Verification and Validation Report: REVITALIZE

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1 Revision History

Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

2 Symbols, Abbreviations and Acronyms

symbol	description
T	Test

[[]symbols, abbreviations or acronyms – you can reference the SRS tables if needed —SS]

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3 Functional Requirements Evaluation

3.1 Login Page

Test #1: FR-LP-1

Description: Testing that login page is displayed upon starting the

application

Type: Manual

Initial State: Loading stage of the login page
Input: An event that loads the login page

Output: Login page is displayed with all necessary components

Expected:

Result: PASS

Test #2: FR-LP-2

Description: Testing that login page displays fillable username

textbox

Type: Manual

Initial State: Login page is displayed with username textbox

Input: Enter username information in textbox

Output: Username information entered is displayed in textbox

Expected:

Test #3: FR-LP-3

Description: Testing that login page displays fillable password

textbox

Type: Manual

Initial State: Login page is displayed with password textbox

Input: Enter password information in textbox

Output: Password information entered is displayed in textbox

via hidden text

Expected:

Result: PASS

Test #4: FR-LP-4

Description: Testing that login page displays login button

Type: Manual

Initial State: Login page is displayed with login button

Input: Click the login button

Output: User logs in after the system checks the validity of

the input parameters in the login page

Expected: Login button is displayed and user logged in success-

fully

Test #5: FR-LP-5

Description: Testing that login page displays forgot password but-

ton

Type: Manual

Initial State: Login page is displayed with forgot password button

Input: Click forgot password button

Output: Display forgot password screen with textbox to enter

email

Expected:

Result: PASS

Test #6: FR-LP-6

Description: Testing that login page displays a stay looged in

checkbox

Type: Manual

Initial State: Login page is displayed with stay logged in checkbox

that is empty

Input: Click stay logged in checkbox

Output: Display a check-mark in the stay logged in checkbox

if checkbox is empty. Else if checkbox contains checkmark already it will then display an empty checkbox

Expected:

Test #7: FR-LP-7

Description: Testing that application saves prior login information

if stay logged in checkbox is checked

Type: Manual

Initial State: Loading stage of REVITALIZE where previous state

had stay logged in checkbox checked

Input: An event that loads REVITALIZE

Output: Display main page

Expected:

Result: PASS

Test #8: FR-LP-8

Description: Testing that login page displays sign-up button that

redirects to sign-up page

Type: Manual

Initial State: Login page is displayed with sign up button

Input: Click sign up button

Output: Loads and displays sign up page

Expected:

Test #9: FR-LP-9

Description: Testing if application checks validity of input param-

eters in login page

Type: Manual

Initial State: Login page is displayed with inputted information in

username and pass- word text-boxes

Input: Click login button

Output: If failure state, display an invalid password or user-

name banner. Else if success state, load and display

main page

Expected:

Result: PASS

3.2 Signup Page

Test #10: FR-SP-1

Description: Testing that signup page displays fillable username

textbox

Type: Manual

Initial State: Signup page is displayed with username textbox

Input: Enter username information in textbox

Output: Username information entered is displayed in textbox

Expected:

Test #11: FR-SP-2

Description: Testing that signup page displays fillable password

textbox

Type: Manual

Initial State: Signup page is displayed with password textbox

Input: Enter password information in textbox

Output: Password information entered is displayed in textbox

via hidden text

Expected:

Result: PASS

Test #12: FR-SP-3

Description: Testing that signup page displays fillable email

textbox

Type: Manual

Initial State: Signup page is displayed with email textbox

Input: Enter email information in textbox

Output: Email information entered is displayed in textbox

Expected:

Test #13: FR-SP-4

Description: Testing that signup page displays signup button

Type: Manual

Initial State: Signup page is displayed with signup button

Input: Click the signup button

Output: User signs up after the system checks the validity of

the input parameters on the signup page

Expected:

Result: PASS

Test #14: FR-SP-5

Description: Testing if application checks validity of input param-

eters in signup page

Type: Manual

Initial State: Signup page is displayed with inputted information

in username and password text-boxes

Input: Click signup button

Output: If failure state then display an invalid user-

name/password or email banner. Else if success state

then load and display login page

Expected:

Result: PASS

3.3 Main Page

Test #15: FR-MP-1

Description: Testing that the application displays a calendar with

current date on successful login

Type: Manual

Initial State: Main page is displayed with calender of current date

Input: An event that loads the main page

Output: Main page is displayed with all necessary components

Expected:

Result: PASS

Test #16: FR-MP-2

Description: Testing that the application has a previous day and

a next day button on each page after successful login

Type: Manual

Initial State: Main page and Diet, Workout, Rest sections are dis-

played with previous day and next day buttons

Input: An event that loads the main page, Diet, Workout,

Rest sections and the previous day and next day but-

tons are clicked

Output: Main page, Diet, Workout, Rest sections are dis-

played with previous day and next day buttons. Once the next day button is clicked, the calendar refreshes the calendar information for the next day. Once the previous day button is clicked, the calendar refreshes

the calendar information for the previous day

Expected:

Test #17: FR-MP-3

Description: Testing that a back button is displayed on each user

interface after a section is selected

Type: Manual

Initial State: Each interaction after leaving the main page must

have a visible back button

Input: An event that loads the next user interface after leav-

ing the main page and the back button is clicked

Output: The next user interface after leaving the main page is

displayed with a back button. Once the back button

is clicked the main page is loaded

Expected:

Result: PASS

Test #18: FR-MP-4

Description: Testing that the application displays the sections

Diet, Exercise, and Rest on the current calendar day

Type: Manual

Initial State: Main page is displayed with Diet, Exercise and Rest

buttons available to click

Input: An event that loads the main page and the Diet, Ex-

ercise and Rest buttons are clicked

Output: Main page is displayed with Diet, Exercise and Rest

buttons. If the Diet button is clicked, the Diet interface is loaded. If the Exercise button is clicked, the Exercise interface is loaded. If the Rest button is

clicked, the Rest interface is loaded

Expected:

Result: PASS

3.4 Diet Section Page

Test #19: FR-DS-1

Description: Testing that application prompts the user to height,

input dietary, weight, calorie information on initial

launch of Diet section

Type: Manual

Initial State: Diet section is initialized for the first time and an

initial information dialog is launched

Input: An event that loads the diet section for the first time

Output: A fillable dialog box is launched with height, dietary

information, weight and calorie information

Expected:

Result: PASS

Test #20: FR-DS-2

Description: Testing that the application saves initial user height,

dietary, weight, calorie information

Type: Manual

Initial State: Diet section is initialized for the first time and an

initial information dialog is launched

Input: Initial information dialog values are filled

Output: Initial information values are saved to the database

Expected:

Test #21: FR-DS-3

Description: Testing that the application initializes with a list of

food logged on the current calendar day

Type: Manual

Initial State: Section is initialized with a list of food logged for the

current calendar day

Input: An event that loads the rest section

Output: A list of inputted food is loaded for the current cal-

endar day

Expected:

Result: PASS

Test #22: FR-DS-4

Description: Testing that Diet section displays add food button

Type: Manual

Initial State: Diet section is displayed with add food button

Input: Click add food button

Output: A user interface is launched that lets the user select

between searching for food or adding a custom meal

Expected:

Test #23: FR-DS-5

Description: Testing that Diet section displays search food button

Type: Manual

Initial State: Food adding user interface is displayed with search

food button

Input: Click the search food button

Output: A recipe criteria user interface is launched that dis-

plays a list of modifiable criteria and a search button

Expected:

Result: PASS

Test #24: FR-DS-6

Description: Testing that search food button launches recipe cri-

teria user interface

Type: Manual

Initial State: Recipe criteria user interface is launched

Input: Search criteria is modi

ed and search button is clicked

Output: List of recipes are loaded correctly based on con-

straints of search criteria

Expected:

Test #25: FR-DS-7

Description: Testing that recipe search displays correct recipe val-

ues based on input constraints

Type: Manual

Initial State: Recipe list is loaded based on search constraints

Input: Add recipe button is clicked

Output: Selected recipe is added to the list of food logged on

the current calendar day

Expected:

Result: PASS

Test #26: FR-DS-8

Description: Testing that add custom meal button adds meal to

list of logged food for the current calendar day upon

filling necessary recipe information textboxes

Type: Manual

Initial State: Food adding interface is displayed with add custom

meal button

Input: Click add custom meal button

Output: A dialog box is launched that lets the user fill in cus-

tom meal information. The meal is added to the food

log list of the current calendar day

Expected:

Result: PASS

3.5 Workout Section Page

Test #27: FR-WS-1

Description: Testing that the Workout section initializes with a

preset list of exercises on the current calendar day

Type: Manual

Initial State: Workout section is initialized with a preset list of ex-

ercises of the current calendar day

Input: An event that loads the workout section

Output: A preset list of exercises is loaded for the current cal-

endar day

Expected:

Result: PASS

Test #28: FR-WS-2

Description: Testing that the Workout section has add exercise

button

Type: Manual

Initial State: Workout section is displayed with add exercise button

Input: Click add exercise button

Output: A dialog box is launched that lets the user

ll custom exercise information. The exercise is added

to the exercise list of the current calendar day

Expected:

Test #29: FR-WS-3

Description: Testing that the Workout section has delete exercise

button

Type: Manual

Initial State: Each exercise in the workout section is displayed with

a delete exercise button

Input: Click delete exercise button

Output: The exercise is deleted from the exercise list of the

current calendar day

Expected:

Result: PASS

Test #30: FR-WS-4

Description: Testing that exercises display an edit exercise but-

ton that launches the changeable exercise information

when clicked

Type: Manual

Initial State: Each exercise in the workout section is displayed with

an edit exercise button

Input: click edit exercise button

Output: A fillable dialog box is launched with information of

the exercise. Once the edit exercise button is clicked the dialog box will close and update the exercise information in the list of exercises for the current calendar

day

Expected:

Test #31: FR-WS-5

Description: Testing that the Workout section prompts the user

to add repetitions and sets of each exercise logged in

the current calendar day

Type: Manual

Initial State: Workout section is displayed with list of exercises for

current calendar day

Input: An event that loads the workout section

Output: If repetition and sets for exercises not logged then

dialog box for exercise is launched and the missing

repetition and set values are highlighted

Expected:

Result: PASS

3.6 Rest Section Page

Test #32: FR-RS-1

Description: Testing that Rest section launches with sleep statis-

tics of current calendar day

Type: Manual

Initial State: Rest section is initialized with the sleep statistics of

the current calendar day

Input: An event that loads the rest section

Output: Sleep statistics are loaded for the current calendar

day

Expected:

Test #33: FR-RS-2

Description: Testing that user can alter inaccurate sleep data

Type: Manual

Initial State: Rest section is initialized with the sleep statistics of

the current calendar day

Input: Alter sleep data

Output: The sleep data is updated with user changes

Expected:

Result: PASS

4 Nonfunctional Requirements Evaluation

- 4.1 Usability
- 4.2 Performance
- 4.3 etc.

5 Comparison to Existing Implementation

This section will not be appropriate for every project.

6 Unit Testing

7 Changes Due to Testing

Formal testing did not reveal any necessary changes in terms of module interfacing, decomposition, or internal design. Changes made to code were to address bugs and logical errors revealed by the testing plan. User interface improvements were made throughout the development process in response to feedback from developers and informal testers.

- 8 Automated Testing
- 9 Trace to Requirements
- 10 Trace to Modules
- 11 Code Coverage Metrics