CRC CARDS – HAUNTED PYRAMID

HTTPS://GITHUB.COM/CSC207-UOFT/COURSE-PROJECT-HAUNTED-PYRAMID

OCTOBER 15TH, 2021



SUMMARY

- Entities
 - User
 - Student
 - Event
 - 。 Course
 - Assignment
 - OurCalendar
- To be implemented
 - o CourseController
 - 。 CalendarController
 - Lecture
 - Reading
 - Test
 - Tutorial
 - Labs
 - Others

- Use Cases
 - 。 Calendar Manager
 - CourseManager
 - 。 EventManager
 - StudentManager
- Controllers
 - EventController
 - LoginController
 - MainController
 - StudentController

- Interface
 - 。Fluid
 - Repeated
- Presenter
 - CalendarPresenter

- Gateway
 - 。 IOSerializable



ENTITY

User

Student

Responsibilities	Collaborators
 Id Name Username Password birthDate dateCreated emailAddress phoneNumber homeAddress 	
Setter of the above responsibilities	
Getter of the above responsibilities	
Construct with name and birthDate	



USER

ENTITY

Student

Responsibilities	Collaborators
number of coursescourses enrolled	• Course
AddCourseRemoveCourseGetter methods	



ABSTRACT

ENTITY

Event

Reading, Assignment, Lecture, Lab, Tutorial, Test, Other

Responsibilities	Collaborators
namelocation (Optional)startTimeendTime	
 modify startTime and endTime 	
 Setters for startTime, endTime, name and location 	
Getters for startTime, endTime and length	
HasConflict	
• Equals	
• ToString	



EVENT

ENTITY Assignment

Responsibilities	Collaborators
worksessionsLength	• Fluid
• hoursSpent	
• hoursNeeded	
DueDate	



ENTITY

Course

Responsibilities	Collaborators
 name EventList [events share the same course attribute organized in a map based on event type] Add events to task Remove events from task Getter of name and task 	 Event Lecture Assignment Reading Test Tutorial Labs Others



ENTITY

OurCalendar

Responsibilities	Collaborators
 calendarMap conflict (Boolean) conflictEvent dateInfo calendarMap add and remove objects from calendarMap check conflicts on calendarMap Getter of conflictEvent, conflict, dateInfo and calendarMap 	 Event Lecture Assignment Reading Test Tutorial Labs Others



USE CASE Calendar Manager

Responsibilities	Collaborators
 CurrentManager futureManager pastCalendar currentYear, currentMonth, currentDate Generate and store past and future calendars 	 OurCalendar Lecture Assignment Reading Test Tutorial
 Getters for Monthly Calendar, Weekly Calendar and Daily Calendar, currentYear, currentMonth, currentDate 	LabsOthersEvent
 Add and remove events to/from a Calendar 	
 Notify conflict events for chosen date Get event time and date info for the selected date 	



USE CASE EventManager

Responsibilities	Collaborators
Map of Events	CalendarManager
Map of Unscheduled Hours	• Event
Map of Scheduled Hours	• Fluid
• getDay	 Repeated
• getType	
GetEvent	
 RemoveEvent 	
 Rescheduable 	
 addEvent 	
 replaceEvent 	
 totalHours 	
 freeTime 	
 chronological 	



StudentManager

Responsibilities	Collaborators
Student id to student courses map	Student
Student id to student object map	• Course
 Create a studentMap with given information and acquired courseList from CourseManager. Store student information in studentInfo Check username and password getStudentInfo getStudentMap addNewStudent 	



USE CASE CourseManager

Responsibilities	Collaborators
 courseList (array of Course's that the events created belong to) 	CourseEvent
 Create courseList of the current user. 	Student
Getter of courseList	
 Getter of one specific course information 	
from courseList	
Add Course to courseList	
Remove Course from courseList	



CONTROLLER

MainController

Responsibilities	Collaborators
 Instantiates IOSerializable Instantiates StudentController and LoginController and initially checks the verification of the user through log in phase Instantiates EventController Instantiates CalendarPresenter DisplayInitScreen DisplayCalendar generateEvent 	 *CalendarManager *EventManager LoginController StudentController EventController CalendarPresenter IOSerializable
saveAndExitProgram	*Managers will move into their own controllers after phase 0 for better organization and simplicity in the MainController

CONTROLLER

LoginController

Responsibilities	Collaborators
logInlogOutsignUpisLoggedIn	StudentController



CONTROLLERS

EventController

Responsibilities	Collaborators
Instantiate EventManager and CalendarManager	CalendarManagerEventManagerCalendarPresenter
Schedule – take user input to schedule, modify, remove events	



CONTROLLERS

StudentController

Responsibilities	Collaborators
 Initialize StudentManager based on readability of the serializable file. If there isn't a saved data in the directory, create a sample file: "students.ser" with sample login information. If there is a file, read from it and instantiate StudentManager with the arraylist of students obtained from the serializable file. 	 IOSerializable StudentManager

INTERFACE

Fluid

Responsibilities	Collaborators
Setter for fluid hours remaining	AutoSchedule
Getter for fluid hours remaining	
Setter for work session length	
Getter for work session length	
Getter for session	
scheduleSession	



INTERFACE

AutoSchedule

Collaborators



INTERFACE

Repeated

	Responsibilities
•	Setter for repitition
•	Getter for list and start times
•	@Override conflicts



GATEWAY

IOSerializable

Responsibilities	Collaborators
 Logger – logs any errors or exceptions EVENTS_FILEPATH TASKS_FILEPATH STUDENTS_FILEPATH CALENDAR_FILEPATH hasSavedData - checks if there is any saved data in the directory and return a boolean 	**Student – this is necessary because we need to type cast the read object as an ArrayList <student> when deserializing the file. This could change through code optimization or new insight for later phases of the program.</student>
 studentsReadFromSerializable – read from "students.ser" and return an ArrayList of Students that were saved in the directory studentsWriteToSerializable – write to "students.ser" and save the ArrayList of students 	
 ***It is important to note that for phase 0, serialization of students were only implemented fully. Going forward, most if not all entities will follow 	

PRESENTER

CalendarPresenter

Responsibilities	Collaborators
Starts from an empty calendar	Calendar Manager
Add information from the calendar manager	
 Display information as string from calendar manager 	

