

Raport de dezvoltare

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- Planul de testare și rezultate

În cadrul planului de testare, am început prin a testa funcțiile ajutătoare implementării de bază, cum ar fi: max/min , medie aritmetică , media geometrică, medie ponderată și mediana. Acestea au fost urmate de randomAlgorithm, FileReader, randomTree, ca apoi să testăm fMeasure.

```
PS D:\UPB\Anul_4\MPS\proiect_MPS_PKD\src> python .\init.py -t global -g ..\resources\mps-global\GlobalTrain.csv -l ..\resources\mps-global\LUTTrain.csv
65.81230815879968
68.04674198476725
60.43770498738232
66.65920091651412
62.14284762591527
61.47125528733002
55.85294994599895
65.6710003027589
69.6567629135068
63.734452485355646
70.22571400797594
60.26752667815116
66.65920091651412
60.34057628530335
65.6710003027589
66.93589496718096
66.93589496718096
55.57184062663442
55.57184062663442
62.97780625856433
62.97780625856433
62.42257093540795
62.42257093540795
60.04644149686193
60.04644149686193
64.19113532014906
64.19113532014906
70.56049418351202
70.56049418351202
69.50766795606695
69.6567629135068
64.45806337938022
68.04674198476725
```

Fig. 1: Rezultate pentru Train

```
PS D:\UPB\Anul_4\MPS\proiect_MPS_PKD\src> python .\init.py -t global -g ..\resources\mps-global\GlobalTest.csv -l ..\resources\mps-global\LUTTest.csv -s
Used best tree with fMeasure = 71.49121122071158
62.75884607191423
PS D:\UPB\Anul_4\MPS\proiect_MPS_PKD\src> python .\init.py -t global -g ..\resources\mps-global\GlobalTest.csv -l ..\resources\mps-global\LUTTest.csv -s
Used best tree with fMeasure = 71.49121122071158
64.0961787248954
PS D:\UPB\Anul_4\MPS\proiect_MPS_PKD\src> python .\init.py -t global -g ..\resources\mps-global\GlobalTest.csv -l ..\resources\mps-global\LUTTest.csv -s
Used best tree with fMeasure = 71.49121122071158
65.12614067677825
PS D:\UPB\Anul_4\MPS\proiect_MPS_PKD\src> python .\init.py -t global -g ..\resources\mps-global\GlobalTest.csv -l ..\resources\mps-global\LUTTest.csv -s
Used best tree with fMeasure = 71.49121122071158
75.81740533629707
```

Fig. 2: Best tree aplicat pe train

```

Result: 14.805081033727552 ..\resources\local\train\[S-MS]z80-F8s.CSV
Result: 15.54585152838428 ..\resources\local\train\[S-MS]z80-F7s.CSV
Result: 16.15986099043093 ..\resources\local\train\[S-MS]z80-F6s.CSV
Result: 21.69197396963124 ..\resources\local\train\[S-MS]z76-F8s.CSV
Result: 7.927677329624479 ..\resources\local\train\[S-MS]z822-F1s.CSV
Result: 8.208695652173912 ..\resources\local\train\[S-MS]z82-F1s.CSV
Result: 9.77961432506887 ..\resources\local\train\[S-MS]z822-F2s.CSV
Result: 8.87348353528596 ..\resources\local\train\[S-MS]z82-F2s.CSV
Result: 5.903021784961349 ..\resources\local\train\[S-MS]z822-F3s.CSV
Result: 4.814159292035399 ..\resources\local\train\[S-MS]z82-F3s.CSV
Result: 8.541666666666666 ..\resources\local\train\[S-MS]z82-F8s.CSV
Result: 8.454608454608454 ..\resources\local\train\[S-MS]z822-F6s.CSV
Result: 8.60812217979868 ..\resources\local\train\[S-MS]z82-F6s.CSV
Result: 9.005888465535158 ..\resources\local\train\[S-MS]z82-F7s.CSV
Result: 7.804878048780488 ..\resources\local\train\[S-MS]z822-F5s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F4s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F2s.CSV
Result: 7.127882599580712 ..\resources\local\train\[S-MS]z822-F7s.CSV
Result: 8.321775312066574 ..\resources\local\train\[S-MS]z822-F8s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F5s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F6s.CSV
Result: 9.299655568312284 ..\resources\local\train\[S-MS]z90-F1s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F8s.CSV
Result: 100.0 ..\resources\local\train\[S-MS]z92-F7s.CSV
Result: 8.111239860950175 ..\resources\local\train\[S-MS]z90-F3s.CSV
Result: 8.198614318706698 ..\resources\local\train\[S-MS]z90-F5s.CSV
Result: 10.279840091376355 ..\resources\local\train\[S-MS]z90-F4s.CSV
Result: 9.736540664375717 ..\resources\local\train\[S-MS]z90-F6s.CSV
Result: 8.30929024812464 ..\resources\local\train\[S-MS]z90-F8s.CSV
Result: 5.109188298310672 ..\resources\local\train\[S-MS]z95-F5s.CSV
Result: 5.589806822852446 ..\resources\local\train\[S-MS]z95-F4s.CSV
Result: 4.626187525815779 ..\resources\local\train\[S-MS]z95-F2s.CSV
Result: 4.545454545454546 ..\resources\local\train\[S-MS]z95-F8s.CSV
Result: 4.545454545454546 ..\resources\local\train\[S-MS]z95-F7s.CSV
Result: 86.2547360624448 ..\resources\local\train\[Salzinnen]017.CSV
Result: 93.16824012920337 ..\resources\local\train\[Salzinnen]010.CSV
Result: 91.3441125812783 ..\resources\local\train\[Salzinnen]012.CSV
Result: 91.01253253897968 ..\resources\local\train\[Salzinnen]009.CSV
Result: 92.73123398779449 ..\resources\local\train\[Salzinnen]016.CSV
Result: 91.81407376797878 ..\resources\local\train\[Salzinnen]015.CSV
Result: 93.0557566027556 ..\resources\local\train\[Salzinnen]018.CSV
Result: 90.3690880320264 ..\resources\local\train\[Salzinnen]014.CSV
Result: 88.16675190401814 ..\resources\local\train\[Salzinnen]011.CSV
Result: 92.5524756915606 ..\resources\local\train\[Salzinnen]013.CSV

```

Fig. 3: Train pe local 1

În cadrul rezultatelor finale observăm și că FMEasure per set este de 21.325561289420776, ceea ce reprezintă o valoare bună.

```

Result: 5.601473574835876 ..\resources\local\train\[NouvelObservateur]1
Result: 13.16386745347254 ..\resources\local\train\[NouvelObservateur]1
Result: 4.762356512664832 ..\resources\local\train\[NouvelObservateur]1
Result: 2.457285467460165 ..\resources\local\train\[NouvelObservateur]1
Result: 1.4759079727969904 ..\resources\local\train\[NouvelObservateur]1
Result: 5.995475113122172 ..\resources\local\train\[NouvelObservateur]1
Result: 2.9773586711981235 ..\resources\local\train\[NouvelObservateur]1
Result: 10.104272400110732 ..\resources\local\train\[NouvelObservateur]1
Result: 7.032348804500703 ..\resources\local\train\[NouvelObservateur]1
Result: 4.539842340203249 ..\resources\local\train\[NouvelObservateur]1
Result: 7.456612246807317 ..\resources\local\train\[NouvelObservateur]1
Result: 2.0106787243253645 ..\resources\local\train\[NouvelObservateur]1
Result: 3.8692461641094065 ..\resources\local\train\[NouvelObservateur]1
Result: 5.977184877910814 ..\resources\local\train\[NouvelObservateur]1
Result: 5.702416918429003 ..\resources\local\train\[NouvelObservateur]1
Result: 6.096009798841099 ..\resources\local\train\[NouvelObservateur]1
Result: 19.100777919395245 ..\resources\local\train\[NouvelObservateur]1
Result: 3.1657979054086365 ..\resources\local\train\[NouvelObservateur]1
Result: 4.753095204212324 ..\resources\local\train\[NouvelObservateur]1
Result: 6.506205340353516 ..\resources\local\train\[NouvelObservateur]1
Result: 12.029045074667764 ..\resources\local\train\[NouvelObservateur]1
Result: 2.8735632183908044 ..\resources\local\train\[NouvelObservateur]1
Result: 3.588471082267608 ..\resources\local\train\[NouvelObservateur]1
Result: 2.087040153883145 ..\resources\local\train\[NouvelObservateur]1
Result: 3.7663885578069127 ..\resources\local\train\[NouvelObservateur]1
Result: 5.187429004165089 ..\resources\local\train\[NouvelObservateur]1
Result: 3.1093039942597467 ..\resources\local\train\[NouvelObservateur]1
Result: 2.760207015526164 ..\resources\local\train\[NouvelObservateur]2
Result: 1.6385542168674698 ..\resources\local\train\[NouvelObservateur]1
Result: 1.4375994982874234 ..\resources\local\train\[NouvelObservateur]1
Result: 0.5524058729466492 ..\resources\local\train\[NouvelObservateur]1
Result: 10.662863977183862 ..\resources\local\train\[NouvelObservateur]1
Result: 5.555555555555555 ..\resources\local\train\[NouvelObservateur]2
Result: 12.969190220848859 ..\resources\local\train\[NouvelObservateur]1
Result: 12.097694590276193 ..\resources\local\train\[NouvelObservateur]1
Result: 11.934570044777484 ..\resources\local\train\[NouvelObservateur]1
Result: 8.111888111888112 ..\resources\local\train\[NouvelObservateur]3
Result: 10.593161842529106 ..\resources\local\train\[NouvelObservateur]1
Result: 9.028905488795063 ..\resources\local\train\[NouvelObservateur]4
Result: 7.986564657585371 ..\resources\local\train\[NouvelObservateur]5
Result: 3.691515238231507 ..\resources\local\train\[NouvelObservateur]5
Result: 11.348427903565863 ..\resources\local\train\[NouvelObservateur]1
Result: 6.633468007140844 ..\resources\local\train\[NouvelObservateur]4
Result: 5.876526906569825 ..\resources\local\train\[NouvelObservateur]6
Result: 3.831855876465542 ..\resources\local\train\[NouvelObservateur]5
Result: 2.0011545122185876 ..\resources\local\train\[NouvelObservateur]1
Result: 7.879014189693802 ..\resources\local\train\[NouvelObservateur]6
Result: 7.699495421416557 ..\resources\local\train\[NouvelObservateur]7
Result: 7.9242113123016615 ..\resources\local\train\[NouvelObservateur]1

```

Fig. 4: Train pe local 2

- Impactul metodologiei de dezvoltare folosite în cadrul implementării

În cadrul proiectului nostru, decizia de a adopta metodologia AGILE s-a dovedit a fi o alegere eficientă și pragmatică, permițându-ne să ne desfășurăm activitățile de dezvoltare într-un mod flexibil și adaptabil. Colaborarea și coordonarea au fost realizate prin înscrierea echipei în Jira, pentru a asigura o înțelegere clară a cerințelor și o împartire corectă a task-urilor, aceasta fiind cea mai eficientă metodă de a transmite informații între membrii echipei.

În concluzie, integrarea AGILE în metodologia noastră de lucru, sprijinită de Jira, a creat un mediu propice pentru o dezvoltare continuă și adaptabilă a proiectului nostru, asigurând eficiența și colaborarea în livrarea acestuia.