

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

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**

StudentList

- student : **vector**<**student**>

Lecturer

- Title: **string**
- firstName: **string**
- lastName: **string**
- courseList: **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**
- schedule : **vector**<**Period**>
- AttendanceList : **vector**<**Attendance**>
- studentList : **vector**<**student**>
- scoreboard: vector<scoreboard>

Scoreboard

- studentID: **string**
- 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

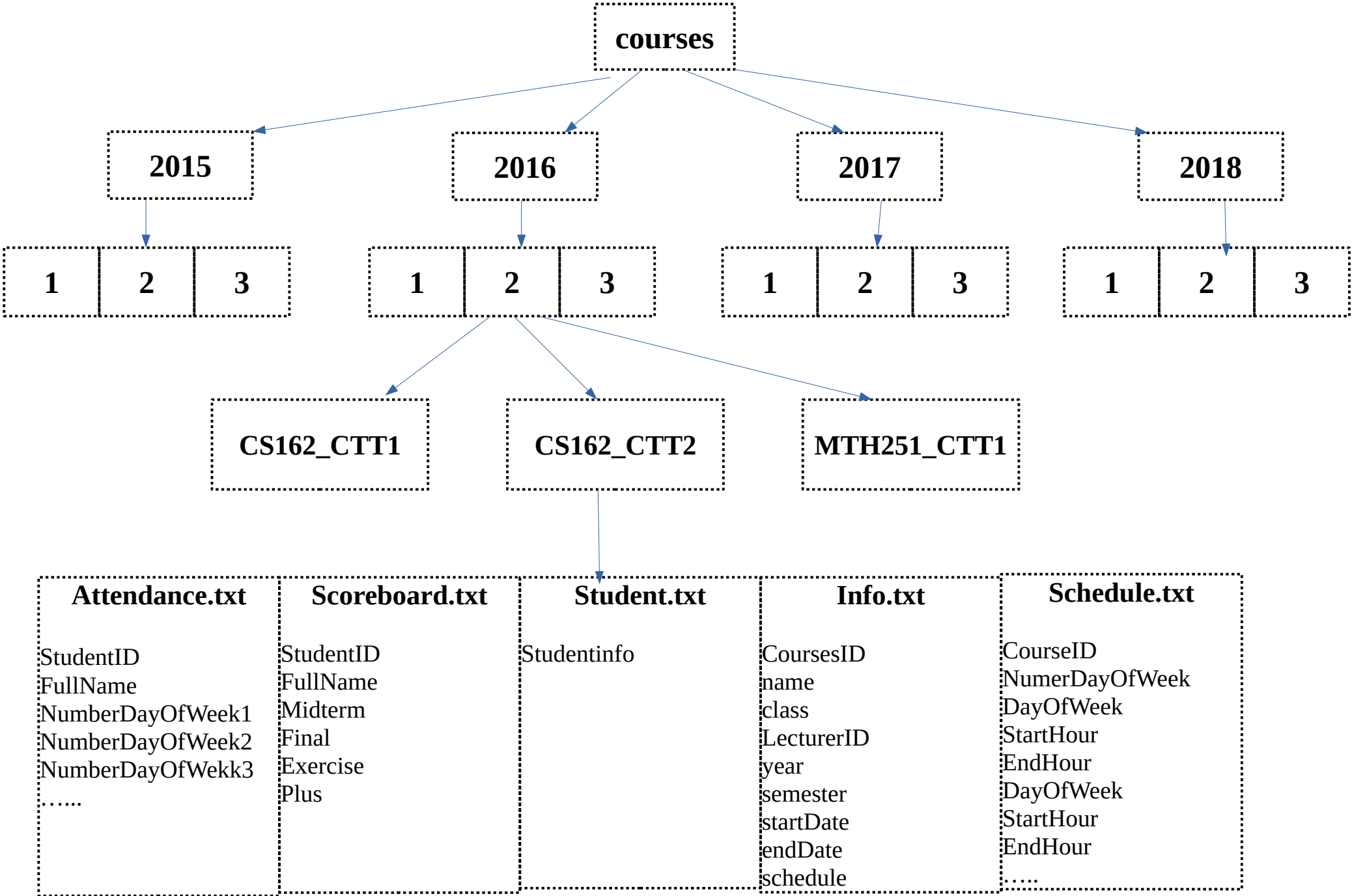
Schedule

- ca: vector< thu >

thu

- ca: vector<string>

Data Tree



Data Tree

