

# IT314: Software Engineering

## Group 12: Stock Analysis and Prediction

### TEST REPORT

#### Step-1:

- Level of testing: Unit testing
- Used strategy: Static Analysis Tool
- Used tool: flake8
- Results:

```
Select Command Prompt
do_prediction.py:80:12: E231 missing whitespace after ':'
do_prediction.py:81:11: E231 missing whitespace after ':'
do_prediction.py:82:5: E122 continuation line missing indentation or outdented
do_prediction.py:82:12: E231 missing whitespace after ':'
do_prediction.py:86:13: E225 missing whitespace around operator
do_prediction.py:87:5: E265 block comment should start with '#'
do_prediction.py:88:15: E225 missing whitespace around operator
do_prediction.py:89:5: E265 block comment should start with '#'
do_prediction.py:90:5: E265 block comment should start with '#'
do_prediction.py:91:13: E225 missing whitespace around operator
do_prediction.py:92:15: E225 missing whitespace around operator
do_prediction.py:93:80: E501 line too long (80 > 79 characters)
do_prediction.py:94:26: E225 missing whitespace around operator
do_prediction.py:94:66: E231 missing whitespace after ','
do_prediction.py:94:74: E231 missing whitespace after ','
do_prediction.py:94:80: E501 line too long (94 > 79 characters)
do_prediction.py:94:85: E231 missing whitespace after ','
do_prediction.py:95:5: E265 block comment should start with '#'
do_prediction.py:96:5: E265 block comment should start with '#'
do_prediction.py:96:48: W291 trailing whitespace
do_prediction.py:97:9: E116 unexpected indentation (comment)
do_prediction.py:97:5: E265 block comment should start with '#'
do_prediction.py:98:1: W293 blank line contains whitespace
do_prediction.py:100:5: E303 too many blank lines (2)
do_prediction.py:100:80: E501 line too long (80 > 79 characters)
do_prediction.py:104:5: E265 block comment should start with '#'
do_prediction.py:105:32: E225 missing whitespace around operator
do_prediction.py:105:80: E501 line too long (97 > 79 characters)
do_prediction.py:105:87: E231 missing whitespace after ','
do_prediction.py:106:32: E225 missing whitespace around operator
do_prediction.py:106:80: E501 line too long (82 > 79 characters)
do_prediction.py:107:32: E225 missing whitespace around operator
do_prediction.py:107:80: E501 line too long (82 > 79 characters)
do_prediction.py:108:1: W293 blank line contains whitespace
do_prediction.py:109:5: E265 block comment should start with '#'
do_prediction.py:110:5: E265 block comment should start with '#'
do_prediction.py:112:5: E265 block comment should start with '#'
do_prediction.py:113:10: E225 missing whitespace around operator
do_prediction.py:118:1: E303 too many blank lines (3)
do_prediction.py:118:1: E265 block comment should start with '#'
do_prediction.py:119:5: E265 block comment should start with '#'
do_prediction.py:119:80: E501 line too long (85 > 79 characters)
do_prediction.py:120:1: E265 block comment should start with '#'
do_prediction.py:121:5: E265 block comment should start with '#'
do_prediction.py:121:80: E501 line too long (166 > 79 characters)
do_prediction.py:122:1: E265 block comment should start with '#'
do_prediction.py:123:5: E265 block comment should start with '#'

(env) C:\Users\Ajit\Documents\IoT_proj\env\Scripts\activate
do_prediction.py:1:1: E265 block comment should start with '#'
do_prediction.py:2:19: W291 trailing whitespace
do_prediction.py:3:1: F401 'matplotlib.pyplot' as 'plt' imported but unused
do_prediction.py:3:32: W291 trailing whitespace
do_prediction.py:4:20: W291 trailing whitespace
do_prediction.py:6:1: F401 'pandas.datareader.utils.RemoteDataError' imported but unused
do_prediction.py:6:53: W291 trailing whitespace
do_prediction.py:13:1: F401 'time' imported but unused
do_prediction.py:17:1: E265 block comment should start with '#'
do_prediction.py:18:5: E116 unexpected indentation (comment)
do_prediction.py:18:5: E265 block comment should start with '#'
do_prediction.py:19:1: E265 block comment should start with '#'
do_prediction.py:20:5: E116 unexpected indentation (comment)
do_prediction.py:20:5: E265 block comment should start with '#'
do_prediction.py:21:1: E265 block comment should start with '#'
do_prediction.py:22:5: E116 unexpected indentation (comment)
do_prediction.py:22:5: E265 block comment should start with '#'
do_prediction.py:22:80: E501 line too long (81 > 79 characters)
do_prediction.py:25:15: E225 missing whitespace around operator
do_prediction.py:26:5: E122 continuation line missing indentation or outdented
do_prediction.py:27:5: E122 continuation line missing indentation or outdented
do_prediction.py:27:10: E231 missing whitespace after ':'
do_prediction.py:28:5: E122 continuation line missing indentation or outdented
do_prediction.py:28:10: E231 missing whitespace after ':'
do_prediction.py:29:5: E122 continuation line missing indentation or outdented
do_prediction.py:29:10: E231 missing whitespace after ':'
do_prediction.py:30:5: E122 continuation line missing indentation or outdented
do_prediction.py:30:16: E231 missing whitespace after ':'
do_prediction.py:31:5: E122 continuation line missing indentation or outdented
do_prediction.py:31:19: E231 missing whitespace after ':'
do_prediction.py:32:5: E122 continuation line missing indentation or outdented
do_prediction.py:32:11: E231 missing whitespace after ':'
do_prediction.py:33:5: E122 continuation line missing indentation or outdented
do_prediction.py:33:17: E231 missing whitespace after ':'
do_prediction.py:34:5: E122 continuation line missing indentation or outdented
do_prediction.py:34:17: E231 missing whitespace after ':'
do_prediction.py:35:5: E122 continuation line missing indentation or outdented
do_prediction.py:35:17: E231 missing whitespace after ':'
do_prediction.py:36:5: E122 continuation line missing indentation or outdented
do_prediction.py:36:13: E231 missing whitespace after ':'
do_prediction.py:37:5: E122 continuation line missing indentation or outdented
do_prediction.py:37:20: E231 missing whitespace after ':'
do_prediction.py:38:5: E122 continuation line missing indentation or outdented
do_prediction.py:38:23: E231 missing whitespace after ':'
do_prediction.py:39:5: E122 continuation line missing indentation or outdented
do_prediction.py:39:20: E231 missing whitespace after ':'
```

[illegible]

```
Select Command Prompt
do_prediction.py:239:12: E231 missing whitespace after ','
do_prediction.py:240:5: E122 continuation line missing indentation or outdented
do_prediction.py:240:12: E231 missing whitespace after ','
do_prediction.py:241:5: E122 continuation line missing indentation or outdented
do_prediction.py:241:10: E231 missing whitespace after ','
do_prediction.py:242:5: E122 continuation line missing indentation or outdented
do_prediction.py:242:26: E231 missing whitespace after ','
do_prediction.py:243:5: E122 continuation line missing indentation or outdented
do_prediction.py:243:12: E231 missing whitespace after ','
do_prediction.py:244:5: E122 continuation line missing indentation or outdented
do_prediction.py:244:26: E231 missing whitespace after ','
do_prediction.py:245:5: E122 continuation line missing indentation or outdented
do_prediction.py:245:11: E231 missing whitespace after ','
do_prediction.py:246:5: E122 continuation line missing indentation or outdented
do_prediction.py:246:20: E231 missing whitespace after ','
do_prediction.py:247:5: E122 continuation line missing indentation or outdented
do_prediction.py:247:20: E231 missing whitespace after ','
do_prediction.py:248:5: E122 continuation line missing indentation or outdented
do_prediction.py:248:15: E231 missing whitespace after ','
do_prediction.py:249:5: E122 continuation line missing indentation or outdented
do_prediction.py:249:16: E231 missing whitespace after ','
do_prediction.py:250:5: E122 continuation line missing indentation or outdented
do_prediction.py:250:11: E231 missing whitespace after ','
do_prediction.py:251:5: E122 continuation line missing indentation or outdented
do_prediction.py:251:29: E231 missing whitespace after ','
do_prediction.py:252:5: E122 continuation line missing indentation or outdented
do_prediction.py:252:18: E231 missing whitespace after ','
do_prediction.py:253:5: E122 continuation line missing indentation or outdented
do_prediction.py:253:21: E231 missing whitespace after ','
do_prediction.py:254:5: E122 continuation line missing indentation or outdented
do_prediction.py:254:26: E231 missing whitespace after ','
do_prediction.py:255:5: E122 continuation line missing indentation or outdented
do_prediction.py:255:17: E231 missing whitespace after ','
do_prediction.py:256:5: E122 continuation line missing indentation or outdented
do_prediction.py:256:16: E231 missing whitespace after ','
do_prediction.py:257:5: E122 continuation line missing indentation or outdented
do_prediction.py:257:24: E231 missing whitespace after ','
do_prediction.py:258:5: E122 continuation line missing indentation or outdented
do_prediction.py:258:13: E231 missing whitespace after ','
do_prediction.py:259:5: E122 continuation line missing indentation or outdented
do_prediction.py:259:14: E231 missing whitespace after ','
do_prediction.py:260:5: E122 continuation line missing indentation or outdented
do_prediction.py:260:10: E231 missing whitespace after ','
do_prediction.py:261:5: E122 continuation line missing indentation or outdented
do_prediction.py:261:27: E231 missing whitespace after ','
do_prediction.py:262:5: E122 continuation line missing indentation or outdented
do_prediction.py:262:20: E231 missing whitespace after ','
do_prediction.py:263:5: E122 continuation line missing indentation or outdented
do_prediction.py:263:12: E231 missing whitespace after ','
do_prediction.py:264:5: E122 continuation line missing indentation or outdented

(env) C:\Users\Ajit\Documents\TOT_proj>
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```
Select Command Prompt
do_prediction.py:271:14: E231 missing whitespace after ','
do_prediction.py:272:14: E231 missing whitespace after ','
do_prediction.py:273:5: E122 continuation line missing indentation or outdented
do_prediction.py:273:12: E231 missing whitespace after ','
do_prediction.py:274:5: E122 continuation line missing indentation or outdented
do_prediction.py:274:11: E231 missing whitespace after ','
do_prediction.py:275:5: E122 continuation line missing indentation or outdented
do_prediction.py:275:27: E231 missing whitespace after ','
do_prediction.py:278:5: E265 block comment should start with '#'
do_prediction.py:279:9: E225 missing whitespace around operator
do_prediction.py:281:5: E265 block comment should start with '#'
do_prediction.py:282:16: E225 missing whitespace around operator
do_prediction.py:283:16: E225 missing whitespace around operator
do_prediction.py:283:58: E231 missing whitespace after ','
do_prediction.py:285:5: E265 block comment should start with '#'
do_prediction.py:285:80: E501 line too long (86 > 79 characters)
do_prediction.py:286:5: E265 block comment should start with '#'
do_prediction.py:287:37: E225 missing whitespace around operator
do_prediction.py:287:64: E231 missing whitespace after ','
do_prediction.py:287:80: E501 line too long (82 > 79 characters)
do_prediction.py:289:5: E265 block comment should start with '#'
do_prediction.py:290:11: E225 missing whitespace around operator
do_prediction.py:291:1: E265 blank line contains whitespace
do_prediction.py:293:5: E265 block comment should start with '#'
do_prediction.py:294:11: E225 missing whitespace around operator
do_prediction.py:294:59: E231 missing whitespace after ','
do_prediction.py:296:5: E265 block comment should start with '#'
do_prediction.py:297:13: E225 missing whitespace around operator
do_prediction.py:298:5: E265 block comment should start with '#'
do_prediction.py:298:9: E225 missing whitespace around operator
do_prediction.py:300:11: E225 missing whitespace around operator
do_prediction.py:301:56: E231 missing whitespace after ','
do_prediction.py:301:65: E231 missing whitespace after ','
do_prediction.py:302:13: E225 missing whitespace around operator
do_prediction.py:303:15: E225 missing whitespace around operator
do_prediction.py:305:5: E265 block comment should start with '#'
```

- Justification and interpretation of result:
  - Almost all of the errors are false positive.
  - We have used ## for the comment, while the tool says use # for the comments, but it doesn't make any sense
  - All the blocks are indented well and code executed perfectly, still the tool is saying that some blocks are outdented.
  - Matplotlib is included so that we can compare our prediction with original one, but it's not needed in the

implementation that's why tool is throwing warning that we haven't used matplotlib

- Time module is included to measure the performance of the algorithm, but it's not actually used by the website, so tool is saying that we have included time but not used it

### Step-2:

- Level of testing: Integration testing

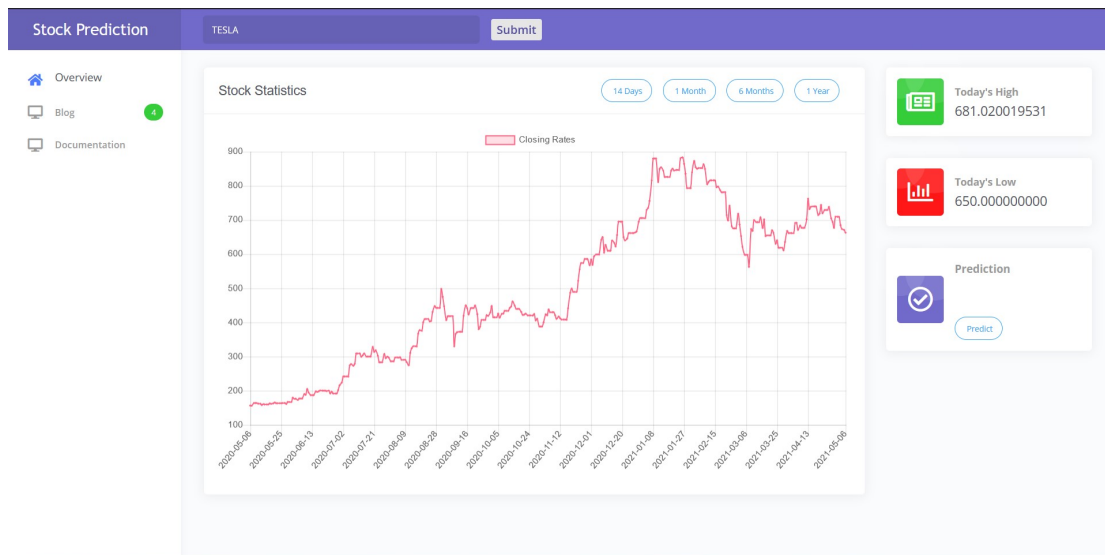
We haven't performed any formal testing for this level. Because we came to know about this topic at the end of the semester. And already, we have integrated most of the part in the code. But still we had done verification using different test cases before doing any pull requests and ensures that errors were not floating in the code.

### Step-3:

- Level of testing: System Testing
- Used strategy: Black Box Testing
- Sub strategy: Equivalence Partitioning
- Our input space is divided into two equivalence classes.
- $S_1$ : Set of valid company names and  $S_2$ : Set of invalid company cases

Index	Equivalence class	Expected Output
1.	$S_1$	Graph of close price, High price and Low Price
2.	$S_2$	Error message

- Output for  $S_1$  (Representative Input of  $S_1$ =TESLA)



- Output for  $S_2$  (Representative Input of  $S_2$ =TECHM)

