

Date	11 Nov 2022
Project name	A Novel method for handwritten digit recognition system
Team id	PNT2022TMID46193

The screenshot shows a web browser displaying a Jupyter Notebook on the GitHub repository `github.com/IBM-EPBL/IBM-Project-31149-1660196845/blob/main/Project%20Development%20Phase/Sprint%203/Application%20Building/Observing%20the%20...`. The notebook has a title "A Novel Method for Handwritten Digit Recognition System" and a section "Observing the Metrics". A code cell, labeled "In [18]:", contains the following Python code:

```
metrics = model.evaluate(X_test, Y_test, verbose=0)
print("Metrics (Test Loss & Test Accuracy): ")
print(metrics)
```

The output of the code cell is:

```
Metrics (Test Loss & Test Accuracy):
[0.10322817414999008, 0.9743000268936157]
```

The browser's taskbar at the bottom shows the Windows logo, a search bar, and several application icons. The system tray on the right indicates the time is 04:53 on 19-11-2022.

IBM-Project-31149-1660196845 x +

github.com/IBM-EPBL/IBM-Project-31149-1660196845/blob/main/Project%20Development%20Phase/Sprint%203/Application%20Building/Test%20the%20Model...

A Novel Method for Handwritten Digit Recognition System

Test the Model

In [29]:

```
prediction = model.predict(X_test[:4])
print(prediction)
```

```
1/1 [-----] - 0s 64ms/step
[[4.77358049e-11 1.26020884e-14 2.23637656e-07 2.59297366e-07
 1.53105145e-18 1.41474479e-13 2.73819453e-19 9.99999523e-01
 5.75746352e-12 1.40723442e-08]
 [3.92702641e-05 3.63764530e-09 9.99928832e-01 1.10518204e-06
 3.28396650e-11 1.87219923e-13 3.02575540e-06 4.75269130e-12
 2.79003762e-05 1.17118581e-09]
 [3.37602168e-11 9.99982953e-01 7.10459869e-09 3.63090309e-13
 1.67968246e-05 6.36366426e-09 4.59948364e-11 2.65287614e-09
 2.72516672e-07 1.53049936e-12]
 [9.99999762e-01 1.02759820e-17 6.89465485e-10 4.13503087e-14
 3.53135576e-12 2.56500203e-11 6.89072754e-09 4.50628203e-14
 8.74276596e-10 1.82247064e-07]]
```

Observing the Met...pdf Show all X

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ENG 04:56 19-11-2022

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github.com/IBM-EPBL/IBM-Project-31149-1660196845/blob/main/Project%20Development%20Phase/Sprint%203/Application%20Building/Test%20the%20Model...

In [22]:

```
print(numpy.argmax(prediction, axis=1))
print(Y_test[:4])
```

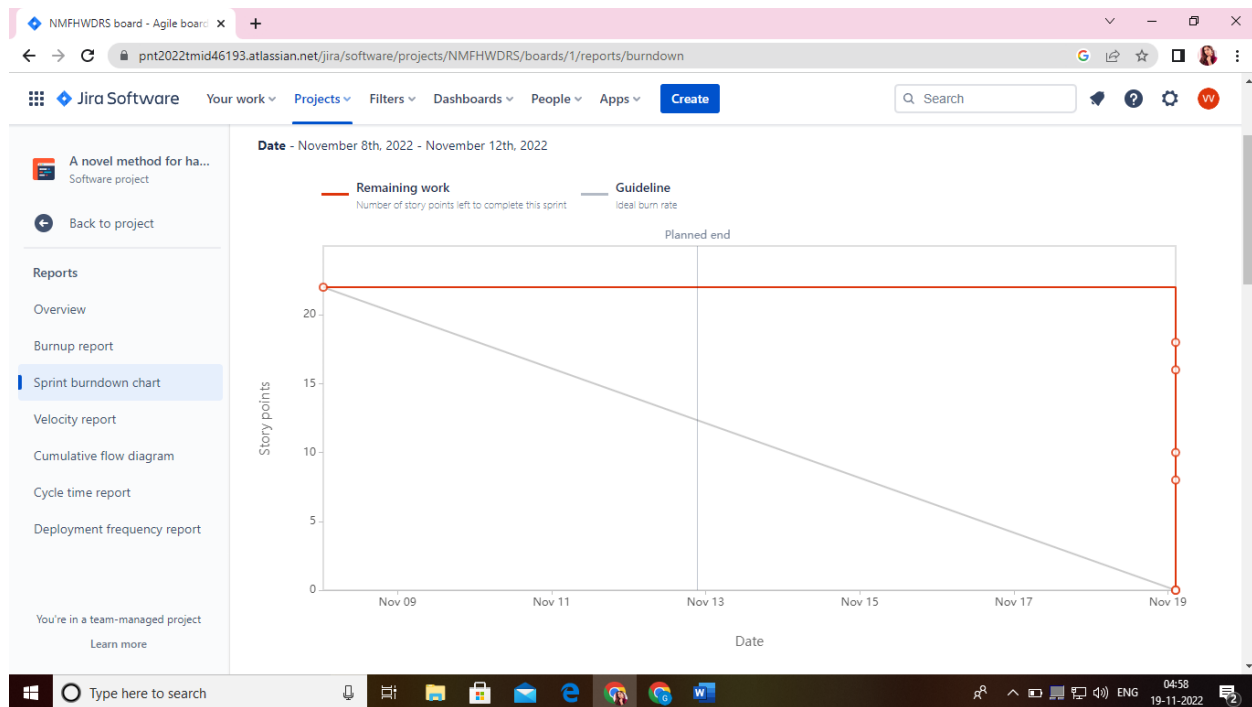
```
[7 2 1 0]
[[0. 0. 0. 0. 0. 0. 0. 1. 0. 0.]
 [0. 0. 1. 0. 0. 0. 0. 0. 0. 0.]
 [0. 1. 0. 0. 0. 0. 0. 0. 0. 0.]
 [1. 0. 0. 0. 0. 0. 0. 0. 0. 0.]]
```

Observing the Met...pdf Show all X

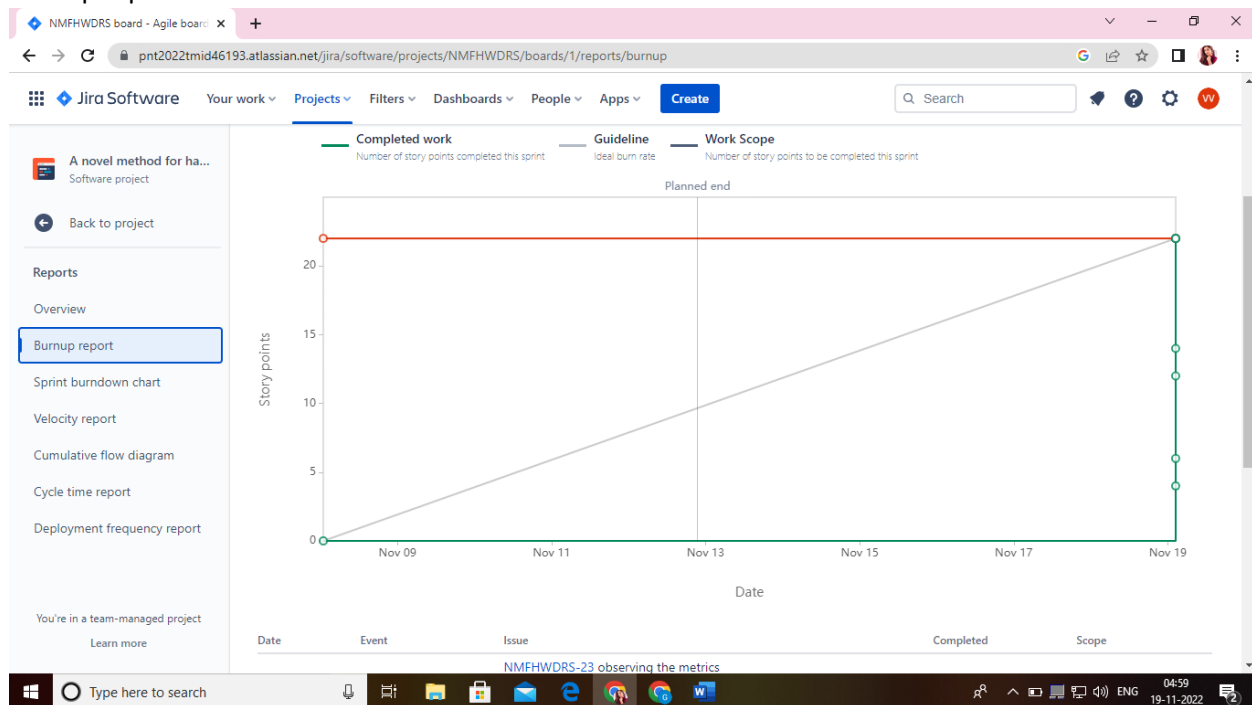
Type here to search

ENG 04:57 19-11-2022

Burndown chart:



Burnup report:



Velocity report:

