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

StudentList

- student : vector<student>

Lecturer

Title: stringfirstName: stringlastName: stringcourseList: CourseList

CourseList

- course: vector<Course>

ClassList

class : vector<string>

LecturerList

- lecturer: vector<lecturer>

Course

ID: string
name: string
class: string
lecturerID: string
year: string
semester: string
startDate: string
endDate: string

Scoreboard

studentID:
midTerm: float
finalTerm: float
lab: float
bonus: float
GPA: float

Period

- dayOfWeek : **string** - startHour : **string** - endHour : **string**

Attendance

studentID : string
dayOfWeek : vector<int>

Enum Data

UserRole

Staft Lecturer Student

Schedule

- ca: vector< thu >

thu

- ca: vector<string>





