

Data Note

Red

→ Class

Green

→ Enum

Blue

→ Struct Data

Black

→ Std Data

App

- user: **User**

- staft: **Staft**

- lecturer: **Lecturer**

- student: **Student**

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

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

+ *ChangePassword*(**string** newPassword) : **bool**

+ *Logout*(**void**) : **bool**

+ *GetUserRole*() : **UserRole**

+ *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

int

Account

- ID: string

- username: string

- password: string

- role: UserRole

- firstTimeLogin: bool

StudentInfo

- ID : string

- firstName : string

- lastName : string

- className : string

- gender : string

- DoB : string

- email: string

Lecturer

- Title: string

- firstName: string

- lastName: string

Course

- ID : string

- name: string

- lecturer: string

- startDate : string

- endDate : string

Period

- dayOfWeek : int

- shift: int

- room: string

Schedule

- schedule: vector< Period >

Attendance

- studentID : string

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

Scoreboard

- studentID: int

- midTerm: float

- finalTerm: float

- lab: float

- bonus: float

- GPA: float

Enum Data

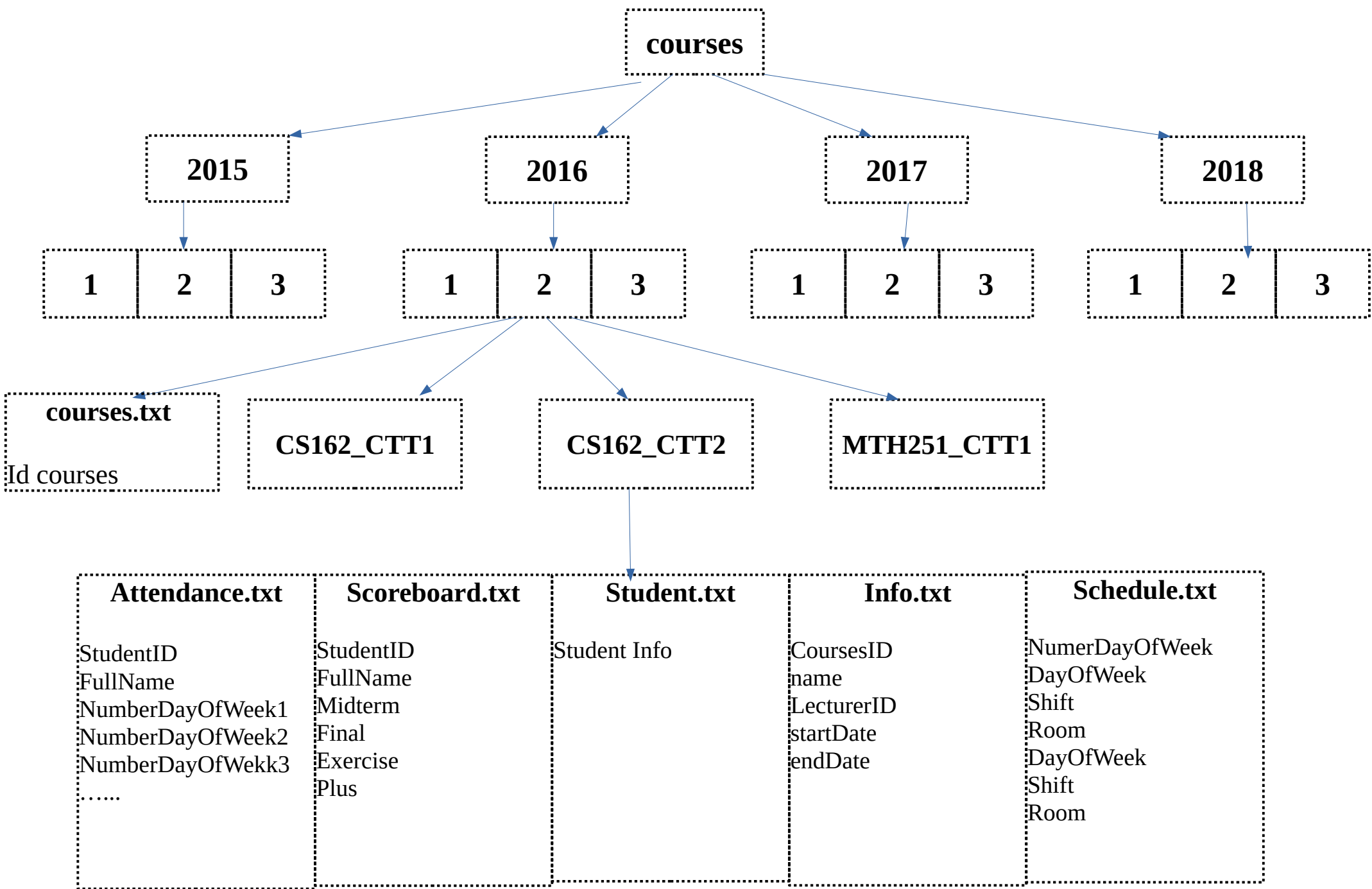
UserRole

- Staft

- Lecturer

- Student

Data Tree



Data Tree

