

LAMPIRAN

Lampiran 1: Surat Izin Penelitian



UNIVERSITAS ISLAM BALITAR FAKULTAS TEKNOLOGI INFORMASI

Sekretariat / Kampus : Jl. Majapahit No.04 Telp. (0342) 813145 Blitar

Blitar, 27 Mei 2024

Nomor : D.320/SPP/0441/V/2024
Lampiran :-
Perihal : Permohonan Izin Penelitian

Yth. Kepala Kantor Desa Pandanarum
Jl. Untoro Tengah No. 62, Kecamatan Sutojayan, Kabupaten Blitar

Kami beritahukan dengan hormat bahwa mahasiswa tersebut di bawah ini:

Nama : Firda Rahmania Suchahyo
NIM : 20104410012
Program Studi : Teknik Informatika

Telah kami izinkan untuk menyusun Skripsi guna melengkapi tugas-tugas studi tingkat Sarjana dengan judul penelitian:

"Perbandingan Algoritma K-Means dan K-Medoids untuk Clustering Wilayah Dusun Berdasarkan Pajak Terhutang Pada Dokumen Ketetapan Pajak"

Sehubungan dengan hal tersebut, kami mohon berkenan Saudara untuk menerima mahasiswa kami tersebut untuk melakukan penelitian di institusi dengan waktu pelaksanaan sebagai berikut.

Nama Instansi tujuan : Kantor Desa Pandanarum
Alamat : Jl. Untoro Tengah No. 62, Kecamatan Sutojayan, Kabupaten Blitar
Waktu :-

Atas perhatian dan kerjasama Saudara, kami ucapkan terimakasih.

Dekan Fakultas Teknologi Informatika
Universitas Islam Balitar Blitar



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Lampiran 2: Dokumentasi



Lampiran 3: Perhitungan Iterasi K Medoids

1	Distance From C1	Distance From C2	Distance From C3	Minimum Distance	Cluster Membership	Minimum Distance ²	a(i)	b(i)	Silhouette Score
2	1,23227432	3,222452482	0,7300684899	0,7300684899	C3	0,533	1,523897843	1,298594238	-0,1478469218
3	1,468877122	2,273609465	2,000624902	1,468877122	C1	2,1576	1,375016652	2,135391158	0,356082071
4	0,04472135955	3,005411785	1,794463708	0,04472135955	C1	0,002	0,9062763814	2,225174892	0,5927167861
5	2,147184203	2,685907668	1,484082208	1,484082208	C3	2,2025	1,644989617	2,266226087	0,2741281966
6	0	3,00441342	1,761505038	0	C1	0	0,9040628205	2,193966126	0,5879321884
7	1,431782106	2,261702898	1,946612442	1,431782106	C1	2,05	1,336280818	2,112205924	0,3673529639
8	1,038941769	2,018539076	2,132908812	1,038941769	C1	1,0794	1,233370249	1,990771702	0,3804562082
9	1,05	2,006240265	1,901420522	1,05	C1	1,1025	1,245982997	1,953273626	0,3621052469
10	1,267201641	2,099261775	1,606517974	1,267201641	C1	1,6058	1,437209764	1,881400708	0,2360958735
11	1,861424186	2,479112745	1,419436508	1,419436508	C3	2,0148	1,620233133	1,994698022	0,1877301148
12	1,035615759	2,003696584	1,871576875	1,035615759	C1	1,0725	1,236224128	1,944994623	0,3644074313
13	1,012027668	2,012088467	2,107534104	1,012027668	C1	1,0242	1,213589239	1,978193358	0,3865163713
14	1,441422908	2,196451684	1,497330959	1,441422908	C1	2,0777	1,594946752	1,759641485	0,09359561859
15	1,013952662	2,001299578	1,994893481	1,013952662	C1	1,0281	1,214971737	1,956239242	0,3789247702
16	0,1118033989	3,008654184	1,724644891	0,1118033989	C1	0,0125	0,9113214984	2,156550253	0,5774169893
17	1,427235089	2,245551157	1,842308335	1,427235089	C1	2,037	1,334181558	2,088744951	0,361252049
18	1,467548977	2,278332724	2,036172881	1,467548977	C1	2,1537	1,372140015	2,142104331	0,3594429572
19	0,1063014581	3,00642645	1,82849665	0,1063014581	C1	0,0113	0,9137358032	2,258486104	0,595421109
20	1,062073444	2,046093839	2,269911893	1,062073444	C1	1,128	1,255585539	2,031387356	0,3819073773
21	0,3206243908	3,009003157	1,508940025	0,3206243908	C1	0,1028	0,9627809156	1,96503869	0,5100448044
22	1,903943276	3,514612354	1,175117015	1,175117015	C3	1,3809	1,594131447	2,113386707	0,2456981765
23	1,562049935	3,338038346	1,010989614	1,010989614	C3	1,0221	1,496813943	1,80755128	0,1719106617
24	1,182074448	3,206306286	0,82	0,82	C3	0,6724	1,570454674	1,248177567	-0,205212613
25	0,05385164807	3,002265811	1,720465053	0,05385164807	C1	0,0029	0,9057802564	2,156813831	0,5800378115
26	3,409545424	1,56092921	3,018758023	1,56092921	C2	2,4365	1,657905499	3,045970514	0,4557053357
345	3,02762283	0,2701851217	3,450478228	0,2701851217	C2	0,073	1,165761173	2,997595403	0,6111012274
346	0,4512205669	3,059035796	1,901078641	0,4512205669	C1	0,2036	1,032051783	2,311332816	0,53481967
347	1,00895986	4,004060439	1,943013124	1,00895986	C1	1,018	1,376127992	2,459419397	0,4404663177
348	4,104266073	1,329849616	4,182929595	1,329849616	C2	1,7685	1,750482594	4,056297473	0,5684531015
349	3,014514886	0,1503329638	3,439680218	0,1503329638	C2	0,0226	1,135699284	2,985037277	0,6195359793
350	4,026325869	1,177879451	4,50059996	1,177879451	C2	1,3874	1,754147111	3,977527113	0,5589855051
351	0,1555634919	3,008803749	1,677050983	0,1555634919	C1	0,0242	0,9186118217	2,112427581	0,5651392596
352	2,002723146	1,011236866	2,612470096	1,011236866	C2	1,0226	1,213224768	2,030166119	0,4024012337
353	3,00441342	0	3,435927822	0	C2	0	1,118533028	2,976007382	0,6241497803
354	2,009303362	1,044796631	2,635222951	1,044796631	C2	1,0916	1,24493195	2,040470741	0,3898800287
355	1,090183471	4,011234224	1,988869025	1,090183471	C1	1,1885	1,439453391	2,517656158	0,4282565607
356	3,005095672	0,3360059523	3,521434367	0,3360059523	C2	0,1129	1,176479806	2,979979267	0,6052053721
357	4,001824584	1,002447006	4,335493052	1,002447006	C2	1,0049	1,593375355	3,949006696	0,5965123695
358	4,078884651	1,204740636	4,179880381	1,204740636	C2	1,4514	1,66846335	4,026747216	0,5856548076
359	4,031401741	1,066255129	4,360791213	1,066255129	C2	1,1369	1,651592565	3,976717303	0,5846844422
360	1,081341759	2,016779611	1,932718293	1,081341759	C1	1,1693	1,273113767	1,970285811	0,3538431023
361	1,030970417	2,030418676	1,971040334	1,030970417	C1	1,0629	1,250270568	1,976155494	0,3673217657
362	4,091711133	1,251958466	4,16521308	1,251958466	C2	1,5674	1,692531194	4,04062464	0,5811213997
363	1,078007421	4,009114615	1,989824113	1,078007421	C1	1,1621	1,429860248	2,517521574	0,4320365463
364	2,068260138	1,066677083	2,468400292	1,066677083	C2	1,1378	1,249304294	2,09171663	0,4027373133
365	4,002049475	1,019852931	4,339642842	1,019852931	C2	1,0401	1,602672804	3,950153691	0,594275836
366	3,870400496	3,347909796	2,915630292	2,915630292	C3	8,5009	2,727679384	3,247558568	0,160083082
367	4,020211437	1,035857133	4,354239314	1,035857133	C2	1,073	1,62734576	3,965786861	0,5896537518
368	3,033842448	0,4172529209	3,583531777	0,4172529209	C2	0,1741	1,241986619	3,004458739	0,5866188466
369	1,033247308	4,00181209	1,967460292	1,033247308	C1	1,0676	1,394656004	2,492013692	0,440349783

Lampiran 4: Perhitungan Iterasi K Means

1	Distance From C1	Distance From C2	Distance From C3	Minimum Distance	Cluster Membership	Minimum Distance ²	a(i)	b(i)	Silhouette Score	
2	1,720610357	2,528339376	1,440138882	1,440138882	C3		2,074	1,110717272	2,385573947	0,5344024974
3	1,038460399	2,957025533	2,472347063	1,038460399	C1		1,0784	1,672177892	1,672622542	0,0002658399267
4	1,023914059	3,709932614	1,239072234	1,023914059	C1		1,0484	0,9622256189	2,253417848	0,572992812
5	2,16	3	2,379180531	2,16	C1		4,6656	1,867435741	2,236811547	0,1651349695
6	1,033440855	3,689227561	1,213301282	1,033440855	C1		1,068	0,9526250249	2,250014574	0,5766138424
7	1,0009995	2,914584018	2,413234344	1,0009995	C1		1,002	1,644326019	1,625612062	-0,01138092872
8	0,2641968963	3,629572978	2,200658992	0,2641968963	C1		0,0698	1,504347541	1,609151583	0,0651299992
9	0,5142956348	3,455850112	2,10798482	0,5142956348	C1		0,2645	1,475377347	1,572581931	0,06181209504
10	1,021077862	3,229767794	2,068453529	1,021077862	C1		1,0426	1,582486838	1,651494446	0,04178494708
11	1,830109286	3,018161692	2,219774763	1,830109286	C1		3,3493	2,023679172	2,016321541	-0,003635769199
12	0,5044799302	3,435593107	2,078509081	0,5044799302	C1		0,2545	1,467432359	1,555240634	0,05645960699
13	0,1749285568	3,612229229	2,166125573	0,1749285568	C1		0,0306	1,490379046	1,584749823	0,05954932195
14	1,288914272	3,136957124	2,092128103	1,288914272	C1		1,6613	1,695807841	1,744455751	0,0278871562
15	0,340147027	3,527336105	2,12513529	0,340147027	C1		0,1157	1,469728781	1,566320224	0,06166774939
16	1,053802638	3,665637734	1,17072627	1,053802638	C1		1,1105	0,9473340744	2,253309907	0,5795810991
17	1,025377979	2,825349536	2,389414154	1,025377979	C1		1,0514	1,620008446	1,609415349	-0,006538914562
18	1,025134138	2,988728827	2,47842692	1,025134138	C1		1,0509	1,678150366	1,675283514	-0,001708340495
19	1,017300349	3,731340242	1,273106437	1,017300349	C1		1,0349	0,9783470412	2,257181859	0,56565825978
20	0,1523154621	3,73470213	2,256036347	0,1523154621	C1		0,0232	1,550822639	1,645517111	0,05754693897
21	1,156027681	3,535024752	1,08411254	1,08411254	C3		1,1753	0,9580365987	2,242560855	0,572793489
22	2,381806037	3,197405198	1,582434833	1,582434833	C3		2,5041	1,87524612	2,361407431	0,2058777766
23	2,079038239	3,182074795	1,369415934	1,369415934	C3		1,8753	1,594429349	2,462833498	0,3526036777
24	1,670957809	2,571555949	1,439791652	1,439791652	C3		2,073	1,076408123	2,366425528	0,5451333201
25	1,046947945	3,66367302	1,192057046	1,046947945	C1		1,0961	0,9470800557	2,244850607	0,5781099852
26	2,711641569	2,914686947	4,167985125	2,711641569	C1		7,353	1,980854373	2,933193332	0,324676505
348	3,220093166	4,386274045	5,005407076	3,220093166	C1		10,369	2,319466217	3,829214297	0,3942709818
349	2,05107289	4,028759114	4,067038234	2,05107289	C1		4,2069	1,523970015	3,381240975	0,5492867778
350	3,020943561	4,801135282	5,091954438	3,020943561	C1		9,1261	2,296879004	4,381320319	0,4757564303
351	1,074150827	3,636069306	1,140394669	1,074150827	C1		1,1538	0,9442752562	2,250805414	0,5804722833
352	1,06400188	3,639024595	3,056141358	1,06400188	C1		1,1321	1,227971115	2,424076441	0,4934272311
353	2,036393872	4,026673565	4,051888449	2,036393872	C1		4,1469	1,510906482	3,371096475	0,5518056237
354	1,071867529	3,659084585	3,054472131	1,071867529	C1		1,1489	1,257536724	2,430093222	0,4825150274
355	2,072896524	4,045256481	0,8542833254	0,8542833254	C3		0,7298	1,286786598	3,188310946	0,5964049241
356	2,014398173	4,121771464	4,067296399	2,014398173	C1		4,0578	1,556113106	3,383332948	0,5400605395
357	3,022879422	4,604888707	5,036953444	3,022879422	C1		9,1378	2,175549531	4,275156102	0,4911181068
358	3,178694701	4,390546663	5,019561734	3,178694701	C1		10,1041	2,25094415	3,845111137	0,4145958153
359	3,059052141	4,628714724	5,082174731	3,059052141	C1		9,3578	2,220612526	4,298812759	0,4834358577
360	0,5622277119	3,47575891	2,143828351	0,5622277119	C1		0,3161	1,498341347	1,600596789	0,6388582263
361	0,43829214	3,507491981	2,071714266	0,43829214	C1		0,1921	1,516496945	1,560977728	0,02849546294
362	3,202389733	4,368352092	5,013820898	3,202389733	C1		10,2553	2,272722263	3,797149293	0,4014661822
363	2,065550774	4,046838272	0,8373768566	0,8373768566	C3		0,7012	1,277109679	3,185437047	0,5990786633
364	1,25015999	3,493493953	3,054766767	1,25015999	C1		1,5629	1,265146125	2,450231191	0,4836625501
365	3,023177137	4,609772229	5,031947933	3,023177137	C1		9,1396	2,183166396	4,284746909	0,4904794979
366	3,708368914	3,469639751	4,046986533	3,469639751	C2		12,0384	1,870617378	3,302765243	0,4336208479
367	3,04409264	4,623515978	5,069635095	3,04409264	C1		9,2665	2,201461711	4,295954703	0,4875500643
368	2,038872237	4,185713798	4,138175927	2,038872237	C1		4,157	1,603517631	3,423019073	0,5315487301
369	2,044015656	4,035888997	0,729177619	0,729177619	C3		0,5317	1,235008439	3,173810473	0,6108751768