



**UNIVERSITAS AIRLANGGA**  
**FAKULTAS SAINS DAN TEKNOLOGI**  
**PROGRAM STUDI S1 SISTEM INFORMASI**  
**UJIAN AKHIR SEMESTER GENAP 2021/2022**

Mata Kuliah (sks)	: Praktikum Pembelajaran Mesin (1 SKS)
Hari, Tanggal	: Kamis, 30 Juni 2022
Dosen Pengampu	: Indah Werdiningsih, S.Si, M.Kom Endah Purwanti, S.Si., M.Kom
Waktu	: 100 Menit
Sifat Ujian	: Project

**Problem**

Look for data related to **diabetes**, for example from social media Twitter or Facebook, or articles from the internet, or from online health services (halodoc, alodokter, etc.). Next, cluster the data by taking a point of view, for example, clustering the topics discussed by diabetics, or clustering based on age, and so on. Do an analysis of the results of the clustering!

**Additional Information:**

1. Work in groups
2. Programs are written in Python
3. The clustering method used is K-Means clustering
4. Make a UAS report consisting of screenshots and an explanation of the source code of the program that has been made
5. The assignment consists of python programs, reports, and the original data
6. Project are collected according to the exam schedule, on Thursday/ June 30, 2021 at 13.00 WIB

**Notes:**

Keywords related to **DIABETES** that can be used to search data:

*[diabetes, diabetes endocrinology, diabetes mellitus, metformin, diabetology, diabetes mellitus, lunch, diabetic, dinner, insulin, glycemia, dinner lunch, microalbuminuria, curve metabolism, diabetes blood sugar, lantus, diabetes diet, breakfast lunch, breakfast, metforal, prandiale, diet, glycemic level, diabetes insulin, hypoglycemia, glucophag, meal, glycated, basal insulin, fasting, mini-curve, pellets, peptide, nutrition, weight, diabetes analysis, fasting glycemia, sugars, obesity, insulin-dependent, glycated hemoglobin, weight height, cpr, metabolic, proteinuria, postprandial, machine, dose, weight loss, pressure, hemoglobin, hyperglycemia, novonorm, kcal, glucose, carbohydrate, cholesterol, insulin resistant, triglycerides, glycosyl, triatec, glicid, insipid, simvastatin, ramipril, lasix, reakfast, milk, biscuit, nutrition, fish, integral, lymphocytes, globules, neutrophils, coffee, protein, dinner, consuming, diarrhea, monocyte, eosinophile, iron, foods, oil, weight, slice, anemia, intolerance, celiac disease, glycemia, mch, mcv, rice, cheese, acid, vitamin, mchc, fruit vegetable, honey, platelets]*