INFO5100-Assignment1-Question5-Meng-Wei Hao

Q5. Design a course registration platform.

Ans:

Class, Object, Behaviors, Input, Output, Data

Student

Data: Name, studentID, password, email

Behaviors: enterStudentID(), browseClass(), enrollSemester(), advancedSearch(), register,

addCourse(), dropCourse()

University

Data: instructor, syllabus, term, courseObjectives, scoringMethod, restrictions

Behaviors: setUpCourses(), adjustCourses(), arrangeInstructors()

RegistrationSystem

Data: courseCode, courseTitle, classTime, classLocation, selectLimit

Behaviors: loginRegistrationSystem(), logoutRegistrationSystem(), searchCourseTitle(),

sort, display, registerCourses()

Internet:

Data: courseSelectWebsite

Behaviors: webSearch() -> searchForRegistrationSystem

RegistrationSystem courseSelect

courseSelect.registerCourse()

Sequence of invoking behaviors on Objects:

RegisterCourseOnRegistrationSystem:

Student fiona

University neu

RegistrationSystem courseSelect

Internet internet

if Internet.connectWell

fiona.searchForRegistrationSystem -> courseSelect, question: courseSelectWebsite

//fiona.foundCourseSelectWebsite -> courseSelectWebsite: courseSelect

if (fiona.enterStudentID() != null) {

fiona.loginRegistrationSystem()

}

else {

fiona.cantRegister()

}

public class RegistrationSystem {

public static void main(String args[]) {

System.out.println(“Browse a class you want to take!”);

->If browse a class I want,

System.out.println(“Choose your favorite class time!”);

->If chose my favorite class time,

System.out.println(“Select one of the instructors!”);

CourseTitle courseTitle = new CourseTitle();

ClassTime classTime = new ClassTime();

Instructor instructor = new Instructor();

RegisterCourses registerCourses = new RegisterCourses();

if (CourseTitle.isDataScience()) {

System.out.println(“I want to take data science course.”);

}

if (ClassTime.isFriday()) {

System.out.println(“The class time is on Friday.”);

}

if (Instructor.isJimmy()) {

System.out.println(“The instructor is Jimmy.”);

}

else {

System.out.println(“No course selected!”)

}

if (fiona.searchCourseTitle() != null) {

fiona.registerCourses()

}

else {

fiona.cantRegisterCourses()

}

if (registerCourses.isDone()) {

System.out.println(“Course registered complete!”);

}

else {

System.out.println(“None of the courses are registered!”);

}

}

}