

TEKNIK PENULISAN KARYA ILMIAH

“Titik Wifi”



Oleh:

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PROGRAM STUDI TEKNIK KOMPUTER

FAKULTAS ILMU KOMPUTER

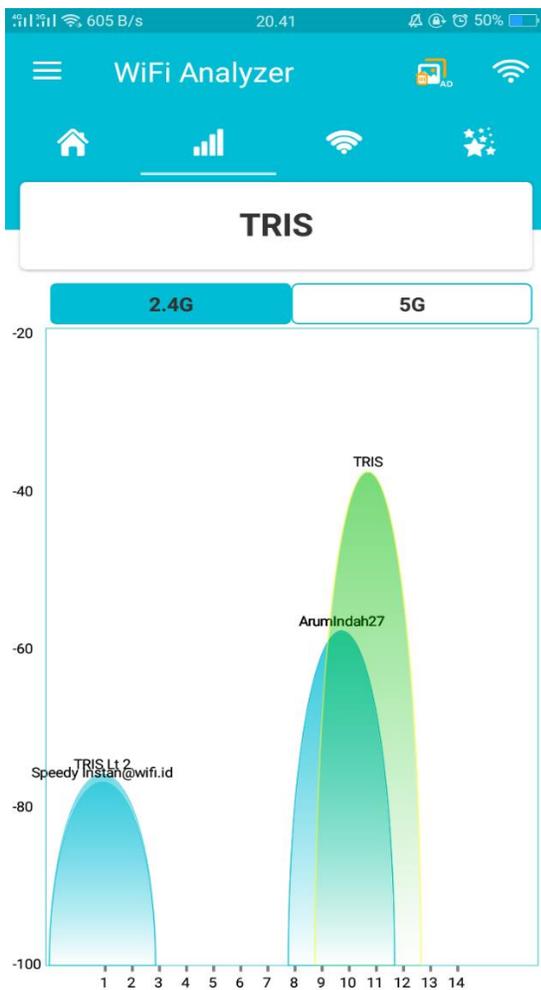
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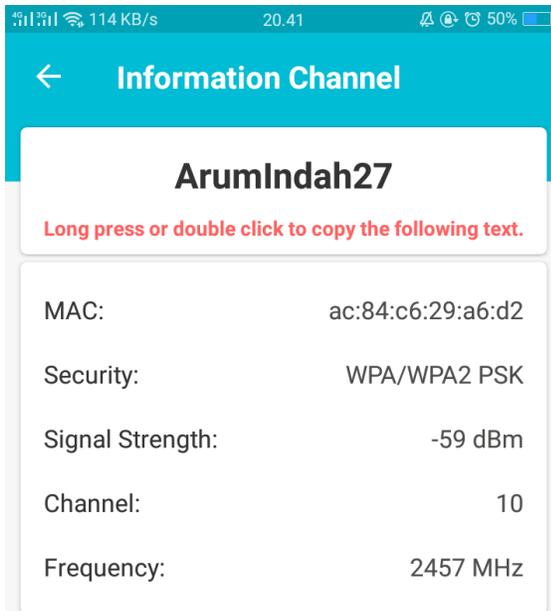
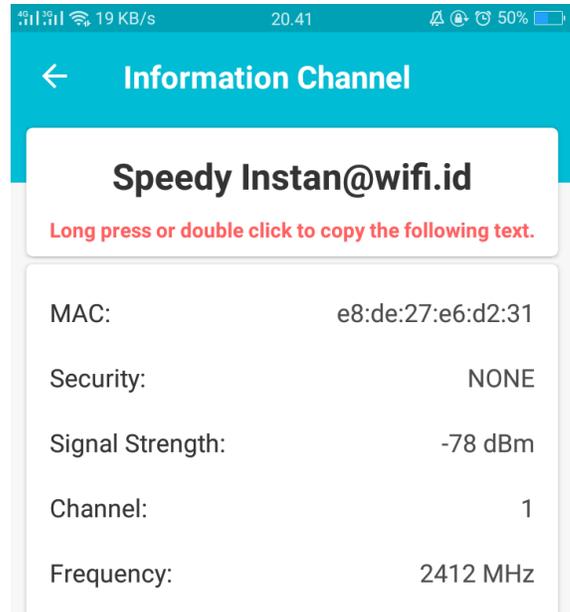
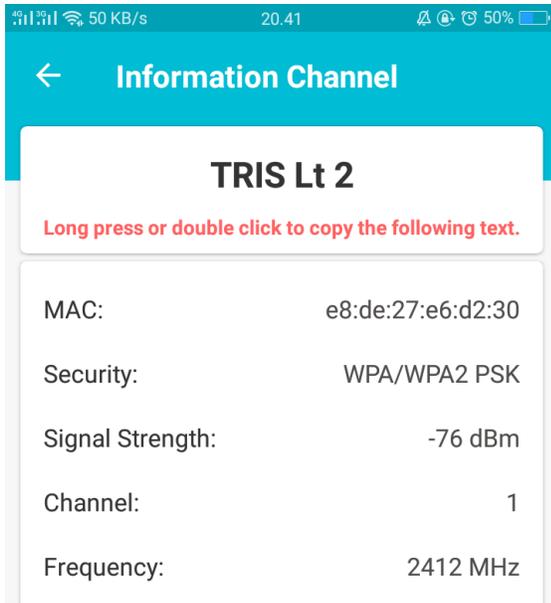
Di penelitian kali ini saya mengambil topik tentang penelitian yaitu titik wifi dimana saya meneliti titik wifi ini di berbagai tempat dan menggunakan suatu aplikasi yaitu wifi analyzer. Aplikasi tersebut dapat di download di playstore atau yang lainnya. Untuk menggunakan aplikasi tersebut sebelumnya jangan lupa untuk, menghidupkan wifi nya terlebih dahulu .

Dalam penelitian ini saya meneliti di 5 tempat yaitu kompleks grandhill 3, gang tanjung, jln. Bonsai raya, Lorong hasana as dan jln. Darmapala.adapun hasil dari titik wifi di tempat- tempat tersebut.

Lokasi : Perumahan Grandhill 3 lunjuk jaya



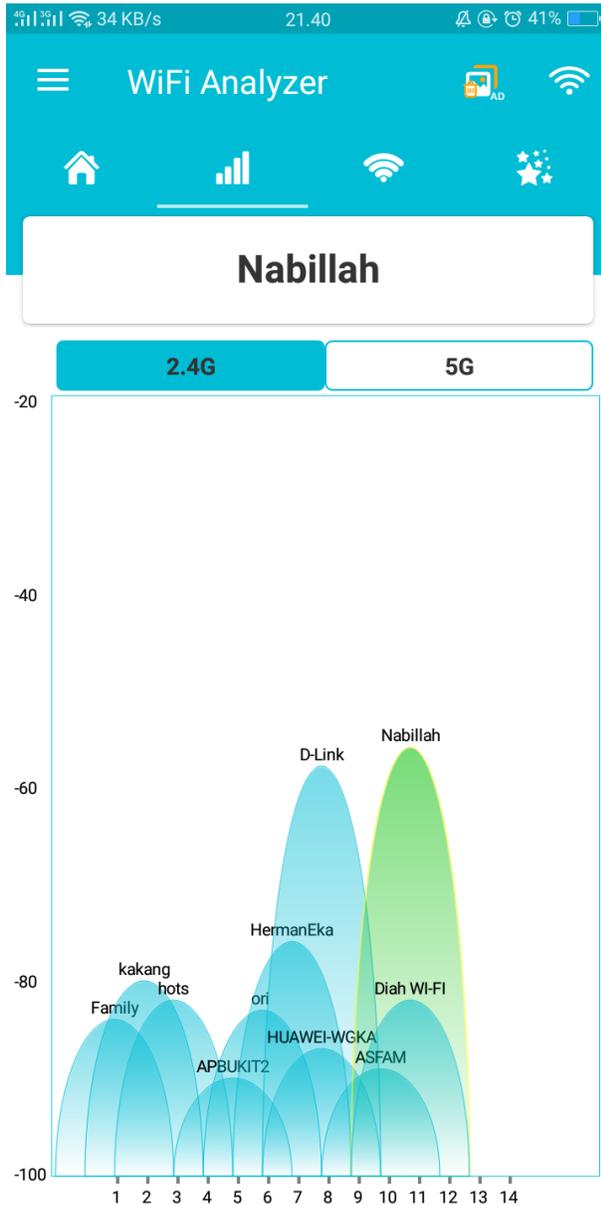
Property	Value
MAC:	00:2e:c7:c5:20:ac
Security:	WPA/WPA2 PSK
Signal Strength:	-40 dBm
Channel:	11
Frequency:	2462 MHz



No	SSID	MAC	Frekuensi	Signal Strength	Channel
1	Tris	00:2e:c7:c5:20:ac	2462 MHz	-40 dBm	11
2	Tris Lt2	e8:de:27:e6:d2:30	2412 MHz	-76 dBm	1
3	Speedy Instan@wifi.id	e8:de:27:e6:d2:31	2412 MHz	-78 dBm	1
4	ArumIndah27	Ac:84:c6:29:a6:d2	2457 MHz	-59 dBm	10

Hasil yang didapat dari tempat yang pertama yaitu adanya 4 titik wifi yang ada di sekitar perumahan grandhill 3, lebih tepatnya titik wifi yang di sekitar blok e10 dengan signal strength yang berbeda beda.

Selanjutnya lokasi ke 2 yaitu di Lorong Hasana As.



The screenshot shows the 'Information Channel' screen for the 'Nabillah' network. It provides the following details:

- MAC: bc:8a:e8:2b:f6:7e
- Security: WPA/WPA2 PSK
- Signal Strength: -57 dBm
- Channel: 11
- Frequency: 2462 MHz

Information Channel

APBUKIT2

Long press or double click to copy the following text.

MAC:	00:0c:42:18:b9:af
Security:	WEP
Signal Strength:	-91 dBm
Channel:	5
Frequency:	2432 MHz

Information Channel

ori

Long press or double click to copy the following text.

MAC:	60:2e:20:7c:6a:c0
Security:	WPA/WPA2 PSK
Signal Strength:	-80 dBm
Channel:	6
Frequency:	2437 MHz

Information Channel

kakang

Long press or double click to copy the following text.

MAC:	48:8e:ef:92:8a:a8
Security:	WPA/WPA2 PSK
Signal Strength:	-82 dBm
Channel:	2
Frequency:	2417 MHz

Information Channel

HermanEka

Long press or double click to copy the following text.

MAC:	b4:43:26:6f:fd:54
Security:	WPA/WPA2 PSK
Signal Strength:	-71 dBm
Channel:	7
Frequency:	2442 MHz

31 KB/s 21.40 41%

← Information Channel

Diah WI-FI

Long press or double click to copy the following text.

MAC:	60:2e:20:7c:6a:14
Security:	WPA/WPA2 PSK
Signal Strength:	-84 dBm
Channel:	11
Frequency:	2462 MHz

40 KB/s 21.40 41%

← Information Channel

HUAWEI-WGKA

Long press or double click to copy the following text.

MAC:	f0:63:f9:9d:6a:a8
Security:	WPA/WPA2 PSK
Signal Strength:	-85 dBm
Channel:	9
Frequency:	2452 MHz

35 KB/s 21.40 41%

← Information Channel

hots

Long press or double click to copy the following text.

MAC:	ce:2d:83:9a:83:3b
Security:	WPA/WPA2 PSK
Signal Strength:	-84 dBm
Channel:	3
Frequency:	2422 MHz

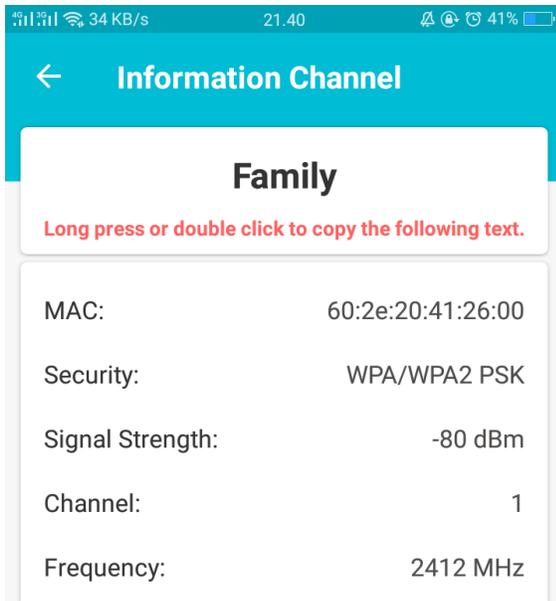
34 KB/s 21.40 41%

← Information Channel

ASFAM

Long press or double click to copy the following text.

MAC:	34:1e:6b:36:7c:fc
Security:	WPA/WPA2 PSK
Signal Strength:	-93 dBm
Channel:	10
Frequency:	2457 MHz

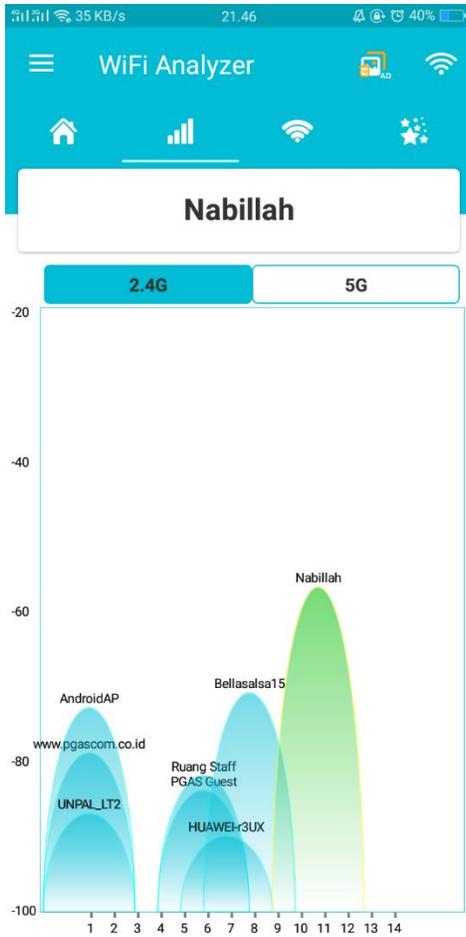


No	SSID	MAC	Frekuensi	Signal Strength	Channel
1	Nabillah	bc:8a:e8:2b:f6:72	2462 MHz	-57 dBm	11
2	Family	60:2e:20:41:26:00	2412 MHz	-80 dBm	1
3	kakang	48:8e:ef:92:8a:a8	2417 MHz	-82 dBm	2
4	hots	ce:2d:83:9a:83:3b	2422 MHz	-84 dBm	3
5	ori	60:2e:20:7c:6a:c0	2437 MHz	-80 dBm	6
6	APBUKIT2	00:0c:42:18:b9:af	2432 MHz	-91 dBm	5
7	ASFAM	34:1e:6b:36:7c:fc	2457 MHz	-93 dBm	10
8	HermanEka	b4:43:26:6f:fd:54	2442 MHz	-71 dBm	7
9	Diah WI-FI	60:2e:20:7c:6a:14	2462 MHz	-84 dBm	11
10	HUAWEI-WGKA	f0:63:f9:9d:6a:a8	2452 MHz	-85 dBm	9

Terdapat 10 titik wifi yang ada di Lorong hasana as, dengan signal strength yang berbeda – beda dan di Lorong hasana as untuk ssid Diah Wi-fi memiliki channel yang banyak yaitu 11 channel. Dan adapun beberapa frekuensi yang sama.

Untuk lokasi yang ketiga yaitu lokasi di jalan darmapala:

No	SSID	MAC	Frekuensi	Signal Strength	Channel
1	Nabillah	bc:8a:e8:2b:f6:72	2462 MHz	-57 dBm	11
2	Bellasalsa15	A4:be:2b:ba:db:a0	2447 MHz	-67 dBm	8
3	Ruang Staff	18:e8:29:47:67:2a	5745 Mhz	-92 dBm	149
4	PGAS Guest	1a:e8:29:47:67:2a	5745 MHz	-88 dBm	149
5	HUAWEI-r3UX	40:ee:dd:b0:02:e8	2442 MHz	-88 dBm	7
6	AndroidAP	20:5e:f7:f3:62:38	2412 MHz	-70 dBm	1
7	UNPAL_LT2	00:15:6d:f8:f7:51	2412 MHz	-83 dBm	1
8	www.pgacom.co.id	4c:5e:0c:68:23:95	2412 MHz	-75 dBm	1



Information Channel

www.pgascom.co.id

Long press or double click to copy the following text.

MAC: 4c:5e:0c:68:23:95

Security: WPA/WPA2 PSK

Signal Strength: -83 dBm

Channel: 1

Frequency: 2412 MHz

Information Channel

Ruang Staff

Long press or double click to copy the following text.

MAC: 18:e8:29:47:67:2b

Security: WPA/WPA2 PSK

Signal Strength: -82 dBm

Channel: 6

Frequency: 2437 MHz

Information Channel

Bellasalsa15

Long press or double click to copy the following text.

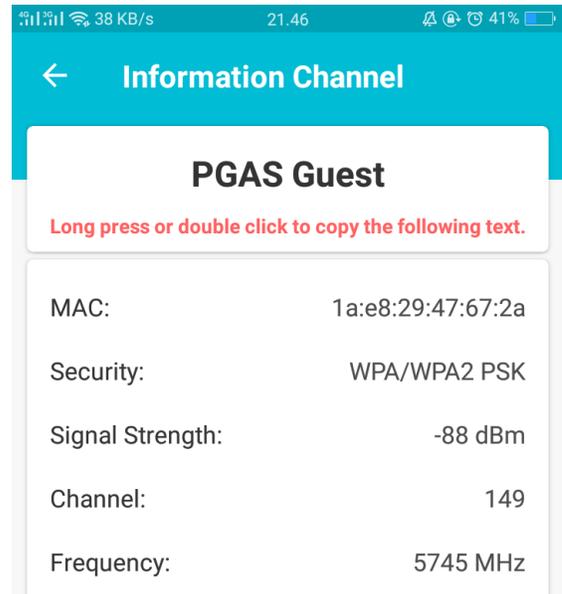
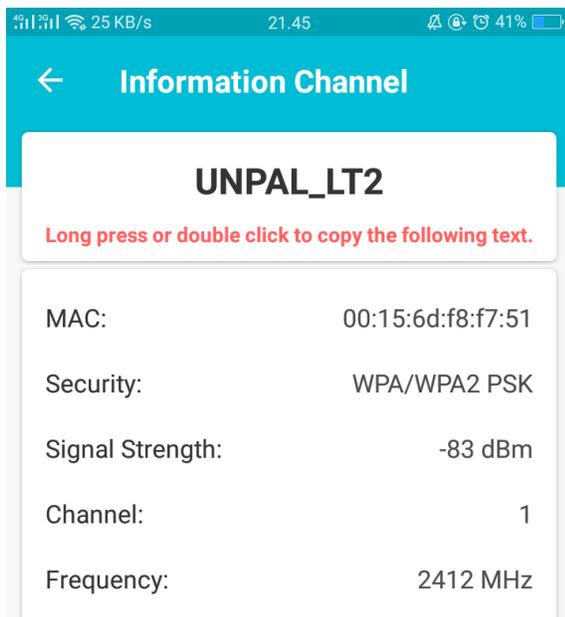
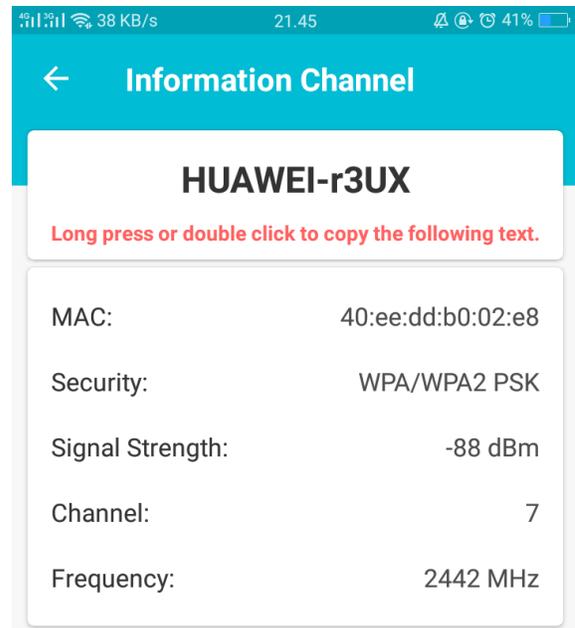
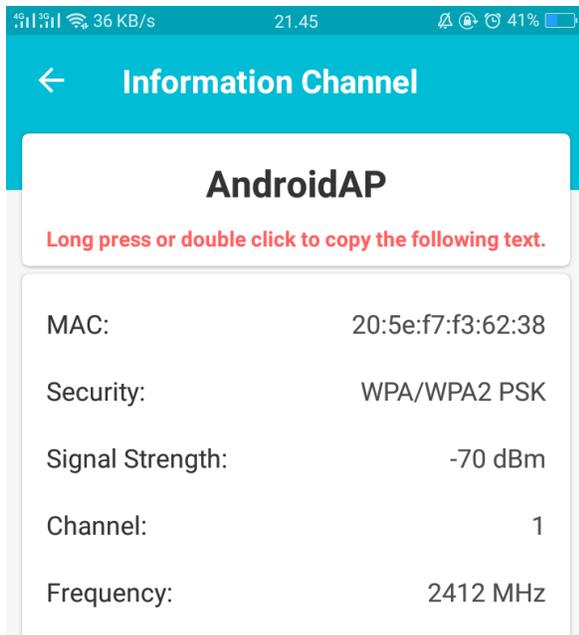
MAC: a4:be:2b:ba:d8:a0

Security: WPA/WPA2 PSK

Signal Strength: -67 dBm

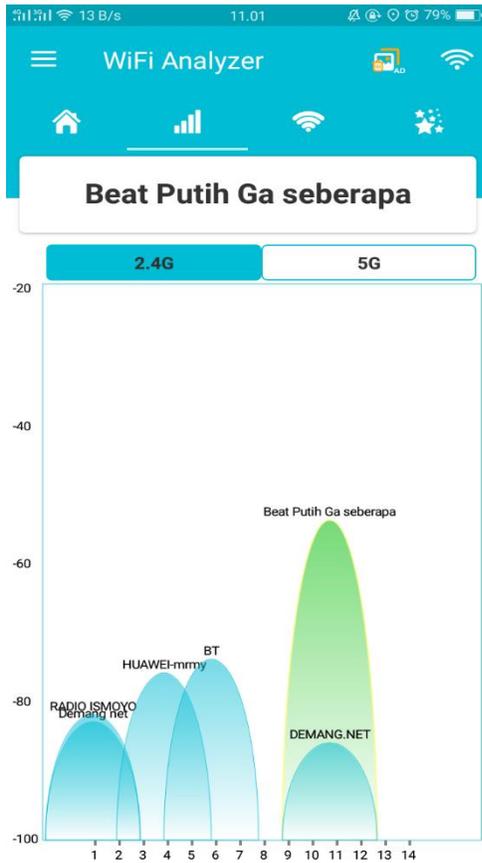
Channel: 8

Frequency: 2447 MHz



untuk jalan ini terdapat 8 titik wifi yang ditemukan yang jumlah signal strength nya hampir sama tetapi untuk di wifi PGAS Guest memiliki channel yang besar yaitu 149 channel.

Lokasi selanjutnya yaitu di jalan. Bonsai Raya



Information Channel

HUAWEI-mrmy

Long press or double click to copy the following text.

MAC:	48:8e:ef:84:56:58
Security:	WPA/WPA2 PSK
Signal Strength:	-79 dBm
Channel:	4
Frequency:	2427 MHz

Information Channel

Demang net

Long press or double click to copy the following text.

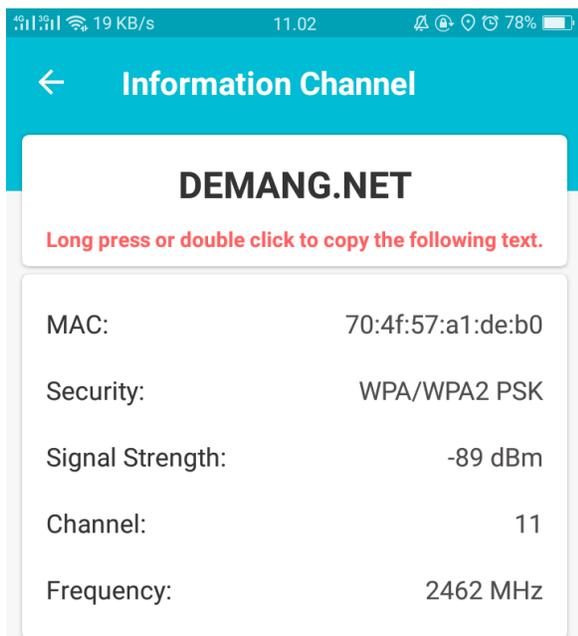
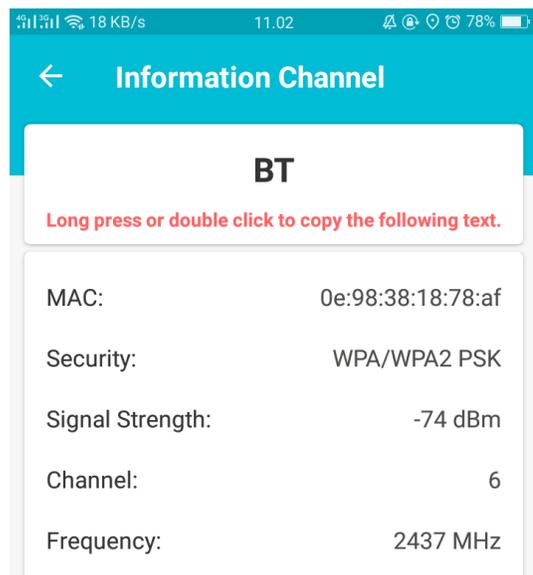
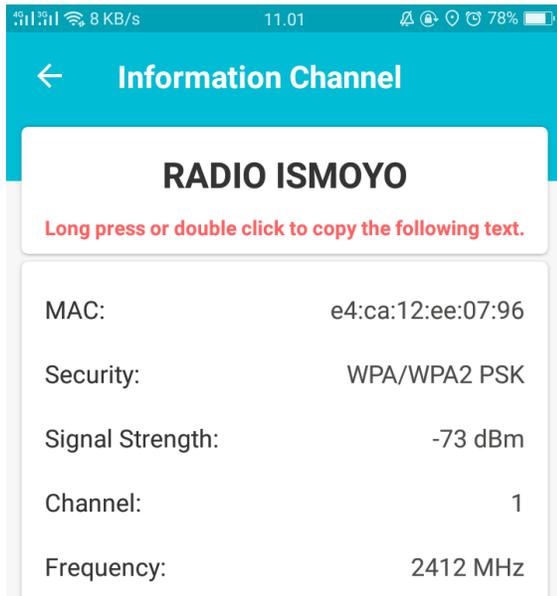
MAC:	d0:ef:c1:0c:97:a4
Security:	WPA/WPA2 PSK
Signal Strength:	-86 dBm
Channel:	1
Frequency:	2412 MHz

Information Channel

Beat Putih Ga seberapa

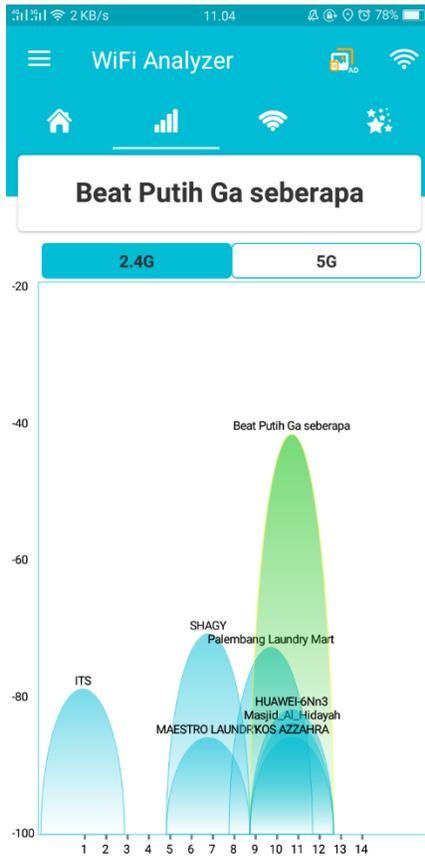
Long press or double click to copy the following text.

MAC:	f4:f5:db:c9:93:d3
Security:	WPA/WPA2 PSK
Signal Strength:	-54 dBm
Channel:	11
Frequency:	2462 MHz



1	Demang net	d0:ef:c1:0c:97:a4	2412 MHz	-86 dBm	1
2	RADIO ISMOYO	e4:ca:12:ee:07:96	2412 MHz	-73 dBm	1
3	HUAWEI-mrmy	48:8e:ef:84:56:58	2427 MHz	-79 dBm	4
4	BT	0e:98:38:18:78:af	2437 MHz	-74 dBm	6
5	DEMANG.NET	70:4f:57:a1:de:b0	2462 MHz	-89 dBm	11
6	Beat Putih Ga seberapa	f4:f5:db:c9:93:d3	2462 MHz	-54 dBm	11

Lokasi yang terakhir yaitu di Gang Tanjung



The screenshot shows the 'Information Channel' screen for 'Masjid_Al_Hidayah'. It features a red header with a back arrow and the title 'Information Channel'. Below the title is a red box with the text 'Long press or double click to copy the following text.' The network details are listed as follows:

MAC:	60:18:88:c1:fb:5a
Security:	WPA/WPA2 PSK
Signal Strength:	-89 dBm
Channel:	11
Frequency:	2462 MHz

The screenshot shows the 'Information Channel' screen for 'Palembang Laundry Mart'. It features a red header with a back arrow and the title 'Information Channel'. Below the title is a red box with the text 'Long press or double click to copy the following text.' The network details are listed as follows:

MAC:	ec:f0:fe:97:2f:68
Security:	WPA/WPA2 PSK
Signal Strength:	-81 dBm
Channel:	10
Frequency:	2457 MHz

4G LTE 84 KB/s 11.05 78%

← Information Channel

SHAGY

Long press or double click to copy the following text.

MAC:	88:86:03:34:be:28
Security:	WPA/WPA2 PSK
Signal Strength:	-62 dBm
Channel:	7
Frequency:	2442 MHz

4G LTE 26 KB/s 11.05 77%

← Information Channel

MAESTRO LAUNDRY

Long press or double click to copy the following text.

MAC:	04:33:89:22:46:c8
Security:	WPA/WPA2 PSK
Signal Strength:	-91 dBm
Channel:	7
Frequency:	2442 MHz

4G LTE 121 KB/s 11.05 78%

← Information Channel

HUAWEI-6Nn3

Long press or double click to copy the following text.

MAC:	d0:ef:c1:4e:38:48
Security:	WPA/WPA2 PSK
Signal Strength:	-82 dBm
Channel:	11
Frequency:	2462 MHz

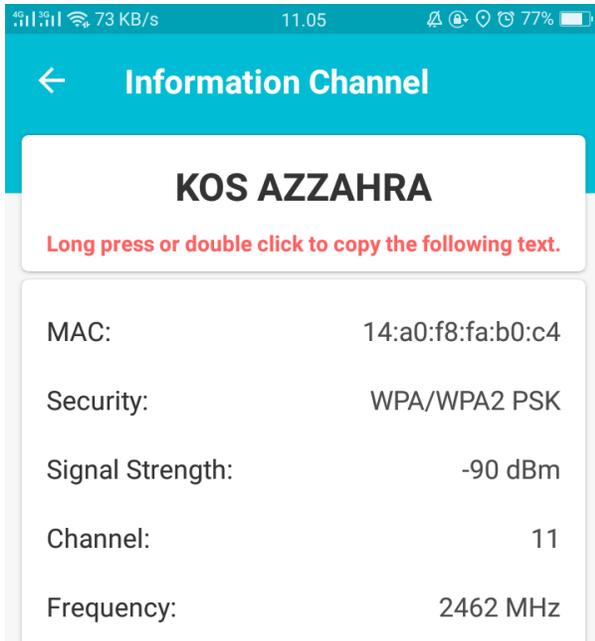
4G LTE 59 KB/s 11.05 77%

← Information Channel

ITS

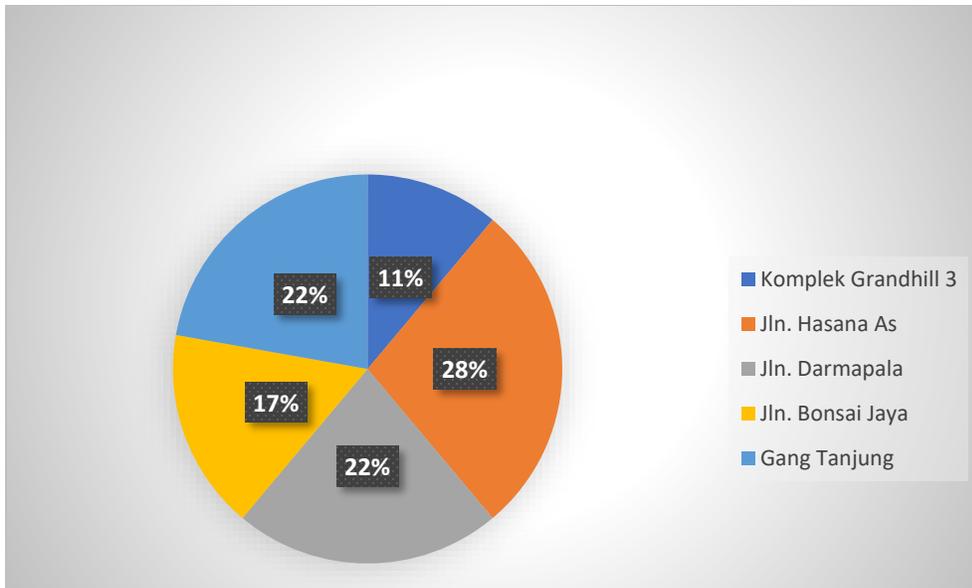
Long press or double click to copy the following text.

MAC:	24:16:6d:e6:a1:54
Security:	WPA/WPA2 PSK
Signal Strength:	-78 dBm
Channel:	1
Frequency:	2412 MHz



No	SSID	MAC	Frekuensi	Signal Strength	Channel
1	ITS	24:16:6d:e6:a1:54	2412 MHz	-78 dBm	1
2	SHAGY	88:86:03:34:be:28	2442 MHz	-62 dBm	7
3	Palembang Laundry Mart	ec:f0:fe:97:2f:68	2457 MHz	-81 dBm	10
4	HUAWEI-6Nn3	d0:ec:c1:4e:38:48	2462 MHz	-82 dBm	11
5	Masjid_Al_Hidayah	60:18:88:c1:fb:5a	2462 MHz	-89 dBm	11
6	MAESTRO LAUNDRY	04:33:89:22:46:c8	2442 MHz	-91dBm	7
7	KOS AZZAHRA	14:a0:f8:fa:b0:c4	2462 MHz	-90dBm	11
8	Beat Putih Ga seberapa	f4:f5:db:c9:93:d3	2462 MHz	-54 dBm	11

Hasil yang di dapat dari penelitian di gang tanjung yaitu ada 8 titik wifi dengan 4 channel yang sama.



Dari hasil penelitian di atas dapat disimpulkan untuk wifi yang memiliki titik yang paling banyak yaitu di jalan hasana As. Signal strength yaitu kuatnya sinyal dapat membuat kualitas jaringan yang sangat handal. Signal Strength pada suatu wireless dapat diukur kehandalannya dengan mengetahui nilai besaran dBm yang tertera saat ini. Semakin nilai dBm nya mendekati positif maka sinyalnya akan semakin baik dan handal. Untuk frekuensinya sendiri yaitu jumlah getaran yang dihasilkan dalam setiap 1 detik.

Channel wifi sangat penting untuk diatur di wifi yaitu meningkatkan daya jangkau sinyal wifi tersebut, dan mencegah interferensi . mengatur channel pada wifi dapat meningkatkan daya jangkau, maka kita dapat menggunakan channel yang memiliki frekuensi yang paling kecil. Semakin kecil frekuensi sebuah gelombang maka semakin besar Panjang gelombang yang menyebabkan semakin jauh jangkauannya. Semakin pesatnya zaman maka teknologi wifi semakin sangat dibutuhkan dalam kehidupan sehari – hari.