Project Deadline-1: UML diagram
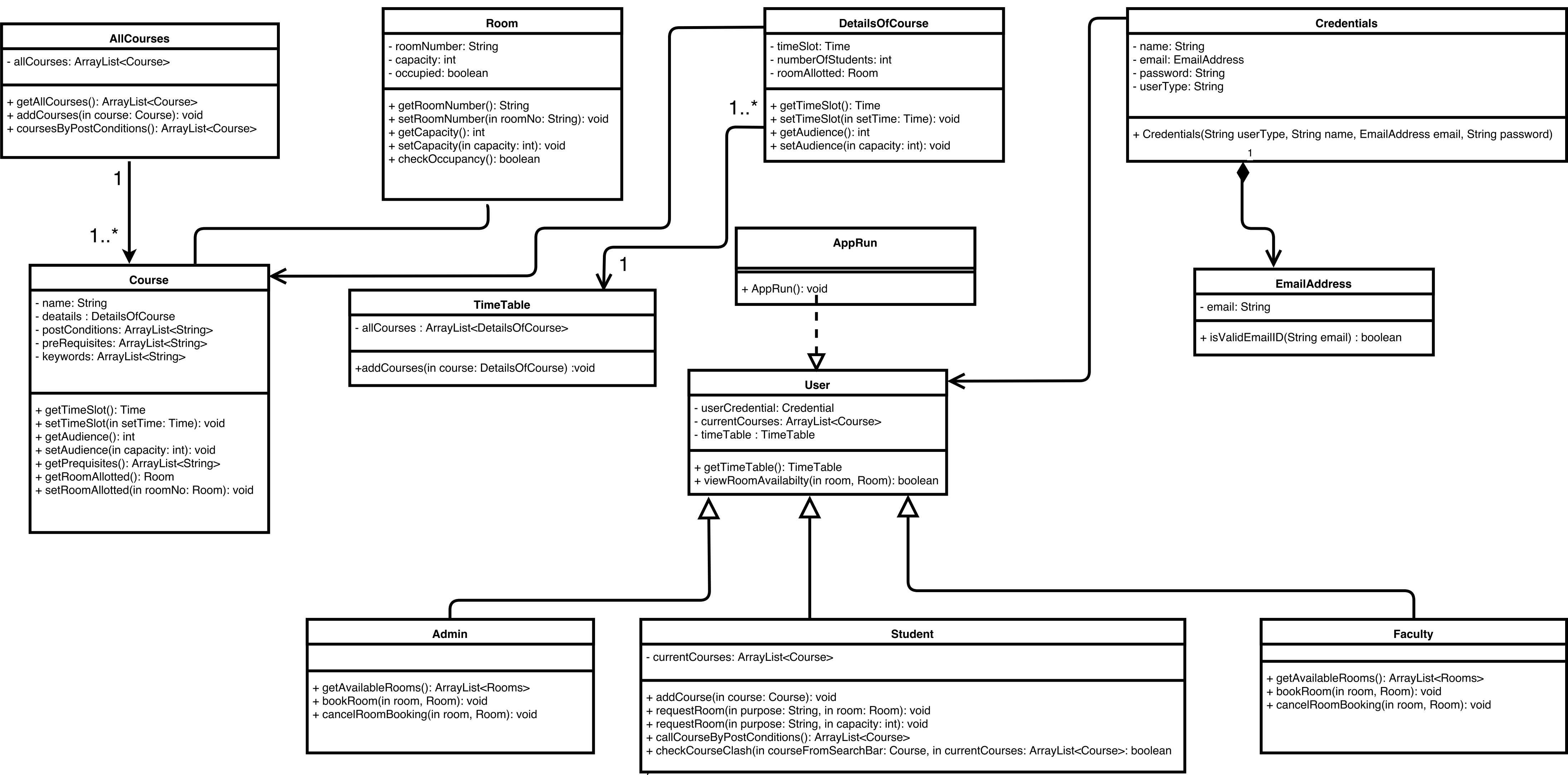## 11th October 2017

Group 57

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UML for Non-GUI components

AllCourses

- allCourses: ArrayList<Course>

+ getAllCourses(): ArrayList<Course>
+ addCourses(in course: Course): void
+ coursesByPostConditions(): ArrayList<Course>

Room

- roomNumber: String
- capacity: int
- occupied: boolean

+ getRoomNumber(): String
+ setRoomNumber(in roomNo: String): void
+ getCapacity(): int
+ setCapacity(in capacity: int): void
+ checkOccupancy(): boolean

DetailsOfCourse

- timeSlot: Time
- numberOfStudents: int
- roomAllotted: Room

+ getTimeSlot(): Time
+ setTimeSlot(in setTime: Time): void
+ getAudience(): int
+ setAudience(in capacity: int): void

Credentials

- name: String
- email: EmailAddress
- password: String
- userType: String

+ Credentials(String userType, String name, EmailAddress email, String password)

Course

- name: String
- deatails : DetailsOfCourse
- postConditions: ArrayList<String>
- preRequisites: ArrayList<String>
- keywords: ArrayList<String>

+ getTimeSlot(): Time
+ setTimeSlot(in setTime: Time): void
+ getAudience(): int
+ setAudience(in capacity: int): void
+ getPrequisites(): ArrayList<String>
+ getRoomAllotted(): Room
+ setRoomAllotted(in roomNo: Room): void

TimeTable

- allCourses : ArrayList<DetailsOfCourse>

+addCourses(in course: DetailsOfCourse) :void

AppRun

+ AppRun(): void

EmailAddress

- email: String

+ isValidEmailID(String email) : boolean

User

- userCredential: Credential
- currentCourses: ArrayList<Course>
- timeTable : TimeTable

+ getTimeTable(): TimeTable
+ viewRoomAvailabilty(in room, Room): boolean

Admin

+ getAvailableRooms(): ArrayList<Rooms>
+ bookRoom(in room, Room): void
+ cancelRoomBooking(in room, Room): void

Student

- currentCourses: ArrayList<Course>

+ addCourse(in course: Course): void
+ requestRoom(in purpose: String, in room: Room): void
+ requestRoom(in purpose: String, in capacity: int): void
+ callCourseByPostConditions(): ArrayList<Course>
+ checkCourseClash(in courseFromSearchBar: Course, in currentCourses: ArrayList<Course>: boolean

Faculty

+ getAvailableRooms(): ArrayList<Rooms>
+ bookRoom(in room, Room): void
+ cancelRoomBooking(in room, Room): void

Use-Case Diagram

Validated?   no
yes

Searchable Interface

<<includes>>

Search for courses using keywords

Check status for a room and pending requests

Check for course clash

Authorize

Display all the courses by the post conditions

Request for a room

<<includes>>

Sign-up

Student Login

<<extends>>

Display available rooms

Login

Faculty Login

Cancel Room Booking if not required

Display all the courses by the post conditions

Admin Login

Book a Room if Available   <<includes>>   Check Room Availability

Student

Faculty

User

Admin

Logout

Accept/Reject a Room Booking and check