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# **Software Requirements Specification**

**for**

## **Homework 1**

**Version 1.3 approved**

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## Revision History

| Name                     | Date   | Reason For Changes  | Version |
|--------------------------|--------|---|---------|
| Initial Draft            | 2/4/20 | Starting homework 1                                       | 1.0     |
| Continuing Initial Draft | 2/5/20 | Finishing homework 1 use cases                            | 1.1     |
| Finished First Draft     | 2/7/20 | Finishing homework 1 draft                                | 1.2     |
| Finalized Rough Draft    | 2/9/20 | Final revisions and formatting for submission to customer | 1.3     |

# **1. Introduction**

## **1.1 Purpose**

The purpose of this document is to present a detailed description of Homework 1. It will explain the purpose and features of the software, the interfaces of the software, what the software will do and the constraints under which it must operate. This document is intended for users of the software. The final version of this draft is version 1.2.

## **1.2 Document Conventions**

This document was created based on the IEEE template for System Requirement Specification Documents. All text written in italics refer to questions that this group has for the customer in order to create accurate requirements. These are primarily for use cases.

## **1.3 Intended Audience and Reading Suggestions**

Campers and parents of campers can use this software to register for camp, rank classes and access built schedules. Camp administrators and instructors can use the software to add classes and edit camper registration. This document can be read in any order, including start to finish. The document is divided in sections based off of the provided template and includes many relevant use cases.

## **1.4 Product Scope**

The software described in this document is for a summer camp. The software allows various users such as campers, instructors, and administrators to access it. The goal of the software is to increase the ease of creating schedules for administrators and make it easy for everyone to view their schedules. It will also allow campers to rank classes for the creation of their schedules and easily view and print their schedules.

## **1.5 References**

Team 10's GitHub repository:

<https://github.umn.edu/umn-csci-5801-002-s20/repo-Team10>

IEEE Template for System Requirement Specification Documents:

<https://goo.gl/nsUFwy>

Software Requirements Specification (SRS) Document Directions

<https://canvas.umn.edu/courses/158173/files/10853456/download?wrap=1>

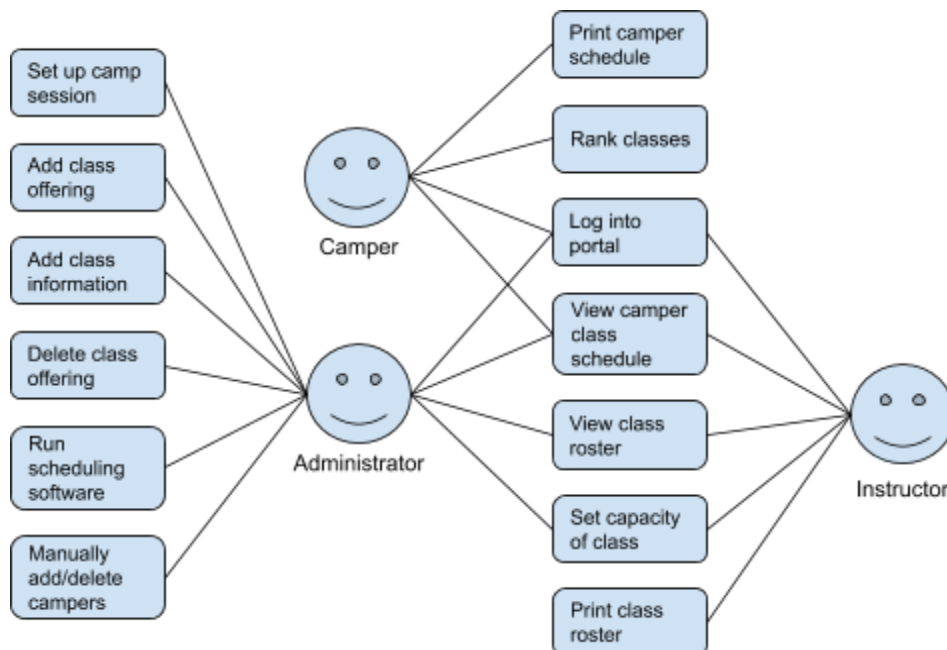
## 2. Overall Description

### 2.1 Product Perspective

This software was developed with the intention of providing a service for a camp that can be used for camper registration and camper placement in offered classes. It eliminates the need for instructors to manually create class schedules for campers. This software is a new product for this camp.

### 2.2 Product Functions

The software must provide the students, instructors, and administrators of the camp the ability to monitor class schedules, remove or add classes to schedules, modify courses offered, change course descriptions and mainly provide a seamless way to interact and understand the class schedules for the camp.



### 2.3 User Classes and Characteristics

There are varied permissions based on a user's person type, the three main person types include:

- Campers and parents of campers - who can use this software to register for camp, rank classes and access built schedules.
- Camp instructors - who can set class sizes, view camper schedules, and view class reports.
- Camp administrators - who can use the software to add classes, run sorting software to place campers in classes and edit camper registration.

## **2.4 Operating Environment**

Operates in a web-based environment that campers and other users can access via a web browser.

## **2.5 Design and Implementation Constraints**

The user interface should be written in English (U.S.) as it will be used for an American summer camp. This will function as a website, and therefore, must be connected to the internet. Functionality will vary based on user type, with campers having the least functional usage and administrators having the most functional usage.

## **2.6 User Documentation**

There is no user documentation available right now.

## **2.7 Assumptions and Dependencies**

It is assumed that users will have a valid internet connection as they submit requests to the application. It is also assumed that users know how to use the software.

# **3. External Interface Requirements**

## **3.1 User Interfaces**

1. Login Screen

### **Log In**

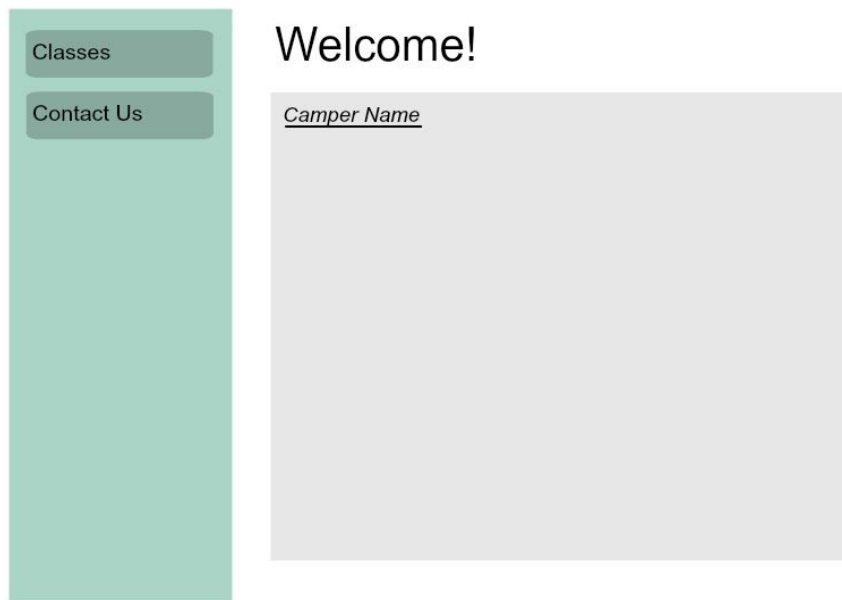
Username

Password

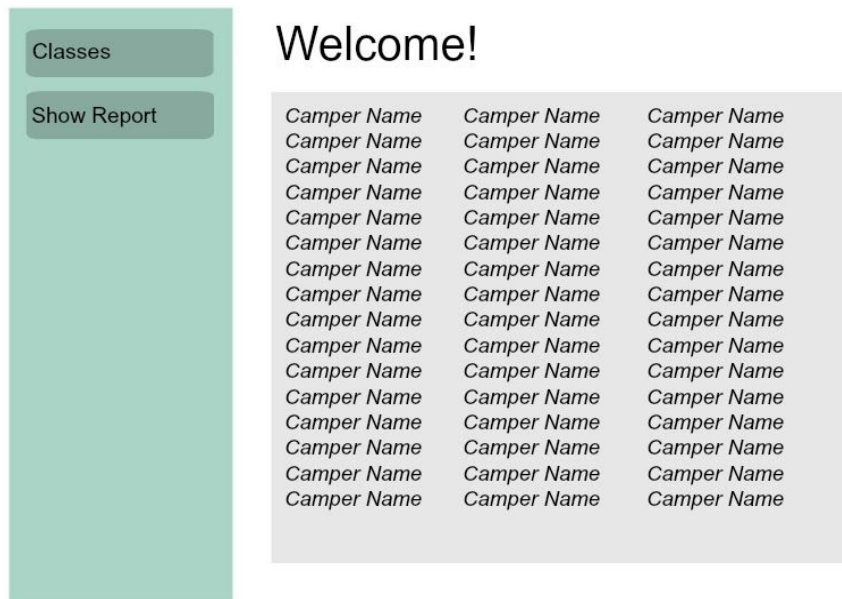
[Create New Account](#)

## 2. Home Page

## a. Camper home page

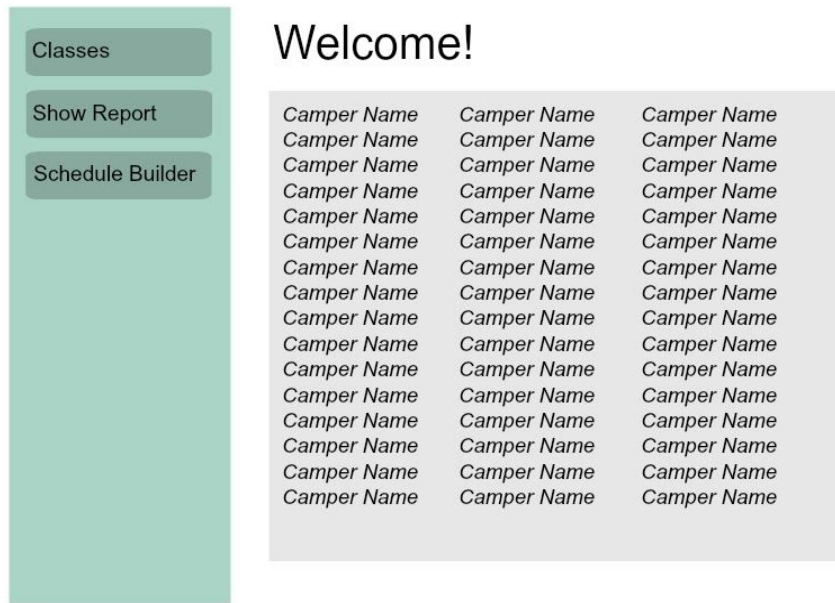


## b. Instructor home page

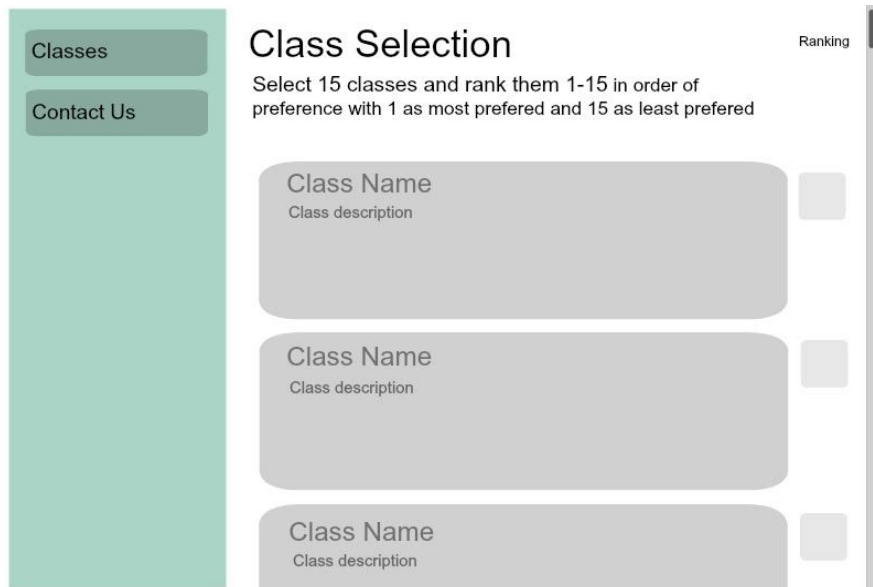


## c. Administrator home page





### 3. Camper ranking classes



### 4. Viewing a schedule

The screenshot shows a web interface for a camper schedule. On the left is a teal sidebar with two buttons: "Classes" and "Contact Us". The main content area has a title "Camper Schedule" and a "Print" button. Below the title is a form for "Camper Name". The schedule is displayed as a table with two columns: "Class Name" and "Class Time". Each row also includes a "Description" field under the class name. The table contains five rows of placeholder data.

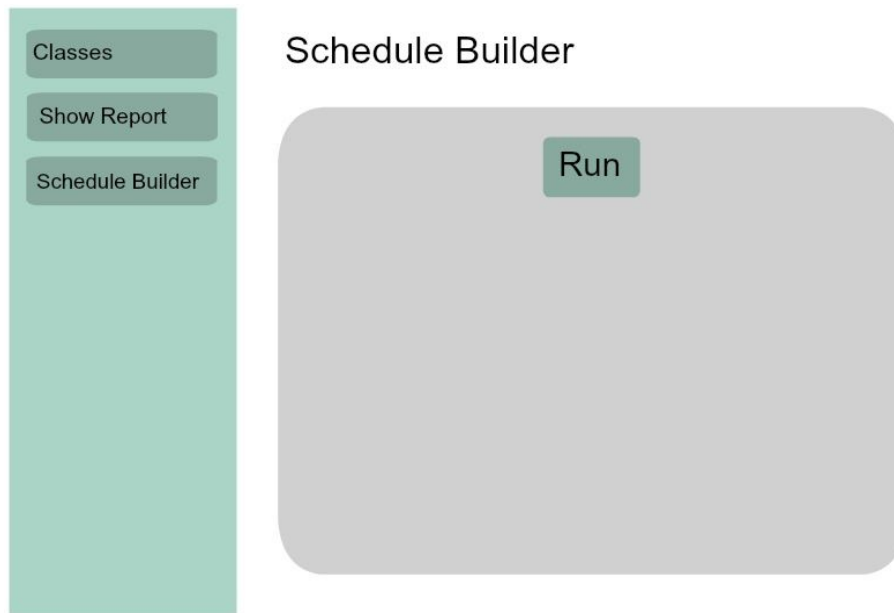
| Class Name | Description | Class Time |
|------------|-------------|------------|
| Class Name | Description | Class Time |
| Class Name | Description | Class Time |
| Class Name | Description | Class Time |
| Class Name | Description | Class Time |
| Class Name | Description | Class Time |

##### 5. Camper printing schedule

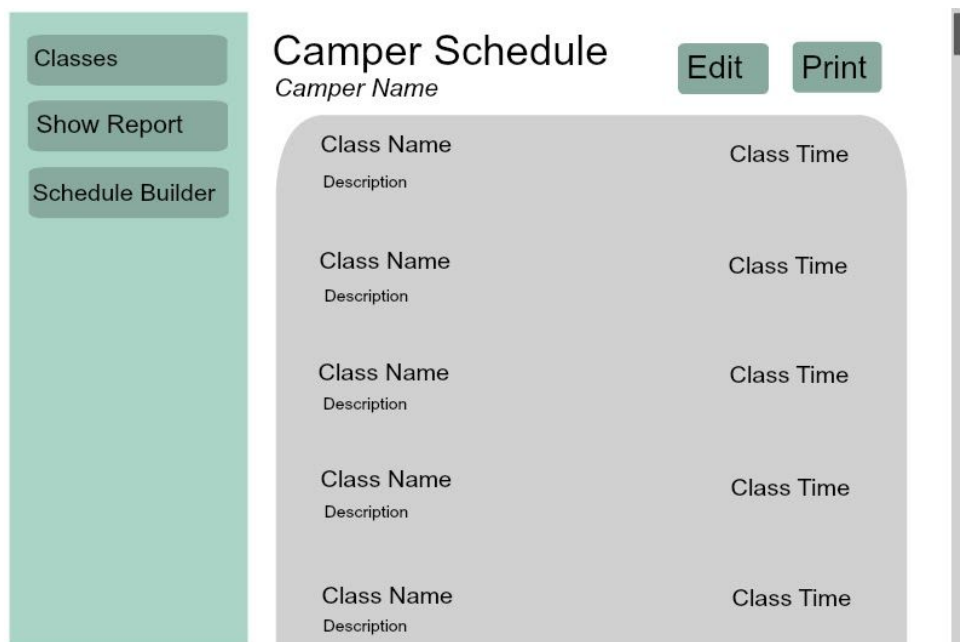
This screenshot shows a confirmation dialog box for printing the schedule. The dialog box is centered and contains the text "Would you like to print this schedule?". Below the text are two buttons: "Cancel" and "Print". The "Print" button is highlighted in blue. The background shows a partial view of the schedule table from the previous screenshot.

Would you like to print this schedule?

##### 6. Administrator running software



7. Administrator manually adding/removing campers from classes



8. Adding class info

Classes

Show Report

Schedule Builder

Class Name

Add Info

Set Capacity

Description

Class Time Capacity:

9. Setting class capacity

Classes

Show Report

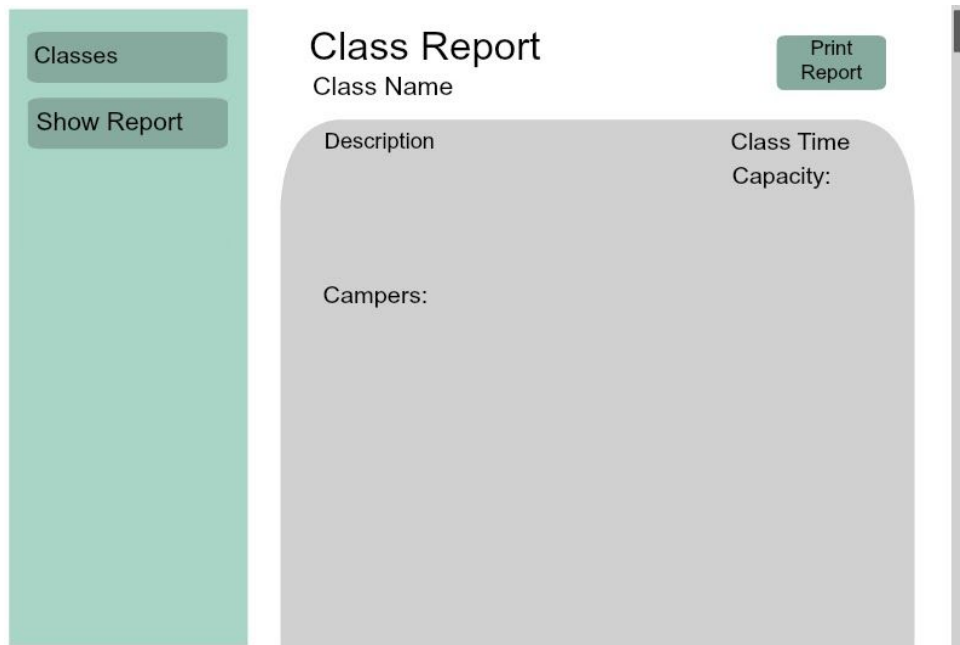
Class Name

Set Capacity

Description

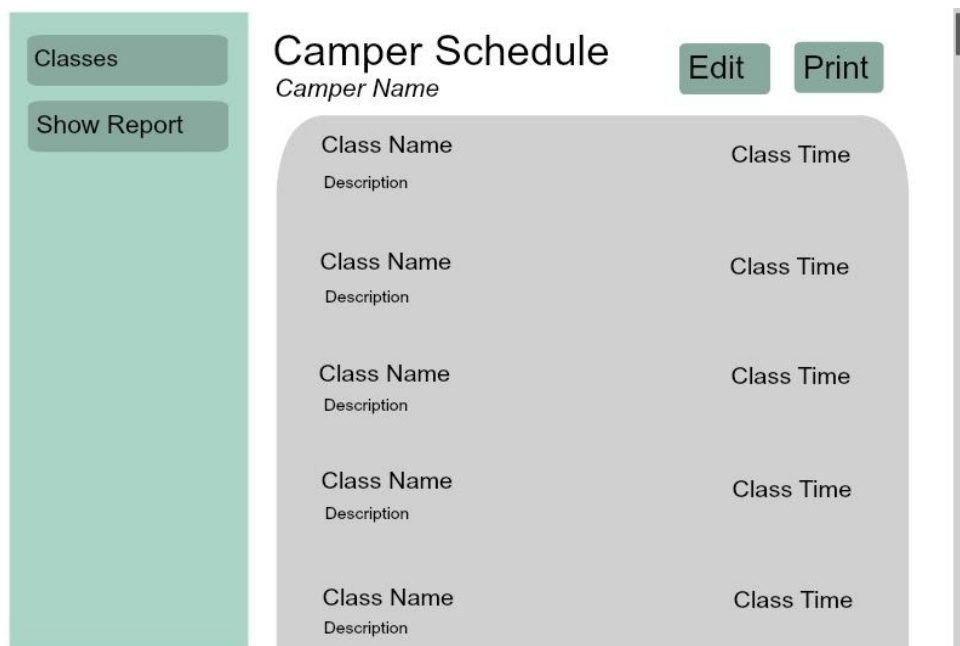
Class Time Capacity:

10. Instructor views online report of current class list



The 'Class Report' form features a teal sidebar on the left with two buttons: 'Classes' and 'Show Report'. The main content area has a title 'Class Report' and a 'Print Report' button. Below the title is a 'Class Name' label. The form body is a light gray rounded rectangle containing a 'Description' label, a 'Campers:' label, and a 'Class Time Capacity:' label. A vertical scrollbar is on the right.

## 11. Instructor views a camper's schedule



The 'Camper Schedule' form features a teal sidebar on the left with two buttons: 'Classes' and 'Show Report'. The main content area has a title 'Camper Schedule' and 'Edit' and 'Print' buttons. Below the title is a 'Camper Name' label. The form body is a light gray rounded rectangle containing a table with five rows. Each row has a 'Class Name' label with a 'Description' label below it, and a 'Class Time' label. A vertical scrollbar is on the right.

| Class Name  | Class Time |
|-------------|------------|
| Description |            |
| Description |            |
| Description |            |
| Description |            |
| Description |            |

## 12. Adding or removing a class

### 3.2 Hardware Interfaces

The relevant hardware interfaces are unknown at this time. This will depend on the customer's preferences.

### 3.3 Software Interfaces

The relevant software interfaces are unknown at this time. This will depend on the customer's preferences.

### 3.4 Communications Interfaces

Since this software is accessed via the internet, this software requires an internet connection.

## 4. System Features

### 4.1 Log on to system

|      |                  |
|------|------------------|
| Name | Log on to system |
| ID   | UC1              |

|                         |  |
|-------------------------|--|
| Description             | Campers and parents can log into the system to register for classes and view schedules when generated. Administrator/instructor can log into the system to run software to place campers in classes and manually edit class schedules if needed.   |
| Actors                  | Campers / Instructor / Administrator   |
| Organizational Benefits | Allows all users to access the system and interact with its processes making the system fully functional.  |
| Frequency of Use        | As many times as necessary. Depends on the type of user.   |
| Triggers                | Person goes to camp website  |
| Preconditions           | <ul style="list-style-type: none"> <li>• Has the ability to reach the site.</li> <li>• Internet</li> </ul>   |
| Postconditions          | 1. Person is logged in   |
| Main Course             | <ol style="list-style-type: none"> <li>1. User enters login credentials</li> <li>2. User clicks the login button</li> </ol>  |
| Alternate Courses       | <p>AC1 User does not yet have an account</p> <ol style="list-style-type: none"> <li>1. User is prompted to enter account information</li> <li>2. User clicks create new account</li> </ol> <p><i>Depends on how the customer would like forgotten logins to be handled - question/answer, email a temporary password, etc.</i></p> <p>AC2 User has forgotten their login credentials</p> <ol style="list-style-type: none"> <li>1. User selects forgot password</li> <li>2. User is prompted to answer their security question</li> <li>3. User is prompted to create new password</li> <li>4. User clicks reset password button</li> <li>5. See Main Course step 1</li> </ol> |
| Exceptions              | <p>EX1 Log on fails</p> <p>See Main Course step 1</p>  |

## 4.2 Campers Rank Classes

|             |  |
|-------------|--|
| Name        | Campers Rank Classes   |
| ID          | UC2  |
| Description | Campers need to be able to rank the classes they want to take when they attend the camp. |

|                         |   |
|-------------------------|---|
| Actors                  | Campers   |
| Organizational Benefits | Added value for the customers because campers will likely be in classes based on their interests  |
| Frequency of Use        | <i>Depends on if the campers can edit their options</i>   |
| Triggers                | Camper selects “rank classes” (or similar) option   |
| Preconditions           | <ul style="list-style-type: none"> <li>• Camper is logged in</li> <li>• Instructors have set classes</li> </ul>   |
| Postconditions          | Camper has a list of ranked classes   |
| Main Course             | <ol style="list-style-type: none"> <li>1. System prompts user to rank courses</li> <li>2. User ranks courses based on preference</li> <li>3. User saves preferences</li> <li>4. User submits rankings, rankings can no longer be modified</li> </ol>  |
| Alternate Courses       | <p><i>Depends on if the campers can edit their options</i></p> <p>Camper has already ranked classes</p> <ol style="list-style-type: none"> <li>1. See main course step 2</li> </ol> <p>User fails to submit preferences before submission deadline</p> <ol style="list-style-type: none"> <li>1. System automatically submits what is saved for the camper</li> </ol> |
| Exceptions              | <ul style="list-style-type: none"> <li>• User does not save preferences before exiting <ul style="list-style-type: none"> <li>○ Chosen preferences are cleared</li> <li>○ See main course step 1</li> </ul> </li> </ul>   |

### 4.3 Viewing and printing camper schedule

#### 4.3.1 Campers or Instructors view a camper’s schedule

|                         |   |
|-------------------------|---|
| Name                    | Campers/Instructors viewing a camper’s schedule online  |
| ID                      | UC3   |
| Description             | Once a schedule has been created, campers and instructors can view a schedule online. Campers can view their own schedule and instructors can view any camper’s schedule. |
| Actors                  | Campers, Instructors  |
| Organizational Benefits | Campers have the ability to view the courses that they have been placed in and instructors can see which campers are in each course.                                      |



|                   |  |
|-------------------|--|
| Frequency of Use  | As often as desired  |
| Triggers          | Person selects a camper  |
| Preconditions     | <ul style="list-style-type: none"> <li>• Person is logged in</li> <li>• Campers have registered and ranked classes</li> <li>• Software has been run by administrator to generate schedules</li> </ul>  |
| Postconditions    | <ul style="list-style-type: none"> <li>• Schedule has been viewed</li> </ul>   |
| Main Course       | 1. System displays schedule  |
| Alternate Courses | <i>Depends if the camper can view their schedule as a daily view or weekly view</i>  |
| Exceptions        | <i>Depends on what customer prefers course of action be</i> <ul style="list-style-type: none"> <li>• Administrator edits camper's schedule as it is being viewed <ul style="list-style-type: none"> <li>○ Reloads page, reverts to main course step 1</li> </ul> </li> </ul> |

#### 4.3.2 Camper prints physical class schedule

|                         |   |
|-------------------------|---|
| Name                    | Campers print schedule  |
| ID                      | UC4   |
| Description             | Campers are able to see their class schedules by printing them providing organization to their day.   |
| Actors                  | Campers   |
| Organizational Benefits | Campers can obtain a physical copy of their schedule  |
| Frequency of Use        | As often as desired   |
| Triggers                | User selects the print button   |
| Preconditions           | <ul style="list-style-type: none"> <li>• Camper is logged in</li> <li>• Campers have registered and ranked classes</li> <li>• Software has been run by administrator to generate schedules</li> </ul> |
| Postconditions          | <ul style="list-style-type: none"> <li>• Schedule has been printed</li> </ul>   |
| Main Course             | <ol style="list-style-type: none"> <li>1. User is prompted for confirmation to print</li> <li>2. User confirms</li> <li>3. System loads print preview for OS</li> </ol>                               |
| Alternate Courses       | <i>Depends if the user can print their schedule from multiple pages</i>   |

|            |   |
|------------|---|
|            | <i>Also depends on what view they can print (weekly vs daily).</i>  |
| Exceptions | <ul style="list-style-type: none"> <li>● An error occurs <ul style="list-style-type: none"> <li>○ See Main Course step 1</li> </ul> </li> </ul> |

## 4.4 Sort campers into classes

|                         |   |
|-------------------------|---|
| Name                    | Administrator runs scheduling software  |
| ID                      | UC5   |
| Description             | Administrators will run the software to place the campers into classes based on their ranking   |
| Actors                  | Administrators  |
| Organizational Benefits | Creates customer value/satisfaction by allowing campers to rank classes   |
| Frequency of Use        | Once per camp session   |
| Triggers                | Administrator clicks the 'Run' button   |
| Preconditions           | <ul style="list-style-type: none"> <li>● Administrator is logged in</li> <li>● Registration has been closed</li> <li>● Times have been set for classes</li> </ul>   |
| Postconditions          | Each registered camper has a complete schedule  |
| Main Course             | <ol style="list-style-type: none"> <li>1. Sorting software is run</li> <li>2. Camper schedules are generated</li> </ol>   |
| Alternate Courses       | N/A   |
| Exceptions              | <ul style="list-style-type: none"> <li>● Software fails sometime in run <ul style="list-style-type: none"> <li>○ Trigger must be redone</li> </ul> </li> <li>● Software has already been run successfully<br/>See UC6 or UC7</li> </ul> |

## 4.5 Manual addition/deletion of campers from classes

### 4.5.1 Adding a camper to a class

|                         |  |
|-------------------------|--|
| Name                    | Administrator manually adds campers to classes   |
| ID                      | UC6  |
| Description             | If registration has been completed and more campers wish to be added from a class, administrators must manually add each camper.   |
| Actors                  | Administrator  |
| Organizational Benefits | Allows administrator to fix issues with classes and possibly allow campers to change a class based on their desire   |
| Frequency of Use        | As many times as necessary   |
| Triggers                | Administrator selects edit button on a camper's schedule   |
| Preconditions           | <ul style="list-style-type: none"> <li>• Administrator is logged in</li> <li>• Classes and their sizes have been set</li> <li>• Administrator has already run software to assign classes</li> </ul>                        |
| Postconditions          | <ul style="list-style-type: none"> <li>• Changes have been made manually by the administrator to camper schedules</li> </ul>   |
| Main Course             | <ol style="list-style-type: none"> <li>1. Administrator selects the class to add the camper to</li> <li>2. Administrator saves schedule</li> </ol>   |
| Alternate Courses       | <i>Depends on if customer also allows the administrator to edit a class roster and add campers to it</i>   |
| Exceptions              | <ul style="list-style-type: none"> <li>• The class capacity is already at the max</li> <li>• Administrator fails to save selections <ul style="list-style-type: none"> <li>○ See Main Course step 1</li> </ul> </li> </ul> |

#### 4.5.2 Removing campers from a class

|                         |   |
|-------------------------|---|
| Name                    | Administrator manually removes campers from classes   |
| ID                      | UC7   |
| Description             | If registration has been completed and more campers wish to be removed from a class, administrators must manually remove each camper. |
| Actors                  | Administrator   |
| Organizational Benefits | Allows administrator to fix issues with classes and possibly allow campers to change a class based on their desire                    |

|                   |   |
|-------------------|---|
| Frequency of Use  | As many times as necessary  |
| Triggers          | Administrator selects edit button on a camper's schedule  |
| Preconditions     | <ul style="list-style-type: none"> <li>Administrator is logged in</li> <li>Classes and their sizes have been set</li> <li>Administrator has already run software to assign classes</li> </ul>   |
| Postconditions    | <ul style="list-style-type: none"> <li>Changes have been made manually by the administrator to camper schedules</li> </ul>  |
| Main Course       | <ol style="list-style-type: none"> <li>Administrator selects the class to remove the camper from</li> <li>Administrator saves schedule</li> </ol>   |
| Alternate Courses | <i>Depends on if customer also allows the administrator to edit a class roster and remove campers from it</i>   |
| Exceptions        | <p><i>Depends on what happens if a camper is removed and the class becomes empty - class removed or camper prevented from being removed?</i></p> <ul style="list-style-type: none"> <li>Administrator fails to save selections <ul style="list-style-type: none"> <li>See Main Course step 1</li> </ul> </li> </ul> |

## 4.6 Adding class information

|                         |  |
|-------------------------|--|
| Name                    | Administrator adds class info to the system  |
| ID                      | UC8  |
| Description             | Administrator enters information about the class such as the day and time offered as well as the capacity.                               |
| Actors                  | Administrator  |
| Organizational Benefits | Instructors and Administrators have more information on the classes  |
| Frequency of Use        | As often as necessary  |
| Triggers                | Administrator clicks the add information button  |
| Preconditions           | <ul style="list-style-type: none"> <li>Administrator is logged in</li> <li>Administrator has chosen a class</li> </ul>                   |
| Postconditions          | <ul style="list-style-type: none"> <li>The class has updated information</li> </ul>  |
| Main Course             | <ol style="list-style-type: none"> <li>Administrator enters information on the given class</li> <li>Administrator clicks save</li> </ol> |

|                   |   |
|-------------------|---|
| Alternate Courses | <i>Depends on if the class information can be edited?</i><br>Class info has already been entered into system <ol style="list-style-type: none"> <li>1. User selects class from class list</li> <li>2. See Main Course step 1</li> </ol> |
| Exceptions        | <ul style="list-style-type: none"> <li>• User fails to save <ul style="list-style-type: none"> <li>◦ See Main Course step 1</li> </ul> </li> </ul>  |

## 4.7 Viewing and printing class roster

### 4.7.1 Viewing a class roster

|                         |  |
|-------------------------|--|
| Name                    | Instructor/Administrator views online report of current class list   |
| ID                      | UC9  |
| Description             | The class instructor is able to view an online report detailing information on the current class list and is able to print the list if needed.                                   |
| Actors                  | Instructors, Administrators  |
| Organizational Benefits | Instructors know who is in their class and administrators can analyze class enrollment   |
| Frequency of Use        | As often as desired  |
| Triggers                | Instructor selects the view report button  |
| Preconditions           | <ul style="list-style-type: none"> <li>• Instructor is logged in</li> <li>• Software has been run</li> <li>• Instructor has selected the desired class</li> </ul>                |
| Postconditions          | <ul style="list-style-type: none"> <li>• Class report has been generated</li> </ul>  |
| Main Course             | <ol style="list-style-type: none"> <li>1. System generates report</li> <li>2. Instructor views report</li> </ol>   |
| Alternate Courses       | <i>Depends of report can be generated for multiple classes at the same time</i><br>User would like to print report <ol style="list-style-type: none"> <li>1. See UC10</li> </ol> |
| Exceptions              | Class roster is being edited while report is generated <ol style="list-style-type: none"> <li>1. See Main Course step 1</li> </ol>   |

**4.7.2 Printing a class roster report**

|                         |  |
|-------------------------|--|
| Name                    | Instructor prints online report of current class list  |
| ID                      | UC10   |
| Description             | Instructor is able to print an online report generated describing their current class list.  |
| Actors                  | Instructors  |
| Organizational Benefits | Instructor has a physical copy of the class report for reference   |
| Frequency of Use        | As often as desired  |
| Triggers                | Instructor selects print report  |
| Preconditions           | <ul style="list-style-type: none"> <li>• Instructor is logged in</li> <li>• Instructor has generated and is viewing class report</li> <li>• Registration has closed</li> </ul> |
| Postconditions          | <ul style="list-style-type: none"> <li>• Class report has been printed</li> </ul>  |
| Main Course             | <ol style="list-style-type: none"> <li>1. User is prompted for confirmation to print</li> <li>2. User confirms</li> <li>3. System loads print preview for OS</li> </ol>        |
| Alternate Courses       | <i>Depends if the user can print multiple classes at once, could have an alternate course for selecting multiple classes to print.</i>   |
| Exceptions              | <ul style="list-style-type: none"> <li>• An error occurs <ul style="list-style-type: none"> <li>○ See Main Course step 1</li> </ul> </li> </ul>                                |

**4.8 Adding a class offering**

|                         |   |
|-------------------------|---|
| Name                    | Administrator adds a class offering   |
| ID                      | UC11  |
| Description             | Administrator has the ability to add class offerings  |
| Actors                  | Administrator   |
| Organizational Benefits | Administrator is able to add classes so more campers can join and have more options for classes |

|                   |   |
|-------------------|---|
| Frequency of Use  | As often as necessary<br><i>Depends if user must do this before/after software has been run</i>   |
| Triggers          | Administrator selects add the class button  |
| Preconditions     | <ul style="list-style-type: none"> <li>Administrator is logged in</li> <li>Registration hasn't begun</li> </ul>   |
| Postconditions    | <ul style="list-style-type: none"> <li>Class has been added to the class offerings list</li> </ul>  |
| Main Course       | <ol style="list-style-type: none"> <li>Administrator inputs information for new class</li> <li>Administrator clicks create class</li> </ol>                     |
| Alternate Courses | <i>Depends if the user has the option to duplicate a class to avoid entering redundant info, or if they must do it from another page.</i>                       |
| Exceptions        | <ul style="list-style-type: none"> <li>Administrator fails to click create <ul style="list-style-type: none"> <li>See Main Course step 1</li> </ul> </li> </ul> |

#### 4.9 Removing a class offering

|                         |   |
|-------------------------|---|
| Name                    | Administrator has the ability to remove class offerings   |
| ID                      | UC12  |
| Description             | Administrator is able to remove classes from class offerings if needed  |
| Actors                  | Administrator   |
| Organizational Benefits | This provides the ability to be flexible and helps deal with class scheduling issues or problems with hosting a certain class while providing the ability to remove the unwanted classes at will.       |
| Frequency of Use        | As often as necessary   |
| Triggers                | Administrator selects the remove class button   |
| Preconditions           | <i>Depends on if this can be done after students are already enrolled in the class?</i> <ul style="list-style-type: none"> <li>Administrator is logged in</li> <li>Registration hasn't begun</li> </ul> |
| Postconditions          | <ul style="list-style-type: none"> <li>Class is removed from the class offerings list</li> </ul>  |
| Main Course             | <ol style="list-style-type: none"> <li>Administrator selects a class to remove</li> <li>Administrator is prompted to confirm that they want to remove</li> </ol>  |

|                   |   |
|-------------------|---|
|                   | the selected class  |
| Alternate Courses | <i>Depends what happens to campers already in the class. May redirect them to each individual camper's page to manually add them to a class or whatever the customer wants.</i> |
| Exceptions        | <ul style="list-style-type: none"> <li>● User doesn't confirm <ul style="list-style-type: none"> <li>○ See Main Course step 1</li> </ul> </li> </ul>                            |

#### 4.10 Set Number of Campers

|                         |  |
|-------------------------|--|
| Name                    | Instructors set number of campers per class  |
| ID                      | UC13   |
| Description             | Instructors work with the camp administrator to determine the number of campers that can fit in each class   |
| Actors                  | Instructors  |
| Organizational Benefits | Software knows how many campers can fit in a class   |
| Frequency of Use        | Most likely once per class per session<br><i>Depends on if this information can be edited and when</i>   |
| Triggers                | Instructor selects the edit capacity button  |
| Preconditions           | <ul style="list-style-type: none"> <li>● Instructor is logged in</li> <li>● Instructor has chosen a class</li> </ul> <i>Depends if the instructor can do this after the software has run</i> |
| Postconditions          | <ul style="list-style-type: none"> <li>● The system knows the class's capacity</li> </ul>  |
| Main Course             | <ol style="list-style-type: none"> <li>1. Instructor inputs predetermined class size</li> <li>2. Instructor clicks save</li> </ol>   |
| Alternate Courses       | <i>Depends if the instructor can do this after the software has run. If so, can edit it.</i>   |
| Exceptions              | <ul style="list-style-type: none"> <li>● User fails to save <ul style="list-style-type: none"> <li>○ See Main Course step 1</li> </ul> </li> </ul>   |



## 4.11 Set Up Camp Sessions

|                         |  |
|-------------------------|--|
| Name                    | Set up camp sessions   |
| ID                      | UC14   |
| Description             | Administrator sets up the different sessions that will be run throughout the summer at the camp.   |
| Actors                  | Administrator  |
| Organizational Benefits | This would allow more campers to be able to have a class of their choosing even if one session was full, they would still be able to register for another one at a different time. |
| Frequency of Use        | <i>Depends how many times the customer allows this to happen.</i>  |
| Triggers                | Administrator clicks create session button   |
| Preconditions           | <ul style="list-style-type: none"> <li>Administrator is logged in</li> </ul>   |
| Postconditions          | <ul style="list-style-type: none"> <li>Session is created</li> </ul>   |
| Main Course             | <ol style="list-style-type: none"> <li>Administrator enters relevant information for the session</li> <li>Administrator clicks save</li> </ol>                                     |
| Alternate Courses       | <i>Depends if the user must do this all at the beginning or add a session while viewing another session</i>  |
| Exceptions              | <ul style="list-style-type: none"> <li>User fails to save <ul style="list-style-type: none"> <li>See Main Course step 1</li> </ul> </li> </ul>                                     |

## 5. Other Nonfunctional Requirements

### 5.1 Performance Requirements

Any performance requirements are unknown at this time. This will depend on the customer's preferences.

### 5.2 Safety Requirements

Any safety requirements are unknown at this time. This will depend on the customer's preferences.

### **5.3 Security Requirements**

Users are required to login. Any additional security requirements are unknown at this time. This will depend on the customer's preferences.

### **5.4 Software Quality Attributes**

Users are provided with easy-to-use features that are packaged in a well-designed and easy-to-navigate user interface, which differs based on user type. Having features that are available based on a strict user type allows users to have a seamless and confusion-less experience. Any additional software quality attributes are unknown at this time and will depend on the customer's preferences.

### **5.5 Business Rules**

All users must log into the system in order to perform any other actions. Campers are able to rank the classes based on preference, and are able to view and print their class schedules. Instructors are able to see an online report of current class lists and print a physical copy, and are able to see campers' schedules online. They can also set the capacity of their classes. Administrators are able to create camp sessions, input class information into the system to offer an instructor's class, and run the software that sorts students into classes. After this software is run, they can manually add and delete campers from classes. They are also able to view class enrollment and analyze for low/high enrollment, add or remove class offerings, view students' schedules and analyze for student needs, and add class information and capacity to the system.

## **6. Other Requirements**

### **Appendix A: Glossary**

No software-specific terms have been created yet.

### **Appendix B: Analysis Models**

No analysis has been completed yet.

### **Appendix C: To Be Determined List**

1. Everything listed as "Unknown at this time."
  - a. Hardware Interfaces
  - b. Software Interfaces
  - c. Performance Requirements
  - d. Safety Requirements
2. All questions for the customer are in italics