

Form Buster

Software Test Documentation

Version 1.0

Prepared by:
**Grace Dolphy, Raphael Setin and McNels
Sylvestre**

October 1st, 2018

Contents

1. Identifier
2. References
3. Introduction
4. Test Items
5. Features to be tested
6. Features not to be tested
7. Approach
8. Item Pass / Fail Criteria
9. Suspension Criteria
10. Responsibilities
11. Schedule
12. Planning Risks
13. Approvals

1. Identifier

FB-MTP1.0-20181001

2. References

This document refers to:

- Form Buster's Project Plan(<http://formbuster.me/plan1.pdf>)
- Form Buster's Software Requirements Specifications document (<http://formbuster.me/requirement.pdf>)
- Form Buster's Software Design Descriptions document (<http://formbuster.me/requirement.pdf>)
- IEEE Standard for Software Test Documentation

3. Introduction

This Software Test Plan addresses the methodology that will be used to test Form Buster and its components. Since most of the requirements are interconnected with each other, we will be testing groups of requirements, instead of testing every single one separately; thus, each feature will cover as many requirements as it is connected to. The features to be tested are the main features that will be used by Form Buster's users, so we need to make sure we are testing them thoroughly. On the other hand, as time and budget are limited in our team of developers, we will have to leave some features out of our testing schedule; because of that, we prioritized the most essential and important features in which should be tested.

4. Test Items

- Web Interface
- Database Connections
- API calls

6. Features to be tested

Features will generally be grouped into a particular group based on a use case and be tested as a sequence of events. Some use cases have been combined into a group as well for testing. Section 9 will provide what will be tested in more detail. The features to be tested are:

1. TC.01 Log In
2. TC.02 Log Off
3. TC.03 Start Form (Student)
4. TC.04 Start Form (Faculty and Student Coordinator)
5. TC.05 Receive Form (Student)
6. TC.06 Receive Form (Staff and Faculty)
7. TC.07 View Draft
8. TC.08 Generate Pin

9. TC.9 View History
10. TC.10 View Notifications (Email)

7. Features not to be tested

The features listed below will not be tested either because the feature is marked as a minor cosmetic feature, as a 'nice-have', something that we may not have time to implement and does not impede the ultimate goal of the software. The features not to be tested are:

- GEN_005
- STA_001
- STA_003
- STA_002
- COO_001
- All Usability Requirements
- Performance Requirements
- Security Requirements
- FAC_009
- FAC_008
- FAC_007
- FAC_003
- FAC_011
- STU_027
- STU_026
- STU_025
- STU_022
- STU_018
- STU_017
- STU_014

8. Approach

We will be using mainly functional testing along with white box testing, so that we have a better understanding of both the functional aspects of the system by the user's perspective, and the software part of the system as well. Later, after the system is almost fully developed, we will be using the old test scripts in order to test if the new changes in the system caused any bugs; thus, we will be performing regression testing too.

9. Item Pass/Fail Criteria

TC.01 Log In

Description: This will test if Form Buster can properly distinguish between a sent token meaning the user is authorized to log in to their personal account or a sent token meaning the user has not provided correct credentials, do not log them into Form Buster.

Covered Requirements: GEN_001

Test Data:

- a. A correct password and correct user id of a student
- b. A wrong password and correct user id of a student
- c. A correct password and correct user id of a faculty member

Expected Results:

1. Form Buster redirects to university's user authentication login page, after a user selects login.
2. If correct user credential are provided, redirect back to formbuster.me and log the user into their personal account, into their proper role (i.e Students should only see a student's perspective). If incorrect user credentials are provided, Form Buster should not allow the user into any account.

TC.02 Log Off

Description: This will test if Form Buster can properly logout a user.

Covered Requirements: GEN_002, GEN_002_1

Test Data:

None

Expected Results:

1. Form Buster redirects the logged out user to the Form Buster home page to log back in, when the user was logged out for inactivity, or when the user click the logout button.

TC.03 Start Form (Student)

Description: This will test if Form Buster can properly access the form the user has selected to start up or continue, until the point when the faculty has received the form.

Covered Requirements: GEN_003, STU_001, STU_006, STU_012, STU_004, STU_005, STU_006, FAC_012

Test Data:

- a. Closed Class Form = CRN: 80441, PREFIX: CSE, COURSE NO.: 4201, SEC: 01, COURSE TITLE: Software Devel Proj 1, ACADEMIC UNIT: Software Engineering

Expected Results:

1. Form Buster's page with a list of forms, and due dates for each form are shown once the student selects Forms.
2. User selects the closed class form, if no draft is saved for this form, the user will see a blank form and may add in information. If the user selects the registration form and a draft is saved for this form, the user will see a popup that asks if they will like to continue from the draft, or delete their old draft and start a new form. If the user selects to continue from draft, the partially filled out form will be shown, and the user may add or change information. If the user chose to start a new form and delete the draft, then the user will see a blank form and may add in information.
3. While the user is entering in information, it should be saving; if they close the form abruptly when editing, the form should be in the drafts section with all information that the user has added at the time the form closed.
4. User selects the submit option, the user will be prompted to enter in an override pin if they have one, and will go through an additional confirmation page when submitting the form. If the user closes the form, the form should be saved to the drafts section.
5. The form will be sent to the proper faculty member and will notify them when they need to approve the form.

TC.04 Start Form (Faculty and Student Coordinator)

Description: This will test if Form Buster can properly access the form the student coordinator or faculty member has selected to start for a student, until the point where the student received the notification to the student.

Covered Requirements: GEN_003, GEN_004, STU_007

Test Data:

- a. Registration Form

Expected Results:

1. A student coordinator or a faculty member will go to the Students section (The Students section is the dashboard for a student coordinator). This will display a list of all the student's of the university.
2. The user will search for the student by first name, last name or i.d then select "Start a form". The user will then be presented with a list of forms that could be started for this student.
3. The user will select the registration form, and be brought to the registration form where they can add in any information or leave it blank, then send it off for the student to review.
4. The student will then receive a notification that a form has been started on their behalf.

TC.05 Receive Form (Student)

Description: This will test if Form Buster can appropriately react to a student pressing the save button or the ignore button on a form that was started for them by a student coordinator or a faculty member.

Covered Requirements: STU_008, STU_009

Prerequisites: A form was started for a student, and the notification is in the student's account.

Test Data:

- a. None

Expected Results:

1. A student will click on the notification that a form has been started for them, which will bring the student to the form.
2. The student will then select "Save" to save the form to their drafts, or the student will select ignore, and Form Buster will not save the form and will bring the student back to the previous page.

TC.06 Receive Form (Staff and Faculty)

Description: This will test if Form Buster will send a form to a faculty or staff member for reviewing as well as what happens when they have reviewed the form, and the expected behaviors of when a student retracts the form.

Covered Requirements: STA_009, STA_008, STA_007, STA_006, STA_005, STA_004, FAC_012, FAC_010, FAC_006, FAC_005, FAC_004, STU_029, STU_024, STU_021, STU_016, STU_015, STU_013, STU_019, STU_020

Test Data:

- a. None

Expected Results:

1. If a student has retracted a form and submitted the confirmation, this retracted form should never reach the staff for processing and should not accept anymore reviewings from faculty members.
2. If a faculty member has been sent a form, they will receive notification of the form, and will provide an approval and confirm their decision. If they decline they must provide a reason with the form and conform their decision. Upon making a decision, the form will be moved to their personal history, and the student will be notified.
3. If all faculty members have approved of the form, the form will be sent to the staff's list on their dashboard, and they will be notified.
4. If the staff member has processed the form or was not able to for any provided reason, then the form should be moved to their history (verify), and moved off of their dashboard, and the form should also move from the student's "in progress" section their history as well and be notified of the review.

TC.07 View Draft

Description: This will test if Form Buster can allow a saved form to be viewed in the drafts section.

Covered Requirements: STU_008, STU_002 and STU_003

Prerequisites: A form was started for a student, and the notification is in the student's account. A student can start a form with no issues.

Test Data:

- a. None

Expected Results:

1. A student will start a form and save it. The form should be located in the student's draft section.
2. Clicking on the form will allow the student to view the form.
3. A student will now view the notification for a form that was started for them, by clicking on the notification.
4. The student should be able to view the form, and select save.
5. The student should now be able to see the form in their drafts list, selecting it will allow the student to view it.

TC.08 Generate Pin

Description: This will test the Form Buster events starting from a faculty member generating the pin, to the student applying the pin.

Covered Requirements: FAC_001, STU_012

Test Data:

- a. None

Expected Results:

1. A faculty member will go to their student's tab, this should show the list of all student's on Form Buster.
2. A faculty member will then search for the student by first name, last name or i.d., and select the right student.
3. The student details should display, and the faculty member will select the "Generate Pin" button.
4. The faculty member will then select which form they are generating the pin for.
5. The student will then go to the draft they would like to submit or start a new form, on submission, the student will enter the pin in the correct form type, before the expiration date of the pin.
6. The student will then see the date updated, and will continue with submission.

TC.9 View History

Description: This will test the Form Buster email notifications which should redirect the user to the form details that the notification is about.

Covered Requirements: GEN_006, STU_028

Test Data: none

Expected Results:

1. A student selects history.
2. History shows all forms that have been processed, not able to be processed, declined by faculty or approved by faculty.
3. A faculty member will go to their students tab (or for the student coordinator, their home page), this should show the list of all students on Form Buster.
4. A faculty member or student coordinator will then search for the student by first name, last name or i.d., and select the right student.
5. The faculty member or student coordinator selects view history.
6. History shows all forms that have been processed, not able to be processed, declined by faculty or approved by faculty.

TC.10 View Notifications (Email)

Description: This will test the Form Buster email notifications which should redirect the user to the form details that the notification is about.

Covered Requirements: GEN_007

Prerequisites: The user has received a notification regarding a form.

Test Data: none

Expected Results:

7. The user selects the link in their email.
8. The link should redirect the user to login if they are not logged in already.
9. The user should now be logged in and seeing the form details for the correct form.

10. Suspension Criteria

Testing will be halted when the team deems all the planned tests' results to be satisfactory.

11. Responsibilities

All team members will be considered testers for each other's implementations, but the implementer will not be responsible for in depth testing of the feature they have developed. If any bugs arise from the implementation which are found by the testers, the developer will take feedback and fix the bug as long as it is agreed that it is a bug by the testers and the developer.

12. Schedule

There will be five main test periods, one for each of the remaining milestones. Only features planned to be tested relevant to the milestone will be tested at that time. The tests will be conducted during the week before each milestone deadline.

13. Planning Risks

The planned tests may change as requirements change. The test schedule may change as well due to unplanned development issues, resulting in late delivery.

14. Approvals

Project Sponsor - Dr. Ribeiro	
Test Team - Form Buster Members	
Senior Project Instructor - Dr. Chan	