

Project Architecture



Data Management

In Server we have 3 variables to store data:

```
var kumpulanSoal = map[string]map[string][]Soal{
    "Kelas 1": map[string]map[string][]Soal{},
   "Kelas 2":
               map[string]map[string][]Soal{},
   "Kelas 3": map[string]map[string][]Soal{},
                                                 Kelas → Mata Pelajaran
   "Kelas 4": map[string]map[string][]Soal{},
                                                 → Tema → array of Soal
   "Kelas 5":
               map[string]map[string][]Soal{},
                                                 (Pertanyaan, Jawaban,
   "Kelas 6": map[string]map[string][]Soal{},
                                                 array of Pilihan)
   "Kelas 7": map[string]map[string][]Soal{},
   "Kelas 8": map[string]map[string][]Soal{},
   "Kelas 9": map[string]map[string][]Soal{},
   "Kelas 10": map[string]map[string][]Soal{},
   "Kelas 11": map[string]map[string][]Soal{},
   "Kelas 12": map[string]map[string][]Soal{},
               map[string]map[string][]Soal{},
    "Umum":
var userInSession userData
                                             Username → UserData
                                             (Username, Password,
var userDataList = map[string]userData{}
                                             Nama, Umur, Status)
```

Who are the users?

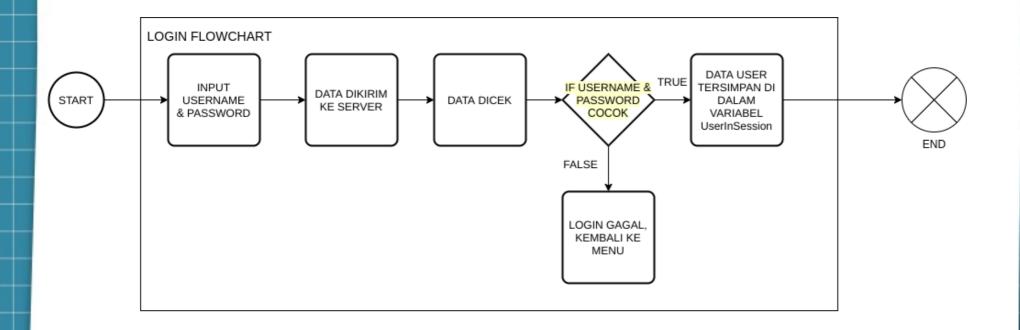
- This API is mostly for students, but not limited to only students.
- Everybody who wish to study can make questions and do them repeatedly

• "The best way to Learn is to teach" - Shirleen

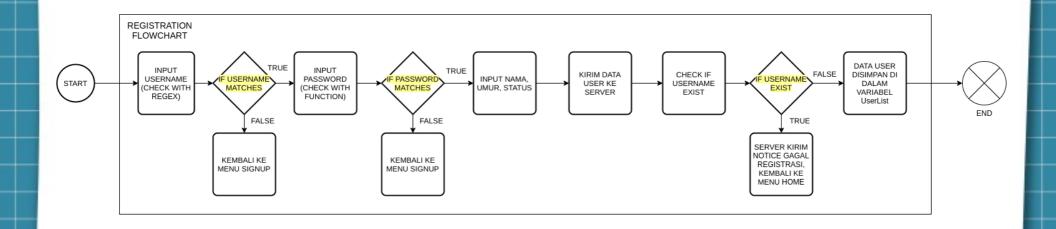
Our Features

- User Login
- User Registration
- Do Practice
- Make Practice

User Login

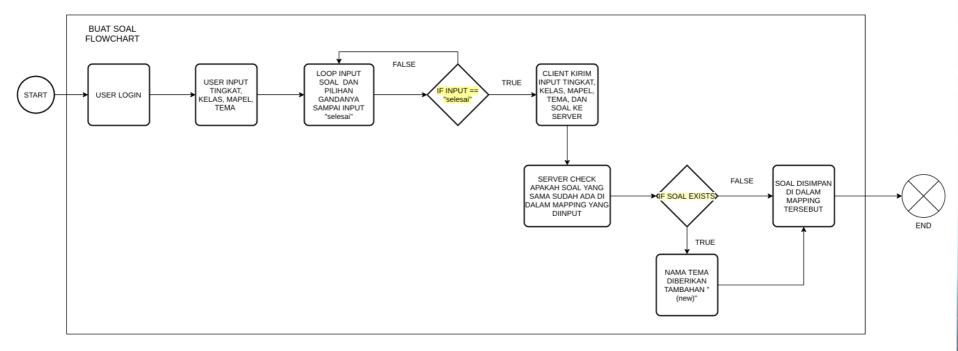


User Registration



- Username and Password have to match with the requirements.
- · Username (which is email) is unique. If the same username is exists, user will be unable to register.

Make Practice



- User makes an array of Soal (number of Soal is not limited) in the client and send it to the server
- User cannot make an empty array of Soal, client will refuse to send.
- User cannot make same answer choices, client will loop to check.
 User can make same Kelas, Mapel, and Tema, but server will rename the Tema automatically before saving it.

Do Practice

- User login
- The menu is shown dynamically (only existing practices are shown)
- Questions and the choices are shuffled. Everytime user do a practice, they will not be in the same order, making the practice harder and the user smarter.
- User can change answer before submitting them for scoring
- User can get a certificate (a .txt in this case) if score is 70+

