No.	Test - subject	no.	Test - object	Sub Cases	Description of input	Description of expected output	Result
1)	Login	1)	Title	1	clicking login title	login title should not be clickable	Pass
				2	Title should be properly positioned	login title should be positioned properly despite resizing	Pass
		2)	Background	1	Background images should load properly and within time	Background images should load properly and within time	Pass
				2	Background images should not be clickable	Background image is not clickable	Pass
		3)	Username	1	Entering username	Username should be case sensitive	Pass
				2	Username should not be blank	Error message displayed	Pass
		4)	Password	1	Password should not be blank	Error message to fill in all the fields	Pass
				2	Entering password	Password should be case sensitive	Pass
				3	Entering password	Password should be masked	Pass
		5)	loginButton	1	clicking login button	Login button should be clickable	Pass
				2	hovering over login button	border colour of login button should change	Pass
				3	login button clicked with correct details	Message box for successful login should be dispayed	Pass
				4	clicking button with wrong details filled	Error message box should be displayed	Pass
		6)	signupText	1	clicking signup text	signup text should be clickable	Pass
				2	clicking signup text	should direct to signup page	Pass
		7)	forgotPasswordText	1	clicking on forgotpasswordtext	forgot password text shoyld be clickable	Pass
				2	clicking forgotpasswordText	new window should be diplayed for sending password to registered mail id	Pass
2)	Sign-Up	1)	Title	1	clicking signup title	signup title should not be clickable	Pass
				2	signup title should be properly positioned	signup title should be properly positioned despite resizing	Pass
		2)	Background	1	loading of background images	background images should load up properly and within time	Pass
		3)	Name	1	Entering name	Name should accept string	Pass
				2	Name left blank	Error message to fill in all the fields	Pass
		4)	Username	1	Username left blank	Error message to fill in all the fields	Pass
				2	Existing username entered	Error message to change username	Pass
				3	entering username	Username entered should be case sensitive	Pass
		5)	Password	1	Password left blank	Error message to fill in all the fields	Pass
				2	Entering password	Password should be masked	Pass
				3	Entering password	Password should be case sensitive	Pass
		6)	Confirm Password	1	entering confirm password	Confirm password should be masked	Pass
				2	confirm password entered not matching the password	Error message mentioning that password and confirm password do not match	Pass
		7)	email	1	Email left blank	Error message to fill in all the fields	Pass
				2	Entering email	Email should be case sensitive	Pass
		8)	signup button	1	signup button clicked with any field empty	Message box to fill in all the fields	Pass
				2	signup button clicked with password not matching confirm password	Error message box to make password match	Pass
				3	signup button clicked with aleady existing username entered	Should diaplay an error message to change username	Pass
				4	signup button clicked with all details properly filled	Successful signup message box should be diaplayed	Pass
		9)	gotologinText	1	Clicking gotoLogin text	gotoLogin text should be clickable	Pass
				2	clicking gotoLogin text	Should redirect to login page	Pass
3)	Sourcerer Tab	1)	Title	1	Title should be fully contained in the tab	Title remains fully contained irrespective of resizing	Pass
				2	Title should be at the centre of the tab	Title remains at the center irrespective of resizing	Pass
				3	Clicking the title tab should open the Sourcerer tab	Clicking the title tab opens the Sourcerer tab irrespective of the current tab	Pass
		2)	Background	1	Background image should load properly and within time	Background image loads properly and within time	Pass
				2	Background image should not be clickable	Background image is not clickable	Pass
		3)	Constant Value	1	"Value " or "Duration of Experiment" field is clicked	Should be editable	Pass
				2	"Value " or "Duration of Experiment" is a string of alphabets	Should display an error	Pass
					"Value " or "Duration of Experiment" is left blank	Should display an error	Pass
				3	"Value " or "Duration of Experiment" is an integral number	Should produce output	Pass
				4	"Value " or "Duration of Experiment" is an non-integral number	Should produce output	Fail
				5	Clicking the "Use LED" radiobutton	Should switch to LED tab	Pass
				6	Clicking "Additional Options" radiobutton	Should open Additional entry fields	Pass
				7	Leaving the Additional options empty	Should produce output	Pass
		4)	SineWave	1	"Value ","Duration of Experiment","Frequency" or "Initial phase" field is clicked	Should be editable	Pass
				2	"Value ","Duration of Experiment","Frequency" or "Initial phase" is left blank	Should display an error	Pass
				3	"Value ","Duration of Experiment","Frequency" or "Initial phase" is a string of alphabets	Should display an error	Pass
				4	"Value ","Duration of Experiment","Frequency" or "Initial phase" is an integral number	Should produce output	Pass
				5	"Value ","Duration of Experiment","Frequency" or "Initial phase" is an non-integral number	Should produce output	Fail
				6	Clicking the "Use LED" radiobutton	Should switch to LED tab	Pass
				7	Clicking "Additional Options" radiobutton	Should open Additional entry fields	Pass
				8	Leaving the Additional options empty	Should produce output	Pass
		5)	Step Voltage	1	"Start Value " , "End Value" or "Number of Steps" field is clicked	Should be editable	Pass
				2	"Start Value " , "End Value" or "Number of Steps" is left blank	Should display an error	Pass
				3	"Start Value " , "End Value" or "Number of Steps" is a string of alphabets	Should display an error	Pass

					Description	Expected Output	Result
				4	"Number of Steps" is integral number	Should produce output	Pass
				5	"Number of Steps" is non-integral number	Should display an error	Pass
				6	"Start Value " , "End Value" or "Number of Steps" is integral	Should produce output	Pass
				7	"Start Value " , "End Value" or "Number of Steps" is non-integral	Should produce output	Fail
				8	Clicking the "Use LED" radiobutton	Should switch to LED tab	Pass
				9	Clicking "Additional Options" radiobutton	Should open Additional entry fields	Pass
				10	Leaving the Additional options empty	Should produce output	Pass
	4) Result Tab	1) Title		1	Title should be fully contained in the tab		Pass
				2	Title should be at the centre of the tab		Pass
				3	Title tab should be clickabe		Pass
				4	Clicking title should switch to results tab		Pass
		2) Background		1	Should fit into the screen entirely		Pass
				2	Background should be non clickable		Pass
				3	Background should be visible		Pass
		3) Result Table		1	Result table executes in proper time		Pass
				2	Result table should contain all the measurable parameters		Pass
				3	Result table should not be editable		Pass
				4	Result table should not be movable		Pass
				5	Result table fits on the screen with proper alignment		Pass
				6	Result table should contain Serial No. column		Fail
		4) Fields		1	Fields should be properly aligned		Pass
				2	Fields should be present for all the availaible options		Pass
			a) X-axis/Y-axis	1	These fields require selecting of predefined inputs so should have Drop Down menus		Pass
				2	All the options in the drop down menu should be clickable		Pass
				3	All the options in the drop down menu should be selectable		Pass
				4	not selecting any input	Should select the default inputs	Pass
			b) Line Color/Background Color	1	Clicking on the textboxes next to these fields should open color pallete		Pass
				2	All colors in the pallete should be selectable		Pass
				3	clicking on a color should select it		Pass
				4	not selecting any color should give an error		
			c) X-start/Y-start/X-end/Y-end	1	The fields requiring numerical input should have textbox		Pass
				2	the textboxes in these fields should only accept numerical value		Pass
				3	when non numerical data is fed	Displays an error message	
			d) Grid/No Grid	1	These are Disjoint options so should have radio buttons		Pass
				2	Radio Buttons should be working accordingly		Pass
				3	Buttons should be properly aligned		Pass
			e) Title	1	This field require alphanumerical input so should have textbox		Pass
				2	Not writing any title should give the default title		Pass
		5) Buttons		1	Buttons should be properly aligned		Pass
				2	Buttons should have their title in centre		Pass
				3	Buttons should look different argo clickable		Pass
				4	Buttons should be clickable		Pass
				5	Buttons shouold be working		Pass
			a) Export Readings button	1	Trying to export readings without running an experiment	Displays an error message	
				2	Clicking on the button	opeing of a new window asking for email-Id from the user to export	Pass
				3	Readings should be exported to the correct email-Id		Pass
			b) Generate CSV button	1	Trying to generate csv file without running an experiment	Displays an error message	
				2	Clicking on the button	Opens a new window asking for details to save the file	Pass
				3	the file shoud be saved by the same name and at the same addresss as specified by the user		Pass
			c) Plot Graph button	1	Trying to plot graph without running an experiment	Displays an error message	
				2	Clicking on the button	Should display the desired graph	Pass
5)	LED Tab	1) Title		1	Title should be properly positioned	Title should be properly positioned irrespective of resizing	Pass
				2	Clicking tab title	Should open led tab irrespective of current tab	Pass
		2) Background		1	Background is clciked	No change is expected	Pass
				2	Background should be visible		Pass
		3) On time		1	field should be properly aligned		Pass
				2	field clicked	should be editable	Pass
				3	field input is integral value	should accept the value	Pass
				4	field input is non integral value	should accept the value	Fail
		4) Off time		1	field should be properly aligned		Pass
				2	field clicked	should be editable	Pass
				3	field input is integral value	should accept the value	Pass
				4	field input is non integral value	should accept the value	Fail
		5) Duration		1	field should be properly aligned		Pass
				2	field clicked	should be editable	Pass
				3	field input is integral value	should accept the value	Pass
				4	field input is non integral value	should accept the value	Fail
		6) Start button		1	should be clickable		Pass
				2	button clicked	should produce output	Pass
				3	"On time" or "Off time" or "Duration" field is empty	should display an error	Fail
				4	"On time" or "Off time" or "Duration" field value is non integral	should produce output	Fail
6)	PID tab	1) Title		1	Title should be properly positioned	Title should be properly positioned irrespective of resizing	Pass
				2	Selecting use heater option	Should open PID tab irrespective of the current tab	Pass

			2)	**Background**		1	Background is clicked	No change is expected	**Pass**
						2	Background should be visible		**Pass**
			3)	**Initial temperature**		1	field should be properly aligned		**Pass**
						2	should automatically display the initial temperature of the sample	should not be editable	**Pass**
			4)	**Temperature to be reached**		1	field should be properly aligned		**Pass**
						2	field clicked	should be editable	**Pass**
						3	field input is integral value	should accept the value	**Pass**
						4	field input is non integral value	should accept the value	**Pass**
			5)	**No. of intervals**		1	field should be properly aligned		**Pass**
						2	field clicked	should be editable	**Pass**
						3	field input is integral value	should accept the value	**Pass**
						4	field input is non integral value	should display an error	**Pass**
			6)	**Start button**		1	should be clickable		**Pass**
						2	button clicked	should produce output	**Pass**
						3	"Temperature to be reached" or " No. of intervals" fields are empty	should display an error	**Pass**
									Pass