

Test cases for the web application

1) For the login system:

Test case	Verify the following username and password combinations	Expected results
1.1	Blank, blank	Error "please enter your email and password"
1.2	Blank, invalid	Error "please enter your email and password"
1.3	Blank, valid	Error "please enter your email and password"
1.4	Invalid, blank	Error "please enter your email and password"
1.5	Invalid, invalid	Error "please enter your email and password"
1.6	Invalid, valid	Error "please enter your email and password"
1.7	Valid, blank	Error "please enter your email and password"
1.8	Valid, invalid	Error "please enter your email and password"
1.9	Valid, valid	Home page is displayed

2) For the registration:

Test case	Possibilities	Expected results
1.1	If the input field for email is left blank or given an email that was used to register before	Error "Email id already taken"
1.2	If the value for password field does not match with the value for confirm password field	Error "passwords do not match"
1.3	If all fields are entered correctly	Message shown "Registration is successful"

3) Test data examples for weather service:

Input	example	output
A valid city with correct spelling	Bangkok	Current weather of the city is displayed
A valid city with wrong spelling	bngkok	Message displayed "City not found"
A valid country	Thailand	Message displayed "City not found"
A random word	hello	Message displayed "City not found"

4) Test data for currency converter:

Input	example	output
A positive whole number	100	The value for exchange rate is calculated and shown
A decimal number	3.99	The value for exchange rate is calculated and shown
A negative number	-9.1	The value for exchange rate is calculated and shown
Just zero	0	The zero is automatically turned to 1 (as that is what is specified in the code). The corresponding exchange rate is then displayed.

5) To test the database connection:

If the name of the database written in the code has been misspelled or does not match the name of the database created then the app will not run and error would be displayed in the terminal. However, if the connection is established then the message "MYSQL Connection Success" is displayed in the terminal. (This can be tested by changing the name of the database in the code)

(When the user logs in then the row data packet-containing values for all the attributes of the user along with the token is displayed in the terminal)