

DENGUE HEMORRHAGIC FEVER DISEASE DATA CLUSTERING BASED ON INTERACTIVE MAP IN SPECIAL REGION JAKARTA CAPITAL

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ABSTRACT

Dengue fever is an infection caused by the dengue virus. The virus spread by Aedes aegypti mosquito. Patients who are infected have symptoms such as fever, accompanied by a headache, pain in muscles and joints, until spontaneous bleeding. This research aims to develop an interactive map that is presenting data with web media to obtain spatial information easily. The interactive map uses clustering to process the data from the Jakarta Health Service Office. Clustering is a method of data analyzing, which aims to group data with similar characteristics to the same 'region' and the data with different characteristics to the 'other area'. This method separates the values of health indicators into a few groups which have significant value difference among groups. The result of this research can be used by the policy maker in Jakarta to reduce the spread of the disease and to decrease the mortality of the patient of dengue fever. The interactive map also can be used for a decision-making system for the government based on data dengue fever in Jakarta. This research can help the government and society to take action related to a characteristic of Jakarta areas that have a lot of cases of dengue hemorrhagic fever.

BENEFIT

This system can help the Health Office Service of Jakarta as a decision support tool based on a map of Dengue Hemorrhagic Fever in the area. The system can monitor the spreading of Dengue Hemorrhagic Fever patient by location detection of areas. It will help to take some actions to prevent and to handle the cases of Dengue Hemorrhagic Fever.

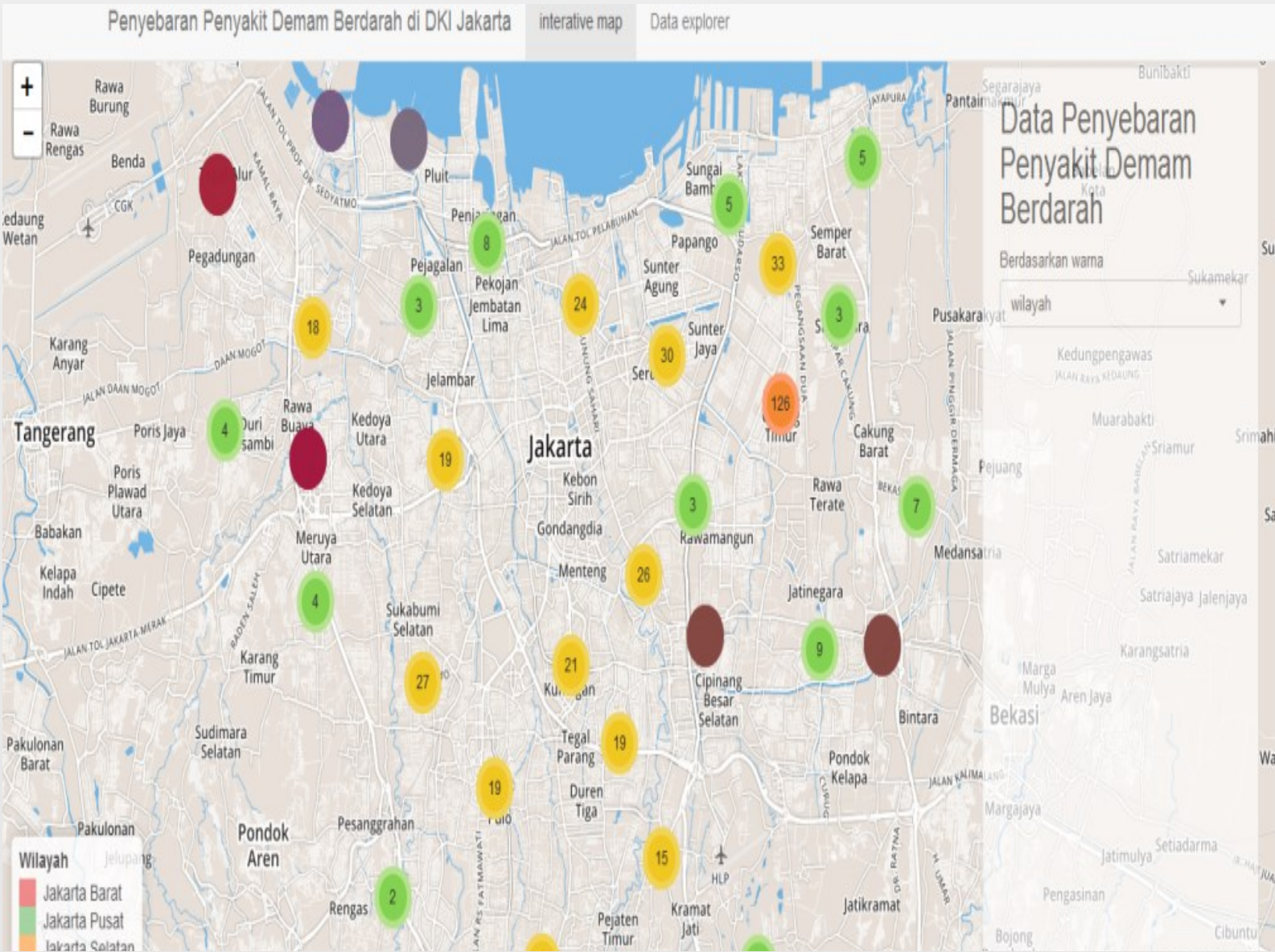
AIM

Develop an interactive map using the clustering method for decision support systems for related parties of Dengue Hemorrhagic Fever data in DKI Jakarta.

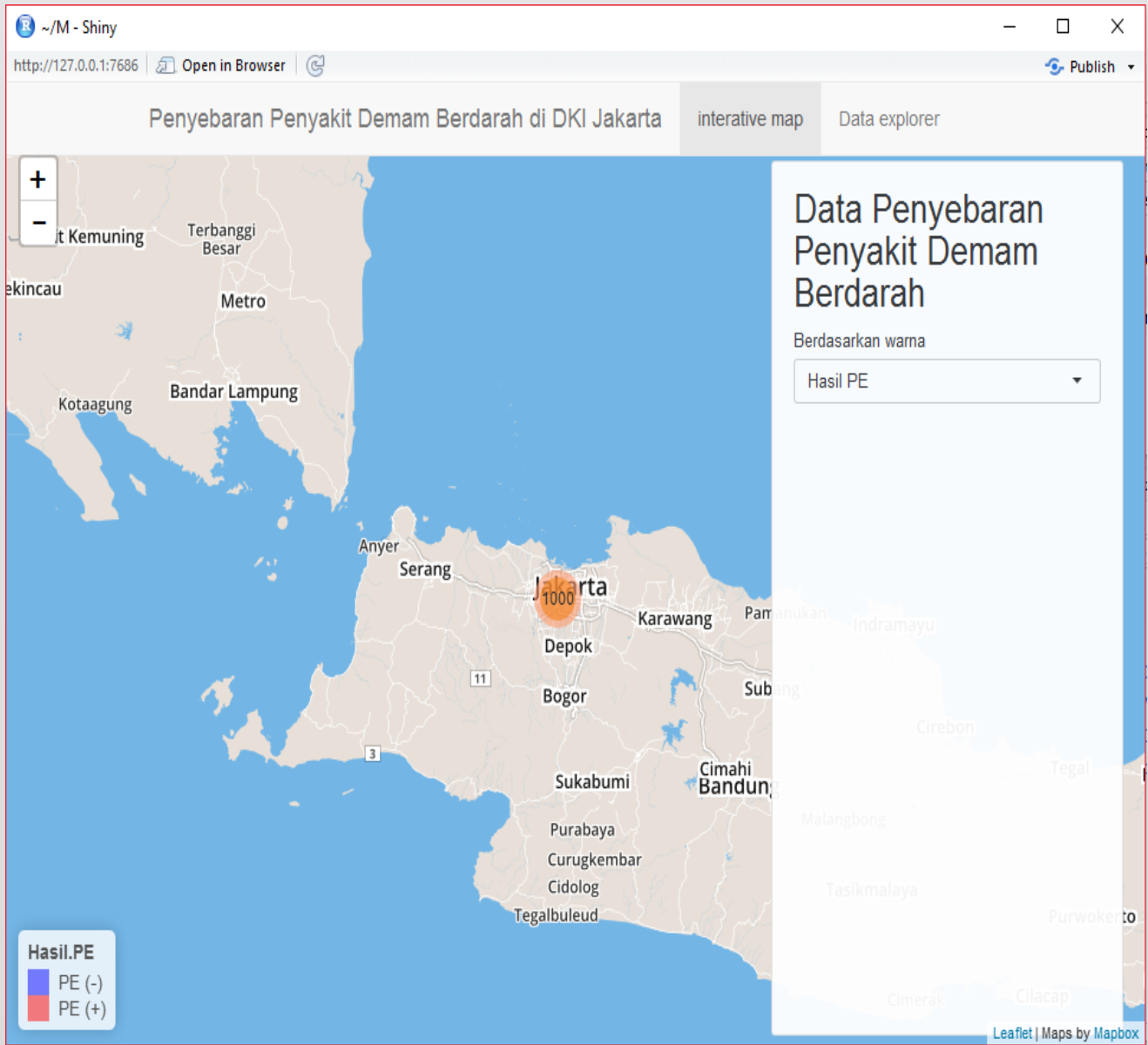
SYSTEM TESTING RESULT

The results of the questionnaire show that the satisfaction of each respondent reaches more than 50%, which means that the system is useful for users.

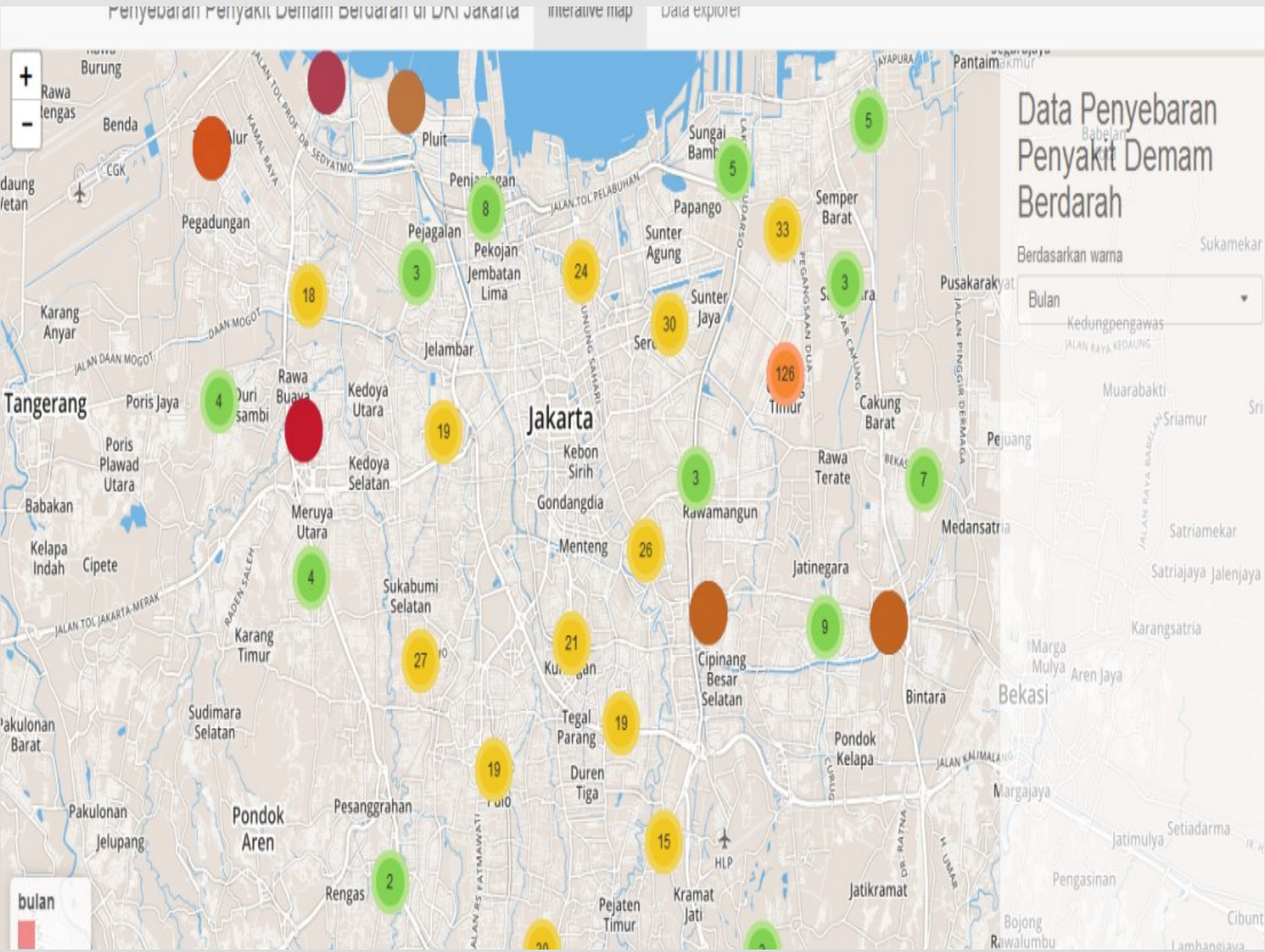
Clustering data on the interactive map based on regions located in DKI Jakarta



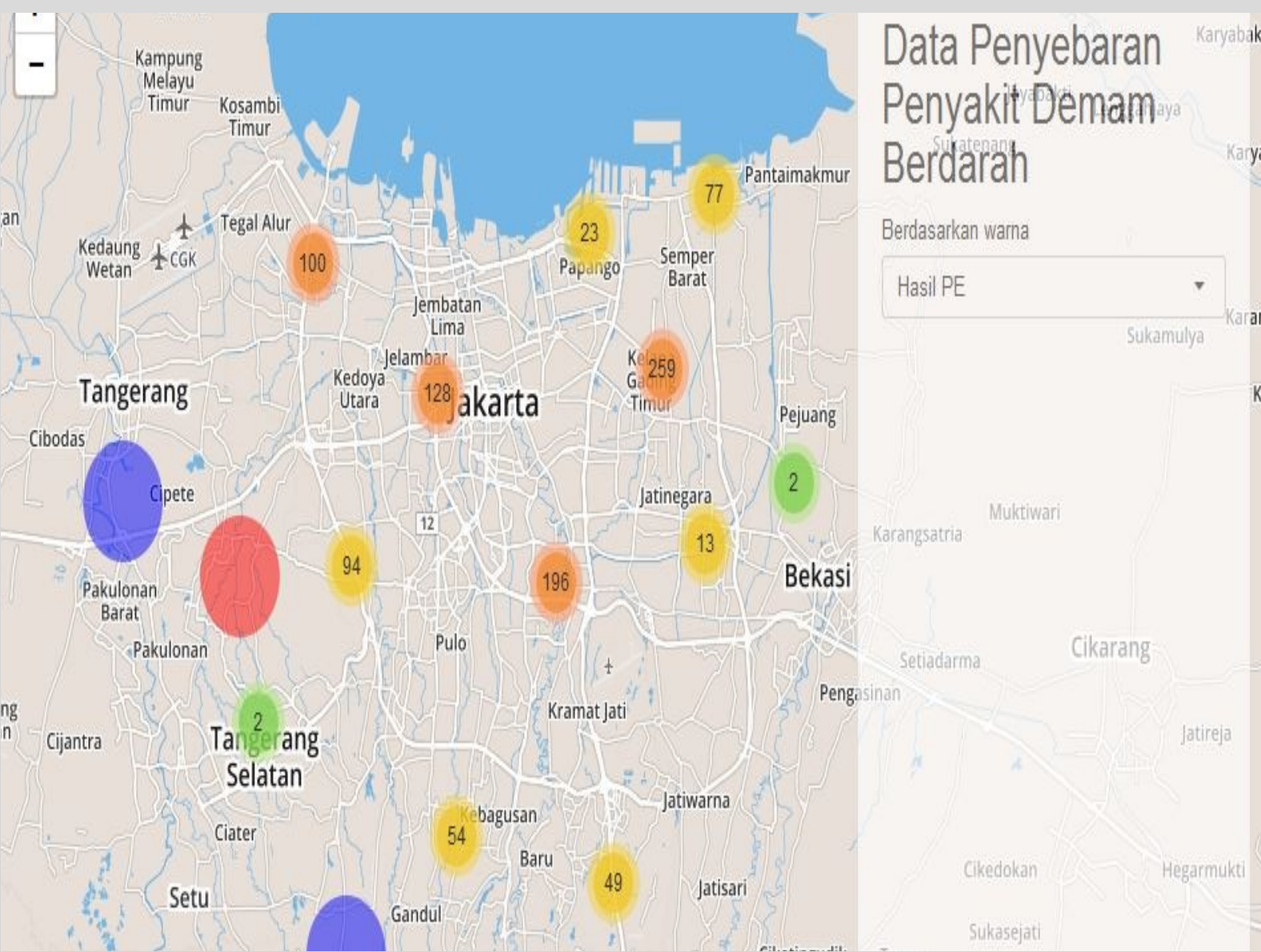
The view of interactive map. There is an input to set the display of the map based on the existing parameters



Clustering data on the interactive map based on the month



Clustering data on the interactive map based on the results of Epidemiological Investigations (PE)



The data searching feature. The user can use the data searching feature directly. There are some additional features in the table for individual data searching easily.

Penyebaran Penyakit Demam Berdarah di DKI Jakarta											
interative map Data explorer											
Kilayah											
Kilayah											
Show 10 entries											
no	Alamat	RT	RW	Tgl.Masuk	Kelurahan	Kecamatan	Wilayah	Tgl.PE	Hasil.PE	Tgl.Fogging.1	Tgl.Fogging.2
1	JL. LT AGUNG GG. TOPIK RT 0808 LT AGUNG - JAKSEL	8	8	05/02/2016	LENTENG AGUNG	Kelapa Gading	Jakarta Selatan	12/02/2016	PE (+)	25/02/2016	03/03/2016
2	JL. WR SILAH NO. 6 RT. 01/05 CIGANJUR - JAKSEL	1	5	12/02/2016	CIGANJUR	Kelapa Gading	Jakarta Selatan	19/02/2016	PE (+)	24/02/2016	02/03/2016
3	JL. BAKTI 1 RT 09 RW 01	9	1	26/01/2016	BARU	Kelapa Gading	Jakarta Timur	27/01/2016	PE (-)		27/01/2016
4	JL. PEGANGSAAN DUA NO. 052	3	4	26/02/2016	PEGANGSAAN DUA	Kelapa Gading	Jakarta Utara	29/02/2016	PE (-)		27/02/2016
5	Pelepah Hijau III				KELAPA BARU	Kelapa	Jakarta				

ACKNOWLEDGEMENT

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