

Heading: System and Unit Test Report, Algebreezy, Algebreezy, 11/30/15

System Test Scenarios:

- User story 1 from Sprint 1: As a user, I want to be able to visit the Algebreezy website instead of having to download a computer program, to save space on my computer.
 - Open up any web browser
 - In the search engine type in
 - <https://algebreezy-test.herokuapp.com>
- User story 2 from Sprint 1: As a user, I want to be able to type algebraic equations, so that I can see them visually and manipulate them.
 - On welcome page of Algebreezy click the “Sign Up” or “Login” button
 - Click the “Create” button to create a new scratchpad
 - In “Please enter an equation” enter in your algebraic equation
 - Click “Enter”
 - View your equation on the left hand side
- User story 3 from Sprint 1: As a user, I would like to be able to see my equations rendered in MathJax, so that I can clearly understand them.
 - If not logged in sign up or login into web page
 - Click the “Create” button to create a new scratchpad
 - In “Please enter an equation” enter in your algebraic equation
 - Click “Enter”
 - View your equation that are rendered in MathJax on the left hand side of page
- User story 1 from Sprint 2: As a user, I want to create an account so that I can maintain a profile with the service.
 - On the welcome page of Algebreezy click “Sign up”
 - Enter in your email
 - [<youremail@email.com>](mailto:youremail@email.com)
 - Enter in your password
 - [<yourpasswordhere>](#)
 - Enter in your password again for confirmation
 - [<yourpasswordhere>](#)
 - Click on “Sign up” button
 - Now page is redirected to a Welcome page
- User story 2 from Sprint 2: As a user, I want to have good navigation controls so that I can efficiently navigate the website.
 - Hover over “More” on the top left corner of page

- Click “Home” to be redirected to home page
 - Click “About” to read brief summary of product and its benefits
 - Click “Contact” to email team members with questions
 - Click “Help” to get help navigating around the page
 - Click “Register” to Sign up to Algebreezy
 - if already logged in “Register” will direct you to welcome page
 - Click “Team” to read brief descriptions about team members
- Click on Algebreezy logo in the center of navigation bar
 - redirect to home page
- If not signed in click on Login on right corner of navigation bar to Login
- If signed in click on Logout on right corner of navigation bar to Logout
- User story 3 Sprint 2: As a user, I want a tree representation of my equation so that I can manipulate it with a drag-and-drop utility rather than being limited to only typing.
 - On welcome page of Algebreezy click the “Sign Up” or “Login” button
 - Click the “Create” button to create a new scratchpad
 - In “Please enter an equation” enter in your algebraic equation
 - Click “Enter”
 - View your equation on the left hand side
 - View your tree that has a post traversal order on the right hand side
 - Zoom in or out of tree representation
- User story 4 Sprint 2: As a user, I want to be able to save my work so that I can return to it at any given time.
 - On welcome page of Algebreezy click the “Sign Up” or “Login” button
 - Click the “Create” button to create a new scratchpad
 - In “Title” text box enter in the title you want to name your project
 - <thisone>
 - Click “Save”
 - Hover over “More” in navigation bar
 - Click on “Dashboard” to see all your work
 - Click on <thisone> to view the work you have saved
- User story 5 Sprint 2: As a user, I want hot keys to be available so that I don’t have to point and click everywhere.
 - Once logged in and on personal scratchpad
 - Type your algebraic equation in “Please enter an equation”
 - Hit Ctrl+z to undo your work
 - Hit Ctrl+s to forcefully save your work
 - Hit Enter to view your equation on scratchpad

- User story 6 Sprint 2: As a user I want to be able to see the equation view, the tree view, the toolbar and the input bar all at the same time so that I don't have to scroll around a lot to work.
 - Once logged in
 - Click "Create" to navigate to a new scratchpad
 - Enter in an algebraic equation in "Please enter an equation" text box
 - Click "Enter"
 - If web browser's screen is large
 - Equation view is second box from the left
 - Tree view is second box from the right
 - Toolbar to manipulate equations is the first box on the right
 - Toolbar to save work is the first box on the left
 - Input bar is below the equation view, tree view, and toolbars
 - Toolbar to comment work is below the Input bar
 - If web browser's screen is smaller
 - Equation view is on the left side
 - Tree view is on the right side
 - Toolbar to save work is below the equation view and tree view
 - Toolbar to manipulate equations is below the toolbar to save work
 - Input bar is below the toolbar
 - Toolbar to comment your work is below the Input bar
- User story 1 Sprint 3: As a user I want to be able to apply basic operations to their equations and expressions so that they can manipulate their equations.
 - Type in an algebraic equation in "Please enter an equation"
 - Click "Enter" or hit "Enter"
 - Click on an operation node in the tree view
 - Look at the different manipulations in manipulation toolbar that are possible with the equation
 - Click on a possible manipulation
- User story 2 Sprint 3: As a user I want to be able to add comments between operation steps so that they can clarify or explain why they chose to do an operation.
 - Once logged in and on personal scratchpad
 - Type in a comment in the "Comment your work" textbox
 - Hit/Click "Enter"

- View your comment on scratchpad
- User story 3 Sprint 3: As a user, I want to be able to save my work so that I can return to it at any given time.
 - Once logged into Algebreezy
 - Click the “Create” button to create a new scratchpad
 - In “Title” text box enter in the title you want to name your project
 - <thisone>
 - Click “Save”
 - Hover over “More” in navigation bar
 - Click on “Dashboard” to see all your work
 - Click on <thisone> to view the work you have saved
- User story 4 Sprint 3: As a user, I want hot keys to be available so that I don’t have to point and click everywhere.
 - Once logged in and on personal scratchpad
 - Type your algebraic equation in “Please enter an equation”
 - Hit Ctrl+z to undo your work
 - Hit Ctrl+s to forcefully save your work
 - Hit Enter to view your equation on scratchpad
- User story 5 Sprint 3: As a user I want a user account page where i can access all of my work so that it is all contained in one place and is easy to come back to.
 - Once logged in
 - Hover over the “More” placed in the top left of navigation bar
 - Click on “Dashboard” to see all your previously saved work

Non User Stories:

- Sprint 3: As an owner I want users to have more information about the product so they can use it better and more efficiently
 - Refer to User story 2 from Sprint 2
- Sprint 3: As an owner I want to host my product so that users do not have to download source code.
 - Hosted at <https://algebreezy-test.herokuapp.com/>