and if the type is memory it can convert it to a DataFrame.
- What is planned to be done until the next scrum meeting?
 - I plan to add buttons for the hyperparameters in the fare price graph so that the user can update the model and change the visualization.
- What are the hurdles?
 - No hurdles.

- What was done since the last scrum meeting?
 - · I have been working on the superclass of the procedure models and the WFMG base class.
- What is planned to be done until the next scrum meeting?
 - i will continue working on the superclass of the procedure models and should finish soon. I also will begin working on the
 frequency and probability distribution classes.
- What are the hurdles?
 - No hurdles.

20190228 - Daily Scrum

20190228- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - The outputStremHandler class is done and the ui components for the parameters of the model in the fare price visualization graph are also done.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the model class and the ARIMA class so that the dashboard can pull data directly from the model.
- · What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the implementation of the ModuleBase and Procedure classes.
- What is planned to be done until the next scrum meeting?
 - I will finish the ModuleBase class and the procedure class by the of day. I will begin working on the frequency and probability distribution classes
- What are the hurdles?
 - The instructions for some of the methods are unclear.

20190301 - Daily Scrum

20190301- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 pm End time: 12:15 pm

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the Model class. The fit and predict functions are 70% completed and about 50% of the load function is
 done.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the model class and hopefully be able to start working on the ARIMA class.
- What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have finished the ModuleBase class and have been working on the procedure class and it subclasses.
- · What is planned to be done until the next scrum meeting?

- I plan to continue working on the procedure class as well as the frequency and probability distribution subclasses.
- What are the hurdles?
 - No hurdles.

Sprint 3 Review

20190304 - Sprint 3 Review Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 2:00 PM End time: 3:00 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners: All.

•	User Story	WFMG-25 - Fix column layout DONE
•	User Story	WFMG-22 - Adjust Prediction Parameters DONE
•	User Story	WFMG-23 - Model wrapper DONE

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

• User Story WFMG-24 - Visualization wrapper DONE

Sprint 3 Retrospective

20190304 - Sprint 3 Retrospective Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

• Team of graduate students

Start time: 2:30 PM End time: 3:30 PM

What went wrong?

- Although we are receiving more feedback from the product owners, communication between the team and the product owners could still be improved.
- Some stories were incomplete because of communication between the team and the graduate students
- Some of the completed features still need some work or need to be modified

What went right?

- The team did a good job on estimating the amount of hours for each user story and we were able to successfully complete most of them except for the visualization wrapper which will be pulled into the next sprint.
- · The team was able to meet regularly according to our schedule and we were able to deliver the features in time.
- · We were able to communicate successfully with the graduate student team and exchange data back and forth for the visualizations
- · A lot of functionality for the plug-in architecture was completed

How to address the issues in the next sprint?

- · How to improve the process?
 - We can improve the process by increasing the rate of communication with the product owners to overcome impediments quickly and avoid wasting our time on unnecessary details.
 - We could improve the communication within the team so that impediments are resolved quickly and integration occurs smoothly.
- How to improve the product?
 - The product could be improved by completing all the features pulled into the sprint.
 - · Attributes of certain visualizations could be improved.

Sprint 4

Sprint 4 Sprint Planning

20190304 - Sprint 4 Planning Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas Ortega
Product Owners: Steven Luis, Miguel Alonso Jr.

Team of graduate students

Start time: 2:30 PM End time: 3:30 PM

After discussion, the velocity of the team were estimated to be 59.

Goal: The goal for this sprint is to finish the visualization classes and start working on the data collection and being able to change the historical data by dragging the data points across the screen.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.



The team members indicated their willingness to work on the following user stories.



20190305 - Daily Scrum

20190305 - Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

· What was done since the last scrum meeting?

- I have been doing some research on how to make the individual points in the graph moveable by the user.
- What is planned to be done until the next scrum meeting?
 - I plan to keep doing research on this topic and hopefully see if it is even possible in the framework that we are using.
- What are the hurdles?
 - · No hurdles right now.

Serge Metellus

- What was done since the last scrum meeting?
- I have been working on the procedure class and its probability and frequency distribution subclasses.
- What is planned to be done until the next scrum meeting?
 - I plan to complete the subclasses and begin working on the other user stories pulled into the sprint.
- What are the hurdles?
 - No hurdles

20190306 - Daily Scrum

20190306 - Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on moving individual data points in the graph but it appears that I'm going to need another framework such as D3 or maybe use some javascript.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the movement of points in the graph and updating the graph after each change.
- What are the hurdles?
 - The dash framework doesn't seem to have the functionality to move points in the graph.

Serge Metellus

- · What was done since the last scrum meeting?
 - I have been working on the Frequency and Probability Distribution classes.
- What is planned to be done until the next scrum meeting?
- I plan to continue working on the distribution classes and should finish by the end of day.
- What are the hurdles?
 - · No hurdles.

20190307 - Daily Scrum

20190307- Daily Scrum Meeting Minutes

Attendees: Serge Metellus, Tomas Ortega

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I'm still working on the draggable point in the fare price graph.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on letting the user drag point across the graph to updated and hopefully finish it by the end of the
 week.
- · What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have completed the implementation of the Frequency and Probability distribution classes.
- What is planned to be done until the next scrum meeting?
 - I plan to begin working on allowing the user to enter a description of the data to be analyzed and explored by the website.
- What are the hurdles?
 - No hurdles.

20190308 - Daily Scrum

20190308- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I've been testing several different options to allow for draggable points but they all seem to have drawbacks. I will have to discuss this issues with the product owners soon.
- What is planned to be done until the next scrum meeting?
 - I plan to continue exploring the possible solutions and hopefully find the one that integrates best with the dash framework we are using.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on allowing the user to enter a description of the data to be analyzed and explored by the website.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on allowing the user to enter a description of the data to be analyzed and explored by the website.
- What are the hurdles?
 - No hurdles.

Sprint 4 Review

20190318 - Sprint 4 Review Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- Product Owners: Steven Luis, Miguel Alonso Jr.
- · Team of graduate students

Start time: 1:00 PM End time: 2:00 PM After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

User Story
 User Story
 WFMG-24 - Visualization wrapper DONE
 WFMG-33 - Movable points DONE

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Spring Planning meeting.

User Story
 User Story
 User Story
 User Story
 User Story

WFMG-32 - Description of data files DONE
DONE

Sprint 4 Retrospective

20190318 - Sprint 4 Retrospective Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- · Product Owners: Steven Luis, Miguel Alonso Jr.
- · Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

What went wrong?

- Did we do a good job estimating our team's velocity?
 - I think we failed at estimating the team's velocity because we couldn't complete all the user stories in the sprint.
- Did we do a good job estimating the points (time required) for each user story?
 - Yes the story points were estimated correctly and they represented the difficulty of each user story.
- Did each team member work as scheduled?
 - Yes the team followed the schedule successfully.

What went right?

• All the meeting were held successfully and the product owners were satisfied with the stories from this sprint.

How to address the issues in the next sprint?

- How to improve the process?
 - I think we need to ask more questions during the planning meetings to acquire the actual functionalities and the details about the users instead of the technologies that they want to use to accomplish these functionalities.
- How to improve the product?
 - I think we can improve the product by focusing on the backend before continuing with the frontend

Sprint 5

Sprint 5 Sprint Planning

20190318 - Sprint 5 Planning Meeting Minutes

Attendees:

• Dev Team: Serge Metellus, Tomas Ortega

• Product Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 1:30 PM End time: 2:00 PM

After discussion, the velocity of the team were estimated to be 47.

Goal: The goal for this sprint is to get the data science pipeline going. We are going to add data cleaning and pre-processing steps to the workflow manager application.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.

 User Story 	WFMG-34 - Drag Multiple Data Points DONE
User Story	WFMG-35 - Reset graph button DONE
User Story	WFMG-39 - Data Processing/Preprocessing DONE
User Story	WFMG-49 - Retrain Model on Point Movement Events DONE

The team members indicated their willingness to work on the following user stories.

•	Serge Metellus	
	 User Story 	WFMG-35 - Reset graph button DONE
	 User Story 	WFMG-39 - Data Processing/Preprocessing DONE
•	Tomas Ortega	
	 User Story 	WFMG-34 - Drag Multiple Data Points DONE
	 User Story 	WFMG-49 - Retrain Model on Point Movement Events DONE

20190319 - Daily Scrum

20190319- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been doing some research on Make and evaluating if it the most appropriate tool to use for the processing and preprocessing pipeline.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the reset button for the graph so that the training data and the model data go back to their original form after the button has been pressed.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on diagrams and test for the visualization wrapper to close the previous sprint. I have also began to do research on Make.

- What is planned to be done until the next scrum meeting?
 - I plan on continuing to research Make and begin working on specifying the data processing steps.
- · What are the hurdles?
 - No hurdles.

20190320 - Daily Scrum

20190320- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

• What was done since the last scrum meeting?

- I have been working on dragging multiple points in the graphs. I have also been working on training the model on point
 movement events.
- What is planned to be done until the next scrum meeting?
 - I plan to have the training of the model on user input functionality done by the end of the day.
- What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - i have been working on resetting the graph after points have been dragged. I have also been researching make and how to use
 it for data processing.
- What is planned to be done until the next scrum meeting?
 - I plan to have the reset graph functionality done by end of the day.
- What are the hurdles?
 - No hurdles.

20190321 - Daily Scrum

20190321- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I was able to train the model every time the user clicks on the graph. Now I need to make sure that the model is only trained when one of the points in the graph change it's x and y position.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the training of the model on user input and fixing some minor bugs in the model class.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I was unable to finish the implementation of the reset graph button. I have also begun working on Data processing/pre-processing
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on resetting the graph and creating a makefile for the processing of the data
- What are the hurdles?
 - Resetting the graph appears to be more difficult than I initially believed.

20190322 - Daily Scrum

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

What was done since the last scrum meeting?

- I have been working on training the model when the user makes a change to the graph. Right now the model updates every time the user moves a point from the training data.
- What is planned to be done until the next scrum meeting?
 - I plan to fix some a bug in the graph that doesn't allow the user to see the the information that appears when hovering the data points.
- What are the hurdles?
 - No hurdles.

Serge Metellus

What was done since the last scrum meeting?

• I have been working on writing Data processing/preprocessing scripts for the Makefile.

What is planned to be done until the next scrum meeting?

• I plan to keep working on the scripts to compile the Makefile for the processing of the data.

What are the hurdles?

· No hurdles.

20190325 - Daily Scrum

20190325 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

What was done since the last scrum meeting?

• I have been working on fixing some bugs with the recognition of clicked data and selected data for the fare price visualization other graphs that depend on models.

What is planned to be done until the next scrum meeting?

• I plan to keep working on the visualization bugs and hopefully find a fix for it. If I don't find a good solution I'm going to have to move on and implement the selection of data for the training of the model using a different framework and use react to append it into the dashboard.

What are the hurdles?

Dash does not have any way of choosing multiple points and move them all at the same time. Furthermore, Dash doesn't seem
to account for global variables so I'm going to have to find a way of storing the data that the user is updating separate from the
other pieces of data. I'll probably end up using json to load and store the data on disk.

Serge Metellus

What was done since the last scrum meeting?

 I have been working on the Data processing/preprocessing scripts for the Makefile. I have also been doing research on the structure of a Makefile

What is planned to be done until the next scrum meeting?

• I plan to keep working on the scripts to compile the Makefile for the processing of the data and should finish by tomorrow.

What are the hurdles?

No hurdles.

20190326 - Daily Scrum

20190326 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM

End time: 12:15 PM

Tomas Ortega

What was done since the last scrum meeting?

• I have been working on keeping the visualization data and the coming from the csv files separate so that the visualizations can be modified by moving points around and when the user decides to reset the graph, the data can be retrieved easily from the csv file or from the variable in memory that contains the data frame

What is planned to be done until the next scrum meeting?

• I plan to keep working on the graphs and the models so that the reset button and the dragging multiple points functionality can be implemented.

What are the hurdles?

· No hurdles at this moment.

Serge Metellus

What was done since the last scrum meeting?

- I have been working on the Data processing/preprocessing scripts for the Makefile. I have also began designing the Makefile. What is planned to be done until the next scrum meeting?
- I plan to keep working on the scripts to compile the Makefile for the processing of the data and should finish by end of day. What are the hurdles?
 - No hurdles.

20190327 - Daily Scrum

20190327 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

What was done since the last scrum meeting?

• The model is now being trained when the user moves a point or a set of points in the graph

What is planned to be done until the next scrum meeting?

• I plan to work on making the updates for the graph more efficient and more responsive. I also need to fix a bug related to caching and managing threads in the callbacks.

What are the hurdles?

No hurdles.

Serge Metellus

What was done since the last scrum meeting?

· I have completed the scripts, which may need to be modified, and I have been working on the construction of the Makefile

What is planned to be done until the next scrum meeting?

• I plan to continue working on the configuration of the Makefile.

What are the hurdles?

No hurdles.

20190328 - Daily Scrum

20190328 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

What was done since the last scrum meeting?

• The point are now able to move smoothly and the user can set a specific amount to change the points he has selected. I also fixed some of the bugs that were interrupting the callback to update the data in the dataFrame.

What is planned to be done until the next scrum meeting?

• I plan to keep working on the data points and the specific ways that the user can interact with them.

What are the hurdles?

· No hurdles.

Serge Metellus

What was done since the last scrum meeting?

· I have been working on the configuration of the Makefile

What is planned to be done until the next scrum meeting?

• I plan to continue working on the configuration of the Makefile and should finish by end of day.

What are the hurdles?

· No hurdles.

20190329 - Daily Scrum

20190329- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the documentation of the callbacks related to the models and the fare price visualizations. I have also been working o n fixing bugs and making sure that everything runs smoothly when the user interacts with the graph.
- What is planned to be done until the next scrum meeting?
 - I plan to do some research on Redis and see if it is a good option for maintaining and sharing state among callbacks and threads.
- · What are the hurdles?
 - There are still some bugs related to data that is not thread safe so there seems to be a race condition that needs to be fixed.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the configuration of the Makefile but i have ran into some issues..
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the configuration of the Makefile and hopefully fix the issues.
- What are the hurdles?
 - The Makefile keeps returning value errors that i have been unable to fix.

Sprint 5 Review

20190401 - Sprint 5 Review Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

 User Story 	WFMG-34 - Drag Multiple Data Points DONE
User Story	WFMG-35 - Reset graph button DONE
User Story	WFMG-39 - Data Processing/Preprocessing DONE
User Story	WFMG-49 - Retrain Model on Point Movement Events DONE

The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Sprint Planning meeting.

• N/A The team was able to complete all the user stories this sprint.

Sprint 5 Retrospective

20190401 - Sprint 5 Retrospective Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas Ortega
Product Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

What went wrong?

- Did we do a good job estimating our team's velocity?
 - We did a good job estimating the velocity since we were able to complete every user story that was pulled into the sprint.
- Did we do a good job estimating the points (time required) for each user story?
 - Yes the story points were estimated correctly and they accurately represented the difficulty of each task.
- Did each team member work as scheduled?
 - Yes the team was able to follow the schedule and work as planned in the sprint planning meeting.

What went right?

• We were able to focus on the goal of the sprint and work together toward the goal of starting the processing pipeline and adding interactive features to the prediction graphs.

How to address the issues in the next sprint?

- · How to improve the process?
 - I believe we can improve the process by identifying the hurdles early on and dealing with them as a team and as quickly as possible.
- How to improve the product?
 - To improve the product we can start thinking about performance of the user interactions and how to make them as efficient as
 possible.

Sprint 6

Sprint 6 Sprint Planning

20190401: Sprint 6 Planning Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

• Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

After discussion, the velocity of the team were estimated to be 41.

Goal: The goal for this sprint is to implement the necessary classes for the inference and visualization models and to include them in the view and controller of the application.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.



The team members indicated their willingness to work on the following user stories.

Serge Metellus



• Tomas Ortega



20190402 - Daily Scrum

20190402- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the implementation of the multivariate series analysis and the random forest regression model. Right now both of them are implemented using the model architecture we defined earlier in another sprint.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the visualization part of the new models so that we can have a couple of predictive models for the demo.
- What are the hurdles?
 - No hurdles right now.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the documentation of the code for the application as wells as improving the code.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the documentation and to began working on adding style elements.
- · What are the hurdles?
 - · No hurdles.

20190403 - Daily Scrum

20190403- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the visualization part of the new models, I finished the implementation of the random forest regression and of the multivariate time series analysis model.
- What is planned to be done until the next scrum meeting?
 - I plan to work on the visualizations for the multivariate model and hopefully finish it by the end of the day.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- · What was done since the last scrum meeting?
 - I have been working on documentation of the code for the application as wells as improving the code.
- What is planned to be done until the next scrum meeting?
 - i plan continue working on documentation and should finish by end of day. I also plan to begin adding style elements and improving the UI.
- What are the hurdles?
 - No hurdles.

20190404 - Daily Scrum

20190404- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the visualization for the multivariate time series analysis. Right now the graph is working but I need to
 ask some questions about the training data for this model to the graduate students.
- What is planned to be done until the next scrum meeting?
 - I plan to start working on the visualization for the random forest regressor.
- What are the hurdles?
 - · No hurdles right now.

Serge Metellus

- What was done since the last scrum meeting?
 - I have complete the documentation of the code for the application, including the Makefile.
- What is planned to be done until the next scrum meeting?
 - I plan to continue adding style elements and improving code and the user interface.
- What are the hurdles?
 - No hurdles.

20190405 - Daily Scrum

20190404- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have completed the visualization for the multivariate time series analysis modle and the random forest regressor.
- · What is planned to be done until the next scrum meeting?
 - I plan to work on the style elements of the model visualizations.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on refining the code, adding style elements, and improving the ui. I have also began working on integration
 of the separate branches
- What is planned to be done until the next scrum meeting?
 - I plan to continue adding style elements, refining code, and integration.
- What are the hurdles?
 - No hurdles.

20190408 - Daily Scrum

20190408 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I finished the random forest regressor model and the visualization for that model. I also fixed some bugs related to the slider that changes the y value of the selected points and I added a train button and a checkbox so that the user can decide if he wants to train the model on each point movement or train it after pressing the train button.
- What is planned to be done until the next scrum meeting?

- I plan to work on the documentation for the user stories and work on the diagrams for the poster.
- What are the hurdles?
 - No hurdles.

- · What was done since the last scrum meeting?
 - I have been working on modifications and fixing issues with the data processing scripts. I may have to change the framework
 used to process the data. I have also been working on adding style elements and improving the UI.
- What is planned to be done until the next scrum meeting?
 - I plan to continue fixing issues with the data processing scripts and i will finish it by tomorrow. I also plan to continue improving
 the UI and adding style elements.
- What are the hurdles?
 - No hurdles.

20190409 - Daily Scrum

20190409 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I added a button to train the machine learning models if the user decides that he doesn't want to retrain the model every time he
 moves a single point.
- What is planned to be done until the next scrum meeting?
 - I plan to add tabs so that the user can switch between each machine learning model.
- What are the hurdles?
 - No hurdles

Serge Metellus

- What was done since the last scrum meeting?
 - I have completed modifications and fixing issues with the data processing scripts. I have also been working on adding style
 elements and improving the UI.
- What is planned to be done until the next scrum meeting?
 - I plan to continue improving the UI and adding style elements. I also plan to begin working on the poster and complete integration.
- · What are the hurdles?
 - No hurdles.

20190410 - Daily Scrum

20190410 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I completed all the work for this sprint. I finished the implementation of the models and their respective visualizations.
- What is planned to be done until the next scrum meeting?
 - I plan to focus on the documentation and record the videos for the user stories. I also plan to fix some issues related to the merging of our latest code.
- · What are the hurdles?
 - No hurdles

- What was done since the last scrum meeting?
 - I have been working on adding style elements and improving the UI. I have also been working on integration(merging of our code) and fixing issues related to the merge.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on UI improvements and fixing merge conflicts. I also plan to begin working on the poster and documentation for the user stories.
- What are the hurdles?
 - No hurdles.

20190411 - Daily Scrum

20190411 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been fixing some issues related to the reset button and the training button. They are both working correctly now.
- What is planned to be done until the next scrum meeting?
 - I plan to keep looking for small bugs and issues to solve before the end of the sprint.
- What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on adding improving the UI and fixing issues related to the merging of our code. I have also been working
 on expanding the capabilities of the Makefile that runs the scripts, the diagrams for the poster and documentation for the user
 stories.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on UI improvements and fixing merge conflicts. I also plan to continue working on the poster and documentation for the user stories.
- What are the hurdles?
 - No hurdles.

20190412 - Daily Scrum

20190412 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I have solved all the issues related to the buttons in the model graphs. I have also started looking into ways of solving the alignment issues on different screen resolutions and aspect ratios.
- What is planned to be done until the next scrum meeting?
 - I plan to solve the issues related to the way the model graphs are displayed in different aspect ratios and in different devices.
- What are the hurdles?
 - No hurdles.

- · What was done since the last scrum meeting?
 - I have completed most, if not all, ui improvements. I have also been working on expanding the capabilities of the Makefile that runs the scripts, the diagrams for the poster and documentation for the user stories.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on expanding the capabilities of the Makefile that runs the scripts and the diagrams for the poster.
- · What are the hurdles?
 - No hurdles.

Sprint 6 Review

20190415 - Sprint 6 Review Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- Product Owners: Steven Luis, Miguel Alonso Jr.
- Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:



The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Sprint Planning meeting.

N/A The team was able to complete all the user stories this sprint.

Sprint 6 Retrospective

20190415 - Sprint 6 Retrospective Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas Ortega
- Product Owners: Steven Luis, Miguel Alonso Jr.
- Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

What went wrong?

- Did we do a good job estimating our team's velocity?
 - · We did a good job estimating the velocity since we were able to complete every user story that was pulled into the sprint.
- Did we do a good job estimating the points (time required) for each user story?
 - Yes the story points were estimated correctly and they accurately represented the difficulty of each task.
- Did each team member work as scheduled?
 - Yes the team was able to follow the schedule and work as planned in the sprint planning meeting.

What went right?

 We were able to focus on the goal of the sprint and work together toward the goal of starting the processing pipeline and adding interactive features to the prediction graphs.

How to address the issues in the next sprint?

- How to improve the process?
 - I believe we can improve the process by identifying the hurdles early on and dealing with them as a team and as quickly as
 possible.
- How to improve the product?
 - To improve the product we can start thinking about performance of the user interactions and how to make them as efficient as
 possible.

Sprint 7

20190416 - Daily Scrum

20190416- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I fixed some bugs related to the formatting of the predictive graphs and started working on the documentations for the final deliverable
- What is planned to be done until the next scrum meeting?
 - I focus on the documentation and work on the final document for the presentation on Thursday.
- · What are the hurdles?
 - No hurdles right now.

Serge Metellus

- What was done since the last scrum meeting?
 - I fixed some bugs related to columns and graph resizing and have started working on documentation for the final deliverable.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the final documentation and begin working on the presentation for the Showcase.
- What are the hurdles?
 - No hurdles.

20190417 - Daily Scrum

20190417- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I have been working on the documentation of certain features, and on the final document and slides for the presentation.

- What is planned to be done until the next scrum meeting?
 - I plan to work on the documentation and prepare a file for the dependencies of the project.
- What are the hurdles?
 - No hurdles.

- What was done since the last scrum meeting?
 - I have been working the final document and the presentation for the showcase.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the final document and presentation for the showcase. I also plan to finish documentation of certain features.
- What are the hurdles?
 - No hurdles.

20190418 - Daily Scrum

No Daily Scrum today because of the Senior Project Showcase.

20190419 - Daily Scrum

20190419- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 10:00 PM End time: 10:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the documentation of the project and on the different charts that are required for the final deliverable.
- · What is planned to be done until the next scrum meeting?
 - · I plan to keep working on documentation.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the final document and presentation of the project.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the document and presentation.
- What are the hurdles?
 - No hurdles

20190422 - Daily Scrum

20190422- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 10:00 PM End time: 10:15 PM

- · What was done since the last scrum meeting
 - I've been working on the documentation part of the project.

- What is planned to be done until the next scrum meeting?
 - I plan to work on the slides and the final deliverable.
- What are the hurdles?
 - No hurdles.

- What was done since the last scrum meeting?
 - I have been working on the documentation of the project
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the documentation of the project.
- · What are the hurdles?
 - · No hurdles.

20190423 - Daily Scrum

20190423- Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting
 - I've been working on the slides and the final deliverable.
- · What is planned to be done until the next scrum meeting?
 - I plan to record some videos for maintenance, how to successfully develop code for the project, how to test it etc.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the presentation and final document of the project.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the presentation and final document of the project.
- What are the hurdles?
 - No hurdles.

20190424 - Daily Scrum

20190424 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

- What was done since the last scrum meeting?
 - I have been working on the documentation and the videos for the project.
- What is planned to be done until the next scrum meeting?
 - I plan to keep working on the videos and the documentation.
- What are the hurdles?
 - · No hurdles at this moment.

- What was done since the last scrum meeting?
 - I have been working on the presentation and final document of the project.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the presentation, final document, and to record the videos necessary to maintain the project.
- What are the hurdles?
 - · No hurdles.

20190425 - Daily Scrum

20190425 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- What was done since the last scrum meeting?
 - I have been working on the final document and the videos for installation and maintenance.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the documentation side of the project.
- What are the hurdles?
 - No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the presentation and final document of the project.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the presentation and final document of the project.
- What are the hurdles?
 - No hurdles.

20190426 - Daily Scrum

20190426 - Daily Scrum Meeting Minutes

Attendees: Tomas Ortega, Serge Metellus.

Start time: 12:00 PM End time: 12:15 PM

Tomas Ortega

- · What was done since the last scrum meeting?
 - I have been working on the documentation of the project and the videos for user stories and install and maintenance guides.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on documentations and videos.
- What are the hurdles?
 - · No hurdles.

Serge Metellus

- What was done since the last scrum meeting?
 - I have been working on the presentation and final document of the project.
- What is planned to be done until the next scrum meeting?
 - I plan to continue working on the presentation and prepare the final deliverable.

What are the hurdles?No hurdles.

Sprint 7 Retrospective

20190428 - Sprint 7 Retrospective Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

· Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

What went wrong?

• N/A. The team successfully completed the project

What went right?

• We were able to completed the project.

How to address the issues in the next sprint?

• N/A. There is no next sprint for us.

Sprint 7 Review

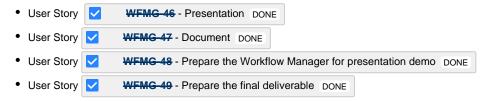
20190428 - Sprint 7 Review Meeting Minutes

Attendees:

- Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.
- Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:



The following ones were rejected and moved back to the product backlog to be assigned to a future sprint at a future Sprint Planning meeting.

• N/A The team was able to complete all the user stories this sprint.

Sprint 7 Sprint Planning

20190416 : Sprint 7 Planning Meeting Minutes

Attendees:

Dev Team: Serge Metellus, Tomas OrtegaProduct Owners: Steven Luis, Miguel Alonso Jr.

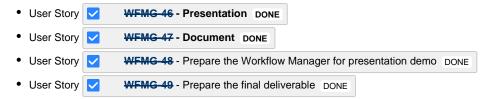
• Team of graduate students

Start time: 1:00 PM End time: 2:00 PM

After discussion, the velocity of the team was estimated to be 35.

Goal: The goal for this sprint is to complete all the required documentation for the final project and prepare for the presentation.

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their priority.



The team members indicated their willingness to work on the following user stories.

Both team members will be contributing to all user stories