

## Setting up a QA/UAT environment

1. Create a new sandbox environment – refer to the Administrator Guide for details on setting up a Sandbox Account.
2. Configure a website (azure or IIS) – refer to the Administrator Guide for details on publishing to Windows Azure or hosting in a stand-alone IIS Server.
3. Make sure web.config has all the right credentials – refer to the Developer Documentation for more details.
4. Test the stories in this QA Plan

## Functional Tests

The following stories are to be tested to ensure the application's features are working correctly:

### Group Selection Screen

1. As a teacher, I want to be able to see a list of groups with Name and Description that I have access to, sorted by Last Modified Date
2. As a teacher, I want to be able to specify the number of new groups I want to create and create them
3. As a teacher, I want to be able to search for any groups I have access to and edit them
4. As a teacher, I want to be able to click on each group and see full details of that group including Name, Description, list of students, lesson plan
5. As a teacher, I want to be able to add data element to the group in the detail view
6. As a teacher, I want to be able to search for and add my students to the group in the detail view
7. As a teacher, I want to be able to view all the information I have access to about a student
8. As a teacher, I want to be able to attach/delete a file (lesson plan) to the group in the detail view
9. As a teacher, I want the system to invalidate my session after 20 minutes of inactivity so I have to login again
10. As a teacher, I want to be able to edit name and description for each group.

### Multiple Groups Edit Screen

1. As a teacher, I want to be able to see a list of all my students in order to put them into groups
2. As a teacher, I want to be able to expand/collapse data element in my groups
3. As a teacher, I want to be able to select all my students in the student list
4. As a teacher, I want to be able to search the student list by name
5. As a teacher, i want to be able to drag and drop students onto different groups
6. As a teacher, I want to be able to tell which group the student is currently in by color circles that corresponds to the group color
7. As a teacher, I want to be able to remove students from each group

8. As a teacher, I want to be able to view all the information I have access to about a student
9. As a teacher, I want to be able to add existing groups to the group set I'm editing
10. As a teacher, I want to be able to add new group to the group set I'm editing
11. As a teacher, I want to be able to remove groups on my edit screen but not removing them from the database
12. As a teacher, I want to be able to filter my student list
13. As a teacher, I want to be able to add data element to my groups
14. As a teacher, I want to be able to assign my students to random groups by specifying how many students I want in a group
15. As a teacher, I want to be able to edit name and description for each group
16. As a teacher, I want to see different color for each group I'm editing
17. As a teacher, I want to be able to view additional details (sections, assessments, GPA, learning styles) for each student by click on them
18. As a teacher, I want to be able to delete/save each group
19. As a teacher, I want to be able to save all my edit at once
20. As a teacher, I want to be able to attach/remove a file (lesson plan) to each group
21. As a teacher, I want to be able to click on "full profile" on each student in the group and it should bring me to the inBloom student dashboard profile page
22. As a teacher, I want to be able to assign students to groups randomly even after they have all been assigned. The system should give me a warning before doing so.
23. As a teacher, I want to be able to download a file containing the group's name, description and list of students.
24. As a teacher, I want to be able to print out a list of students that belong to a group along with the group name and description.
25. As a teacher, I want to be able to print out a list of students that belong to each group on screen.

## Bug Tracking Template

In order to keep track of bugs/defects found during the testing of the application we have created a template for logging these issues.

Exact date/time error occurred	Added By (tester)	Added Date/Time	Current Behavior	Expected Behavior	Steps to reproduce	Status	Notes
Timestamp of when the error occurred. Helps with finding the exact error in the error logs	Keep track of who logged the bug so details can be traced	When the bug was logged	What the error is	What is the expected behavior	Exact steps to reproduce the error	<ul style="list-style-type: none"> <li>• New</li> <li>• Fix in progress</li> <li>• To be released to UAT</li> <li>• Released to UAT</li> <li>• Cannot be reproduced</li> <li>• Fixed</li> <li>• Non-issue</li> </ul>	Comments about the issue

## Unit and Acceptance testing guidelines

Unit testing and acceptance testing can be used to further enhance the quality of the code and make sure that new changes will not have that large of an impact on the rest of the code base. Libraries like **QUnit** can be used to unit test Javascript and **Jasmine**, which provides Behavioral Driven Development (BDD) style syntax, can be used for acceptance testing. For more information on these testing frameworks visit <http://qunitjs.com/> and <http://pivotal.github.com/jasmine/>

## Test Automation Guidelines

Testing of the application could be automated to avoid repetitive manual testing through tools such as **Selenium**, which is a GUI tool for recording user actions and verifying values on the screen or a combination of **CasperJS + Phantom JS** for Javascript-based UI testing. For more information visit <http://seleniumhq.org/> and <http://casperjs.org/>. Furthermore, these automated tests could also be made part of the **Continuous Build** process. For more information on **Continuous Integration** please refer to the **Operations Guide**.