

TP1DPBOC12023

Rapi (M) is a student as well as the President of BEM in his department. He has some friends with specific positions, such as Alga (M) who became a DPM member, or Najmi (F) and Bulan (M) who are the assistants of Mrs. Rose (F), a programming lecturer. However, there are some regular students, like Afri (M) and Anin (F).

As a happy human being, everyone could do what a human usually does, like eat, drink, and sleep. Meanwhile, Rapi as well as his friends have stuff a student usually has, such as NIM, a few textbooks, and a laptop. Besides, they could do what a student usually does, such as studying, attending classes, and working on assignments.

Fortunately enough, Rapi as a president of BEM, who has an enormous amount of programs and innovations on his mind, can do specific things such as doing a program, planning an innovation, and working on innovation. Meanwhile, Alga whose job is to monitor Rapi's activities will provide appreciation as well as recommendations. He always says “I appreciate your work” to every completed development from Rapi and his team. On the other hand, Najmi and Bulan may help Mrs. Rose in teaching and giving homework. Mrs. Rose herself, as a lecturer, has some stuff for teaching, such as NIP, some whiteboard markers, and a laptop. She also has to fulfill his duties by teaching, giving assignments, and giving scores.

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

Catatan

- Diperbolehkan menambah atribut / properti dan metode 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.
- Batas waktu: **Minggu, 19 Maret 2023**

Challenge (0 - 25 poin)

Buatlah interaksi antar objek dengan syarat dan batasan yang didefinisikan sendiri. Sebagai contoh, pengurus DPM tidak bisa memberi masukan sebelum ketua BEM melaksanakan prokernya, atau dosen yang tidak bisa memberi nilai sebelum asisten memberikan tugas.

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.