Summary Week 5

Scrum Master for Next Week

Gustavo A Hernandez

List at least 5 things the team did well and will continue doing

Working in Python
Visualizations in Tableau
Sharing ideas
Developing code
Working with Trello

List at least 3 things the team did poorly and how you will mitigate them next sprint

Time management
Workspace
Weekly meeting

List shout-outs to any team members for excelling in any way

Gustavo – Taking care of coding!

What did you learn as a team this week?

How to communicate efficiently

What did you learn as an individual this week?

How much goes into just one project.

```
size = 0.8 ## train size

train, test = data_close_price.iloc[:int(size*len(data_close_price))],
data_close_price.iloc[int(size*len(data_close_price)):]



SARIMAX

model = SARIMAX(train,order=(2,1,2),seasonal_order=(1,1,1,4)).fit(disp=-1)

model.summary()


model.plot_diagnostics(figsize=(20,10))
```

```
plt.show()



Predictions

predictions = model.get_prediction(start='2000-03-31',end='2022-06-30')

conf = predictions.conf_int()

test_conf = conf.loc[test.index[0]:]

## ploting results

plt.plot(predictions.predicted_mean[1:],color='red',label='predictions')

plt.plot(train,color='blue',label='original')

plt.plot(test,color='green',label='test')

plt.fill_between(test_conf.index, test_conf.iloc[:,0], test_conf.iloc[:,1],
color='gray', alpha=.2,label='95% confidence')

plt.title('Original vs Predictions',size=20)

plt.legend(loc='best');



Accuracy Metrics

print(f"Mean Absolute Error:
{mean_absolute_error(data_close_price[1:],predictions.predicted_mean[1:
])}")

print(f"Mean Absolute Percentage Error:
{mean_absolute_percentage_error(data_close_price[1:],predictions.predi
cted_mean[1:])}")
```