Data Note

Red → Class
Green → Enum
Blue → Struct Data
Black → Std Data

App

- user: <mark>User</mark> - staft: **Staft**

lecturer: Lecturerstudent: Student

+ *Login(string* userName, string password) : **bool**

+ FirstTimeLogin(**void**) : **bool**

+ ChangePassword(string newPassword) : bool

+ Logout(void) : **bool** + GetUserRole() : <mark>UserRole</mark>

+ GetUserName(): **string**

+ GetLecturerInfo(): LecturerInfo

+ GetStudentInfo(): StudentInfo

+ AddNewStudent(StudentInfo student, string className) : bool

+ ImportStudentFromFile(string fullPathName, string className) : bool

+ *EditStudent*(**string** studentID) : **bool**

+ RemoveStudent(**string** studentID) : **bool**

+ ChangeStudentFromA2B(**string** studentID, **string** classB) : **bool**

+ GetClassList(void) : ClassList

+ GetStudentList(string className) : StudentList

User

isAuthenticated_: **bool** account_: **Account** generator : **Generator**

- + Login(**string** userName, **string** passWord) : **bool**
- + FirstTimeLogin(**void**) : **bool**
- + CreateAccount(**string** id, **string** userName, **string** password)
- + ResetPassword(**string** id, **string** oldPassword, **string** newPassword)
- + PasswordVerify(**string** password, **string** hash) : **bool**
- + Logout(**void**) : **bool**
- + getUserRole() : **UserRole**

Student

· CheckIn(**string** courseID) : **bool**

- getCheckInResult(void): CheckInResult

- GetSchedules(): Schedule

Struct Data

Account

ID: stringusername: stringpassword: stringrole: UserRole

- firstTimeLogin: **bool**

StudentInfo

- ID : **string**

firstName : string
lastName : string
className : string
gender : string
DoB : string
email: string

Lecturer

Title: stringfirstName: stringlastName: string

Course

ID: stringname: stringlecturer: stringstartDate: stringendDate: string

Period

- dayOfWeek : **int** - shift: **int** -room: **string**

Schedule

- schedule: vector< Period >

Attendance

- studentID : **string**

- week: vector<int> (size = 10)

Scoreboard

studentID: int
full name: string
midTerm: float
lab: float
bonus: float
finalTerm: float

-ABCF: **A+** - GPA: **float**

Enum Data

UserRole

- Staft - Lecturer - Student





