# Software Requirements

## User Interfaces

### User login to the website using their MLS login credentials

### Once logged in, the user will be presented with a list of courses from the current term that the user has permission to set grades for. Courses should be sorted by course number.

### Selecting a course will expand/collapse the course’s grade items

### The Grade Item page will be opened once a grade item is selected.

#### A Choose File button will open file dialog for selecting an Autograder file.

#### An Upload Grades File button will upload the file and set the grades.

#### A search bar will appear below the above 2 buttons choosing students to manual input data for.

#### Selecting a student returned by the search bar will add Grade and Feedback input boxes (with the student’s name and ID acting as a label above them) to the page (underneath any existing students). An X icon next to the student’s ID will remove the input boxes from the page.

#### There will be a Select All button next to the search bar for quickly adding input boxes for all students.

#### A Set Grades button will use the manually input grades and feedback to set the grades.

### A report page will show how many grades were successfully set. Any errors in the submission will also be displayed.

### The report page has an Upload More Grades button, a Check Grades button (links to MLS page with all grades for that grade item), and a Logout button.

### There will be a Logout button on the site’s banner.

### The site needs to work on standard web browsers (Internet Explorer, Mozilla Firefox, Google Chrome, Safari, etc.)

## Functional Requirements

### Login. Occurs when users click the Login button on the Login page.

* If the Brightspace API cannot identify the user, they will not be able to login and use the service. Similarly, if the user is identified but does not have permission to edit grades of any courses (determined by the Brightspace API), they will not be able to login and use the service.
* Else, the user is brought to the Course List page

### Upload/parse file. Occurs once Upload has been clicked and the user has selected a file in the file dialog.

* If the file is not a correctly formatted Autograder file, an error message is displayed and the file is not parsed.
* If a necessary parameter for a grade is missing, that grade will not be accepted.
* Only grades for which the total grade is greater than or equal to the grade received will be accepted (i.e. 45/23 is not a valid grade). If the grade total is smaller than the grade received, the user will be prompted to continue (and skip the student) or modify the total of the grade item (taken to corresponding MLS page).
* Grades will only be accepted for students that are currently enrolled in the selected course.
* The results of the parsing will be relayed to the user on the Report page.

### Search students. Occurs when user types into search bar on Grade Item page.

* The search will be dynamic and will search students by name until a numeric character is entered, at which point student IDs are searched.

### Get manually input data. Occurs when user has clicked Set Grades.

* The data that has been input for the selected student(s) will be stored.
* Only grades for which the total grade is greater than or equal to the grade received will be accepted (i.e. 45/23 is not a valid grade).
* If no grade value has been entered for a student, the user will be prompted to choose if they want to go back and set a grade value or continue. If they continue, no grade will be set for the student.
* Any unaccepted grades will be relayed to the user on the Report page.

### Set grade and feedback data. Occurs once manually input data has been stored or upload or after upload.

* Sets grades and feedback in MLS database.

### Logout. Occurs when user clicks Logout.

* User’s session will be terminated and they will need to login again to access the service.

## Performance Requirements

### The site needs to be able to handle a file containing hundreds of records in under \_\_\_

### The website must be able to handle multiple concurrent users.

## Security Requirements

### Only those who have permission to set grades will be allowed past the login page.