Name	Check Class Session for Instructor
ID	UC_Ins_001
Description	This is the instructor version of CRSS which shows what the instructor log into CRSS and check the class they teach
Actors	Instructor
Organizational Benefits	Let the instructors know which class they are going to teach so they won't be confused about that
Frequency of Use	All the instructor in the summer camp should use this system to log into the system and use the functions in the system
Triggers	The instructor uses log-in system to see which class it is
Preconditions	An instructor is going to check his/her class
Postconditions	The instructor gets the information about the class and decide to do something with this information
Main Course	1. System determines user doesn't log in and redirect user to log in 2. User Log in (See AC2) 3. The system will show the instructor which session he is going to teach (See EX1, EX2)

Alternative Courses	AC1 System determines user is already logged on
	   1. Return to Main Course step 3
	
	AC2 User logs off again
	   1. Return to Main Course step 1
	
	AC3 User wants to check attendance in the instructor page
	   1. See Use case "Attendance taking from the instructor"

Exceptions	EX1 A instructor doesn't assign into a class
	   1. See user case "Arrange Instructors into classes"
	   2. Use the link "Contact CD" to ask a claim for that
	
	EX2 A instructor assigned into more than one class in a single block
	   1. See user case "Arrange Instructors into classes"
	   2. Use the link "Contact CD" to ask a claim for that

Name	Attendance taking from the instructor
ID	UC_Ins_002
Description	This is the function in the system that instructor could this function to check attendance for every attendee in his/her class
Actors	Instructor
Organizational Benefits	Could let the instructor check the attendance to the attendees to make sure they attend the class
Frequency of Use	When a class would need to take attendance, the instructor must use this function to take the attendance
Triggers	Check attendance to the attendees by clicking the link "Take Attendance"
Preconditions	The instructor would attend a summer camp to lead the attendees
Postconditions	The instructor uses his ways to control the attendee activities, to record the information for his own session of summer camp
Main Course	1. User click the name of the class 2. The system shows user the information of the class 3. User click the link, "Take Attendance" 4. The system shows user the list of students in the class 5. User click block near the students' name to check the students who attend the class (See AC1) 6. User put the date at the bottom of the page and click "submit" 7. The system will post the attendance information to the class page (See AC2, EX1)

Alternative Courses	AC1 Some students who have emergency (like illness) cannot attend the class
	    1. User would not check the block, but put comments about the emergency on the right of the students' name
	    2. If User give the evidence for the emergency after taking the attendance, use Alternative Course 2 (AC2)
	
	 AC2 User wants to make changes to the previous attendance information
	    1. User click the line "Make Changes" next to the previous attendance information in the class page
	    2. Return to Main Course step 4

Exceptions	EX1 System fails to post the attendance information to the class page
	    1. System notifies users that an error has occurred
	    2. Return to Main Course step 6

Name	Perform/Run Ranking Process
ID	CD_001
Description	The camp director wants to run a ranking process to determine the rankings for each given camp
Actors	Camp director
Organizational Benefits	Increase the number of potential participants by assigning ideal ranks to each of the camp.
Frequency of Use	Used on all attendees who submitted their ranking before deadline.
Triggers	Camp director starts the process
Preconditions	System recognizes the user as the camp director, the deadline is not passed.
Postconditions	The rankings for each given camp are determined after each performance of the process Determines the preference on class enrollment for attendees
Main Course	1. System prompts user to run ranking process 2. User confirms to run 3. System determines users is not logged in and redirects user to log on (see AC2) 4. User logs on 5. System runs the ranking process 6. System saves the results and shows it to the user

Alternate Courses	AC1 System determines user is already logged on
	    1. Return to Main Course step 5
	AC2 User logs off again
	    1. Return to Main Course step 3

Exceptions	EX1 Camp director has already locked the ranking
	    1. See "manually enter information" use case. (for both instructors and camp director)
	EX2 User has no authority in performing the process
	    1. System notifies the user that additional authority is needed.
	    2. Exit the system

Name	Lock ranking
ID	CD_002
Description	The camp director wants to lock the latest ranking to be the final rankings for each camp, assign a unique identifier to the term of the camp
Actors	Camp director
Organizational Benefits	Identify the attendees' preferences, making reasonable adjustments to the number of offered classes
Frequency of Use	Once at/before the deadline, when the camp director decides to lock.
Triggers	The camp director decides to lock the ranking after his/her last run of the ranking process
Preconditions	System recognizes the user as the camp director. At least one ranking process is performed before the lock.
Postconditions	The ranking process cannot be run again, final rankings for each camp are determined and are being assigned as the result. A unique identifier is assigned to each term of the camp.
Main Course	1. System prompts user to lock ranking 2. User confirms to lock 3. System determines users is not logged in and redirects user to log on (see AC2) 4. User logs on 5. System locks ranking, assigns unique identifiers to each term of the camp and assigns classes to attendees. 6. System disables "run ranking process" function 7. System stores the results as final rankings and shows to the user

Alternate Courses	AC1 System determines user is already logged on
	   2. Return to Main Course step 5
	AC2 User logs off again
	   2. Return to Main Course step 3

Exceptions	EX1 Ranking process has not been run
	   1. See "Perform/run ranking process" use case.
	EX2 User has no authority in locking the rankings
	   1. System notifies the user that additional authority is needed.
	   2. Exit the system

Name	Manually Enter Information
ID	CD_003
Description	The camp director or an instructor wants to manually enter information for late attendees
Actors	Camp director, instructors
Organizational Benefits	Optimize the class usage, increase the camp income
Frequency of Use	Any time a late attendee is found flexible to fit into the class schedule
Triggers	A late attendee wants to participate
Preconditions	1. The presence of at least one late attendee who wants to join the camp after the camp director locks the ranking. 2. At least one class is available. 3. System recognizes the user as the camp director or an instructor
Postconditions	The late attendee gets to enroll into the camp
Main Course	1. System directs user to a page with an information form to fill in. 2. System prompts user to fill in information 3. User fills in information 4. System determines users is not logged in and redirects user to log on (see AC2) 5. User logs on 6. System processes and stores the information of the attendee 7. System enrolls the attendee
Alternate Courses	AC1 System determines user is already logged on 1. Return to Main Course step 6 AC2 User logs off again 1. Return to Main Course step 4
Exceptions	EX1 User has no authority in manually entering the information 1. System notifies the user that additional authority is needed. 2. Exit the system EX2 No schedule fits the late attendee 1. System notifies the user with this information 2. Return to Main Course step 1

Name	Increase/Decrease class offerings
ID	CD_004
Description	Camp director wants to increase or decrease the number of a class offered based on the locked rankings
Actors	Camp director
Organizational Benefits	Potentially attracts more future students with more offerings of the popular classes in a different term of the camp.
Frequency of Use	Increase or decrease class offerings in the next term based on the ratio of the locked class rankings of the current.
Triggers	Camp director decides the increase or decrease the number of a class offered.
Preconditions	System recognizes the user as the camp director, the current camp ranking is locked.
Postconditions	Class offerings are adjusted in the next term.
Main Course	1. System directs user to a page with class information 2. System prompts user to increase/decrease the offerings of a particular class 3. User confirms the adjustments. 4. System determines users is not logged in and redirects user to log on (see AC2) 5. User logs on 6. System processes and stores the adjustments for the class offerings 7. System shows the user the results of the adjustments.

Alternate Courses	AC1 System determines user is already logged on
	    2. Return to Main Course step 6
	AC2 User logs off again
	    2. Return to Main Course step 4

Exceptions	EX1 User has no authority in manually entering the information
	    3. System notifies the user that additional authority is needed.
	    4. Exit the system
	EX2 The offerings of a class that is being adjusted has reached to 0 or has passed the maximum number that a camp can offer
	    1. System notifies the user that an error has occurred.
	    2. Return to Main Course step 1

Name	Submit rankings for picking classes
ID	UC_ATT_01
Description	When the user wants to enroll in one of the classes, he needs to fill out a user ranking form to rank the classes so that he could be enrolled in his highest ranked classes as long as there is availability.
Actors	Attendees.
Organizational Benefits	Satisfy students with class enrollment by allowing them to rank the classes based on their preference.
Frequency of Use	Most users fill out the user ranking form on time to submit ranking. A few users fail to fill out the form late, and they are not allowed to rank classes. They will be assigned classes based on availability.
Triggers	The user logs in as attendee before submission deadline.
Preconditions	User is viewing a list of classes with short description of each class.
Postconditions	The submitted ranking is visible to the admins for assigning classes.
Main Course	1. System prompts users to rank classes using numeric values. 2. User ranks and submits the user ranking form (see AC1, EX1, EX2, EX3). 3. System stores the ranking of classes and submission time in database. 4. System redirects user to his ranked classes list to review the submission.
Alternative Course	AC1 User logs off accidentally 1. System auto-saves the result. 2. Redirects user to "login" Use Cases.
Exception	EX1 User does not rank any classes 1. System notifies user that at least one class needs to be ranked. 2. Returns user to Main Course step 3. EX2 User ranks two or more classes with same ranking 1. System notifies user that no duplicate ranking is allowed. 2. Returns user to Main Course step 3. EX3 User ranks a class with more than one ranking. 1. System notifies user that each class can only have one ranking. 2. Returns user to Main Course step 3.

Name	View Final class schedule
ID	UC_ATT_02
Description	After class enrollment is done, user can see and print out the time block, the class enrolled in that block, and the location of the class.
Actors	Attendees, Instructors.
Organizational Benefits	Ease the process of distributing schedule to every student and instructors in the summer camp.
Frequency of Use	All users view the schedule to know which classes they are assigned. Some users will have the schedule print out.
Triggers	User logs in after submission deadline and clicks on "View Schedule".
Preconditions	The admins have finished assigning classes.
Postconditions	The final schedule with time block, class and location is visible to the user when he views the schedules. The final schedule is printable if the user selects print options
Main Course	1. System identifies users based on login information (see AC1, AC2). 2. User select the print option 3. System print out the schedules.
Alternative Course	AC1 System identified user as student. 1. System displays the time block, the class enrolled in that block, and the location of the class. AC2 System identified user as instructor. 1. System displays the time block, the class assigned for teaching in that block, and the location of the class.
Exception	N/A

Name	Identify User in Login Process
ID	UC_SYS_01
Description	System can identify users as campus director, instructor, or student based on the unique id for user. It will redirect user to different use cases for further actions.
Actors	System.
Organizational Benefits	Easier to identify every person in the Summer Camp and give certain level of access depending on his id.
Frequency of Use	All users need to login to the system.
Triggers	The user clicks on "Log in".
Preconditions	The user knows his own id and password.
Postconditions	The system will redirect users to other use cases based on what the user needs.
Main Course	1. System determines user is not logged in and redirects user to log on. 2. User logs on (see AC1, EX1). 3. System identifies user based on the unique id and password (see AC2, AC3, AC4, AC5, AC6, AC7).
Alternative Course	AC1 User logs off again. 1. Return to Main Course step 1 AC2 System identifies user as attendee when it is before ranking submission deadline. 1. See "Rank Classes" Use Case AC3 System identifies user as attendee when it is after ranking submission deadline. 1. See "View Attendee Schedule" Use Case AC4 System identifies user as instructor when it is before ranking submission deadline. 1. System notifies user that class ranking is currently in progress and final schedule is not completed yet. AC5 System identifies user as instructor when it is after ranking submission deadline. 1. See use case "Check Class Session for Instructor" AC6 System identifies user as camp director when it is before ranking submission deadline. 1. See use case "Perform/Run Ranking Process" AC7 System identifies user as camp director when it is after ranking submission deadline. 1. See use case "Perform/Run Ranking Process"
Exception	EX1 User's login information does not match any records in the database. 1. System notifies user that login/password is wrong. 2. Returns user to Main Course step 1.

Name	Assign Students to Classes
ID	UC_SYS_02
Description	System assigns students to classes based on preference, submission time, and class availability.
Actors	System.
Organizational Benefits	Get up-to-date changes on assigning classes and avoid duplication on time block. This is easier to arrange classroom location.
Frequency of Use	The system will assign classes for most students. The rest will be assigned manually by administration.
Triggers	After submission deadline.
Preconditions	Class ranking and students' submission time is stored in database.
Postconditions	Schedule is available for view by students.
Main Course	1. System sort students according to their submission time (AC1). 2. System starts at the first time block. 3. Assign students to classes based on their ranking (AC2, AC3) and store the result in database. 4. System move to the next time block and repeat step 3 until no more time block can be found.
Alternative Course	AC1 Students have the same submission time. 1. System sorts students by their names in alphabetical order. 2. Return to Main Course Step 3 AC2 Class is full. 1. System assign students to their next ranked class and store the result in database. 2. Return to Main Course step 4. AC3 Duplicate class is assigned. 1. System assign students to their next ranked class and store the result in database. 2. Return to Main Course step 4.
Exception	

Name	Arrange Instructors into classes
ID	UC_Sys_003
Description	This is the system user case that arrange the instructors into different classes to let every class have an instructor
Actors	System
Organizational Benefits	Arrange instructor to the classes to let instructor and attendees know who is going to take this class
Frequency of Use	When the new summer camp begins, this system will use to arrange instructor to their classes
Triggers	Pick instructor in the instructor list and put them into random classes
Preconditions	TBA will be shown at the instructor name in the class information page
Postconditions	An Instructor will be shown in the class information page
Main Course	1. System notices that there will be no instructor in a class 2. System randomly pick a name in the instructor list 3. System put the name into the class 4. System will post the name of the instructor into class information page
Alternative Courses	

Exceptions	EX1 System fails to arrange an instructor into a class
	  1. System notifies that an error has occurred
	  2. Return to Main Course step 2
	
	EX2 The number of instructors is less than the number of classes
	  1. System sends this situation to camp director
	  2. System waits for CD's command
	  3. Return to Main Course step 1