



## CourseRegistrationSystem

instance : CourseRegistrationSystem=null

<u>- input\_scanner : Scanner</u>

- all\_department\_courses\_list : List<Course>
- all\_classrooms : List<Classroom>
- + \_\_init\_\_()
- + get\_course\_registration\_system\_instance(): void
- + main(): void
- + select\_and\_increase\_course\_section\_capacity ()
- + update\_classroom\_schedule (classroom : Classroom) : void
- + update\_all\_classrooms\_schedules () : void
- \_\_print\_all\_department\_courses\_with\_status (student\_course\_section\_map) : void
- \_\_print\_all\_department\_courses () : void
- + print\_all\_department\_courses (\*args : str) : void
- + print\_all\_classroom\_with\_capacities () : void
- + print\_all\_classes\_lecture\_hours () : void
- + review\_classroom\_schedule () : void
- + review\_all\_classroom\_schedules () : void
- + select\_a\_course\_from\_all\_department\_courses (all\_student\_courses : Course) : void
- + select\_course\_to\_assign\_new\_lecture\_hour () :void
- + select\_course\_to\_assign\_new\_lecture\_hour () : void
- + select\_courses\_section\_from\_course (course : Course) : void
- + select\_classroom\_from\_all\_classrooms () : void
- + select\_lecture\_hour\_for\_classroom (classroom : Classroom) : void
- + menu\_operation (\*args: str) : void
- + print\_all\_given\_courses\_with\_their\_capacities () : void

## FileOperationsClass

- course\_map : Dictionary<int,Course>

-advisor\_map : Dictionary<int,Advisor>

-student\_map : Dictionary<int,Student>

- admin : Admin

- people : List<Person>
- classrooms : Dictionary<Classroom>

-controller\_instance :CourseRegistrationSystem

- + \_\_init\_\_(controller\_instance : CourseRegistrationSystem)
- + login\_check (user\_id :int, password : str) : void
- +read\_json(dirpath : str): void
- + map\_courses\_and\_advisor\_to\_student(student\_dir\_path: str): void
- + read\_department\_scheduler (dirpath : str) : void
- + read\_department\_head (dir\_path : str) : void
- + read\_admin\_json ( admin\_dir\_path : str) : void
- + map\_prerequisite\_to\_course : course\_dir\_path : str)
- + read\_classroom\_json (dir\_path : str) : void
- + read\_course\_json (dir\_path : str) : void
- + read\_advisor\_json (dir\_path : str) : void
- + read\_student\_json (dir\_path : str) : void
- + take\_json\_files (dir\_path : str) : void
- + update\_json () : void
- + update\_student\_json () : void
- + update\_advisor\_json () : void
- + update\_admin\_json () : void
- + update\_course\_json () : void
- + update\_classroom\_json () : void
- + update\_department\_head\_json () : void
- + update\_department\_scheduler\_json () : void + update\_person\_json () : void
- + save\_file () : void