COP3331 Spring 2019 Project 2 UML

User

- ID : string
- PWD : string
- + User(ID : string, PWD : string)
- + setID(userID : string) : void
- + getID(): string
- + getPWD(): string
- + setPWD(userPWD : string) : void
- + login(filename : string, login : bool&) : void
- + printHeader(): virtual string
- + checkDigit(input : string, invalid : bool&, wantDouble : int&) : void
- + InvalidNumberTypeException : struct

Student

- major : string
- total_hours : string
- GPA: string
- advising_notes: vector<string>
- + Student(ID : string)
- + get_major() : string
- + get_GPA(): string
- + get_total_hours(): string
- + setGPA(userGPA : string) : void
- + setMajor(userMajor : string) : void
- + setTotalHours(userHours : string) : void
- + printHeader() override : string
- + printHeader(ID : string) : string
- + studentJob() : void
- + view_adv(): void
- + get_all_std_info(all_stds : map<string, vector<string> >) : void
- + add_advising_notes(adv_ID : string, date : string) : void
- + view_advising_notes(): void
- + printStudentInfo(): void
- + UpdateGPA(invalid: bool&, Updated: int&): void
- + UpdatedMajor(Updated: int&): void
- + UpdatedHour(invalid: bool&, Updated: int&): void
- + StudentUPdatedInfoSubMeun(): void

Advisor

- room : string
- phone : string
- all_advisees : vector<Student*>
- + set_room(room : string) : void
- + set_phone(phone : string) : void
- + get_room() : string
- + get_phone() : string
- + template<typename T>
- + display(value : T) : void
- + printHeader() override : string
- + advisorJob(): void
- + get_all_student_info_by_ID(): void
- $+\ get_all_student_info_by_major():void$
- + get_all_student_info_by_hours(): void
- + sortAdviseeMenu(): void
- + searchAdviseeMenu(): void
- + AdvisingNotesMenu(): void
- + get_all_advisees(): bool
- + search_by_ID(): void
- + search_by_major(): void
- + search_by_range_total_hours(): void
- + search_by_major_range_total_hours(): void
- + get_current_date(): string
- + add_notes(): void
- + view_notes() : void
- + add_advisee() : void
- + delete_student(): void
- + check_who_is_advisor(): void
- + display_all_advisors() : void + view_count_and_GPA_of_major() : void
- + move_advisees(): void

FileIO

- where: string

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+ FileIO(where: string)
+ filesLoaded(): void
+ readFile(): ifstream
+ checkPWD(filename : ifstream, userID : string, userPWD : string, login : bool&) : string
+ showAdvisorInfo(ID: string): void
+ get_student_vector(filename : ifstream, ID : string, open : bool&) : vector<string>
+ get_all_student_map(filename : ifstream) : map<string, vector<string> >
+ save_note(full_note : string) : void
+ view_notes(std_ID : string) : void
+ check_students(std_ID : string) string
+ write_advisee(advisor_ID : string, std_ID : string) : void
+ check_if_has_advisor(std_ID : string, advisor_ID : string) : int
+ studentUpdatedInfoInFile(Updated: int, ID: string, PWD: string, major: string, total_hours: string, GPA: string): void
+ remove_if_my_advisee(adv_ID : string, std_ID : string, write : bool) : int
+ check_std_advisor(std_ID : string) : string
+ get_all_advisors(): map<string, vector<string>>
+ move_advising_notes(ID : string, moving_adv : string, std_ID : string) : void
```