CMSC 447

Software Test Report (STR)

Date: May 12th, 2018

1 Scope

This section shall be divided into the following paragraphs.

1.1 Identification

This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

This Software Test Report (STR) document applies to CasaDomus 1.0, a web-based home finding software that utilizes user inputs to generate a map with a color gradient for each county in the lower-forty eight states of the United States of America, corresponding to the closeness that the conditions in each county has with the user's preferences.

1.2 System overview

The purpose of this piece of software, which should run on any system that is capable of any of the two following web browsers, Chrome version 60.0+, and Firefox version 58.0+, is to enable users to easily find housing locations based off their preferences. The web-based software should perform these tasks by using user preferences obtained from a questionnaire to search through information obtained through various APIs, .csv files, and a database, which display to the user a map that is gradiented based off the comparability of the housing options in various areas to the user preferences. The project sponsor is Professor Charles Nicholas. The development team is CasaDomus. This software was developed over the spring of 2018.

1.3 Document overview

This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2 Referenced documents

This section shall list the number, title, revision, and date of all documents referenced in this report. This section shall also identify the source for all documents not available through normal Government stocking activities.

3 Overview of test results

This section shall be divided into the following paragraphs to provide an overview of test results.

3.1 Overall assessment of the software tested

This paragraph shall:

   a. Provide an overall assessment of the software as demonstrated by the test results in this report

b. Identify any remaining deficiencies, limitations, or constraints that were detected by the testing performed. Problem/change reports may be used to provide deficiency information.

c. For each remaining deficiency, limitation, or constraint, describe:
   1) Its impact on software and system performance, including identification of requirements not met
   2) The impact on software and system design to correct it
   3) A recommended solution/approach for correcting it

3.2 Impact of test environment

This paragraph shall provide an assessment of the manner in which the test environment may be different from the operational environment and the effect of this difference on the test results.

3.3 Recommended improvements

This paragraph shall provide any recommended improvements in the design, operation, or testing of the software tested. A discussion of each recommendation and its impact on the software may be provided. <u>If no recommended improvements are provided, this paragraph shall state "None."</u>

4 Detailed test results

This section shall be divided into the following paragraphs to describe the detailed results for each test. Note: The word "test" means a related collection of test cases.

4.1 (Project-unique identifier of a test)

This paragraph shall identify a test by project-unique identifier and shall be divided into the following subparagraphs to describe the test results.

4.1.1 Summary of test results

This paragraph shall summarize the results of the test. The summary shall include, possibly in a table, the completion status of each test case associated with the test (for example, "all results as expected," "problems encountered," "deviations required"). When the completion status is not "as expected," this paragraph shall reference the following paragraphs for details.

4.1.2 Problems encountered

This paragraph shall be divided into subparagraphs that identify each test case in which one or more problems occurred.

4.1.2.1 *(Project-unique identifier of a test case)*

This paragraph shall identify by project- unique identifier a test case in which one or more problems occurred, and shall provide:

a. A brief description of the problem(s) that occurred
b. Identification of the test procedure step(s) in which they occurred
c. Reference(s) to the associated problem/change report(s) and backup data, as

applicable
d. The number of times the procedure or step was repeated in attempting to correct the problem(s) and the outcome of each attempt
e. Back-up points or test steps where tests were resumed for retesting

4.1.3   Deviations from test cases/procedures
This paragraph shall be divided into subpara- graphs that identify each test case in which deviations from test case/test procedures occurred.

4.1.3.1   (Project-unique identifier of a test case)
This paragraph shall identify by project- unique identifier a test case in which one or more deviations occurred, and shall provide:

a. A description of the deviation(s) (for example, test case run in which the deviation occurred and nature of the deviation, such as substitution of required equipment, procedural steps not followed, schedule deviations). (Red-lined test procedures may be used to show the deviations)
b. The rationale for the deviation(s)
c. An assessment of the deviations' impact on the validity of the test case

5   Test log
This section shall present, possibly in a figure or appendix, a chronological record of the test events covered by this report. This test log shall include:

a. The date(s), time(s), and location(s) of the tests performed
b. The hardware and software configurations used for each test including, as applicable, part/model/serial number, manufacturer, revision level, and calibration date of all hardware, and version number and name for the software components used
c. The date and time of each test-related activity, the identity of the individual(s) who performed the activity, and the identities of witnesses, as applicable

6   Notes
This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. Appendixes

Appendixes may be used to provide information published separately for convenience in document maintenance (e.g., charts, classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

DESCRIPTION/PURPOSE

he Software Test Report (STR) is a record of the qualification testing performed on a Computer Software Configuration Item (CSCI), a software system or subsystem, or other software-related item.

The STR enables the acquirer to assess the testing and its results.

APPLICATION/INTERRELATIONSHIP

Portions of this plan may be bound separately if this approach enhances their usability. Examples include plans for software configuration management and software quality assurance.

The Contract Data Requirements List (CDRL) should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

PREPARATION INSTRUCTIONS

General instructions.

a.   Automated techniques. Use of automated techniques is encouraged. The term "document" in this means a collection of data regardless of its medium.

b.   Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required can be made more readable using these styles.

c.   Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

d.   Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

e.   Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

f.   Response to tailoring instructions. If a paragraph is tailored out of this document, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

g.   Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

h.   Standard data descriptions. If a data description required by this document has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

i.   Substitution of existing documents. Commercial or other existing documents, including other project plans, may be substituted for all or part of the document if they contain the required data.