

## TP1DPBOC22023

Resyad (M) is a happy university student on his campus. He has some friends, such as Pahri (M), Angga (M), Getsbi (M), and Mila (F). Besides that, he has a favorite lecturer, and she is Mrs. Rose (F). As a happy human being, everyone could do what a human usually does, including eat, drink, and sleep. The difference is that a student has stuff for studying, such as NIM, some textbooks, and a laptop; but a lecturer has stuff for teaching, such as NIP, some whiteboard markers, and a laptop.

On campus, Resyad is only a regular student. It is quite different with his friends, like Pahri who is a BEM member and actively participates in every event. His activities are planning programs, implementing programs, and attending evaluations. Meanwhile, Mila is Mrs. Rose's assistant and her businesses are teaching and giving homework. Lastly, Getsbi and Angga are English Club members who have been planning to become the next club's president. Their activities are advancing language and planning future programs.

It is much different with Mrs. Rose, who has the same businesses as Mila, but she gets a different system and duty. Additionally, she can give scores to her students, including Resyad and his friends.

Based on the story above, choose **keywords** that may be important, then make its design, objects, as well as their relations in OOP!

## Catatan

- Diperbolehkan menambah atribut / properti baru.
- Buatlah Class Diagram dari desain yang telah dirancang, serta berikan penjelasannya!
- Pilihlah satu bahasa yang disukai / dikuasai, **kecuali PHP**.
- Diperbolehkan menggunakan konsep yang belum diajarkan, seperti polimorfisme (*overload* – *override*), kelas abstrak, *interface*, dan sebagainya.
- Pengumpulan akan diumumkan nanti.

## Challenge (0 - 25 poin)

Buatlah interaksi antar objek dengan syarat dan batasan yang didefinisikan sendiri. Sebagai contoh, dosen tidak bisa memberikan nilai sebelum asisten memberikan nilainya, atau anggota BEM tidak bisa menghadiri evaluasi sebelum menjalankan prokernya.

## Tips

- Nama kelas dianjurkan umum, bukan spesifik.
- Pelajari perbedaan antara “level-atribut” dengan “level-kelas”. Jika suatu perbedaan tidak signifikan, suatu kelas bisa dibuat menjadi atribut saja.