**3.2 Subsystem Interfaces Specifications**

The system consists of mainly three interfaces: IUserInteraction, IScheduleManagement, and ICourseModifier. Each of those interfaces provides a set of methods that components can publicly access. The classes that implements those interfaces are the ones presented in the architecture diagram (see section 3.1), and the use of the method calls are explained in more detail in dynamic design scenario (see section 5).

**3.2.1 IUserInteraction**

The user interaction interface provides methods for students to perform actions on their schedule.

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| **Method** | |
| getAllSavedSchedules(studentID:long) list<SavedSchedules> | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Retrieves and returns all saved schedules of a student given its student ID.  ***Input parameter(s):***  studentID:long representing the student ID  ***Condition(s) for validity:***  studentID ≥ 0  ***Return type:***  list<SavedSchedules> |

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| --- | --- |
| **Method** | |
| getSavedSchedule(scheduleID:long) SavedSchedules | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Given a schedule ID, retrieves and returns a specific saved schedule that represents the schedule of a semester.  ***Input parameter(s):***  scheduleID:long representing the schedule ID  ***Condition(s) for validity:***  scheduleID ≥ 0  ***Return type:***  SavedSchedules |

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| **Method** | |
| saveSchedule(scheduleID:long) | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Saves the schedule given its ID to an account and adds it to the list of saved schedules.  ***Input parameter(s):***  scheduleID:long representing the schedule ID  ***Conditions for validity:***  scheduleID ≥ 0  ***Return type:***  void |

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| **Method** | |
| searchCourse(courseID:long) HashMap | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Retrieves and returns information about a course, including the course’s sections, given the course ID.  ***Input parameter(s):***  courseID:long representing the course ID  ***Conditions for validity:***  courseID ≥ 0  ***Return type:***  HashMap |

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| **Method** | |
| selectWeek(date:int, month:int) Schedule | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Provides the caller with a weekly schedule view given the date and month as valid integer values for the targeted week.  ***Input parameter(s):***  date:int representing a date in the targeted week  month:int representing the month of the targeted week  ***Conditions for validity:***  1 ≤ date ≤ 31  1 ≤ month ≤ 12  ***Return type:***  Schedule |

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| --- | --- |
| **Method** | |
| viewAcademicRecord(studentID:long) AcademicRecord | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Allows to view the academic record of a student given the student’s ID.  ***Input parameter(s):***  studentID:long representing the ID of the student  ***Conditions for validity:***  studentID ≥ 0  ***Return type:***  AcademicRecord |

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| --- | --- |
| **Method** | |
| viewCourseInfo(courseID:long, sectionID:long) HashMap | |
| **Class implementing this method** | **Specification** |
| UI | ***Description:***  Retrieves and returns information about a course given the course ID and the section ID.  ***Input parameter(s):***  courseID:long representing the ID of the course  sectionID:long representing the ID of the section  ***Conditions for validity:***  courseID ≥ 0  sectionID ≥ 0  ***Return type:***  HashMap |

**3.2.2 IScheduleManagement**

**3.2.3 ICourseModifier**