Test Plan Document

CS 4321 - Software Engineering 1

Group [*8*] – B.A.R.T.S

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1. **Test Plan – Black-Box Testing**

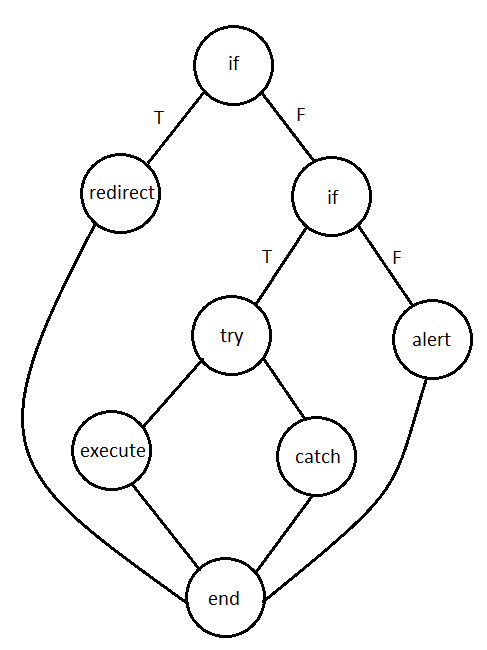
Provide the information in the following two tables pertaining to the features tested using the category-partition method:

|  |  |  |
| --- | --- | --- |
| **Feature** | **Title** | **Brief Description** |
| 1 | Post Item | Displays how user post item to bid page |
| 2 | Edit item | Edit items posted |
| 3 | Bid Item | Makes a bid on an item. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feature** | **Num Frames** | **Num Tests** | **Coverage** | **Pass (%)** | **Fail (%)** |
| 1 | 43 | 16 | 23% | 15(90%) | 1 (10%) |
| 2 | 10 | 5 | 10% | 5(100%) | 0(0%) |
| 3 | 5 |  |  |  |  |
| **Total** | 59 | 21 | 33% | 20(90%) | 1(10%) |

Reason for high pass rate is because the testing was done after debugging stage we had fix most of the problem.

1. **Test Plan – White-Box Testing**



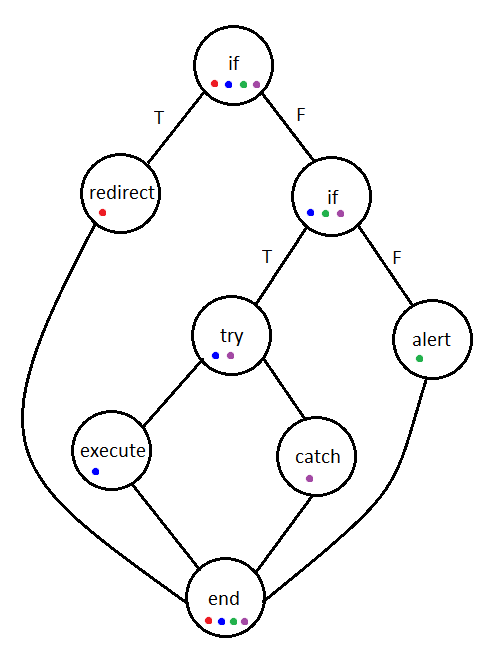
The feature shown is the method used to Bid on an item. The first if statement checks to see if the user is logged in (is user session = null). If not, they are redirected to the login page and the method ends. If so, the entered amount is check to see if it is greater than the current bid. If not, an alert displays for invalid input, and the method ends. If so, a try statement initiated connection to the database and tries to enter the new bid into the system. If successful, the new bid is saved in the database and the method ends. If unsuccessful, the exception is caught in the catch block, and the method ends.

Test Cases:

User: not logged in 1.  
Input: > currentBid

User: logged in 2.

Input: > currentBid  
Try successful

User: logged in 3.

Input: < currentBid

User: logged in 4.

Input: > currentBid  
Try unsuccessful (exception)

The first 3 test cases give 100% statement coverage (excluding the try/catch). The fourth test case fails the try block and causes the catch to display the exception. This gives 100% branch coverage in the case that the try fails.

**Appendix 1**

#editItem()

#name, price, description, category, owner, seller

# Name

Name:

Empty. [property empty]

Not empty.

Owner:

Owner's name. [if !empty][property owner]

No owner. [if !empty]

Price:

Is a number. [if !empty && owner][property number]

Not a number. [if !empty && owner]

Description:

Description. [if !empty && owner]

No description. [if !empty && owner]

Category:

Category Name. [if !empty && owner]

Seller:

Owner. [if !empty && owner]

Seller's name. [if !empty && owner]

*#amount*

*Content:*

*is a number. [property number]*

*not a number.*

*Format:*

*two decimal places. [if number]*

*not two decimal places. [if number]*

*Value:*

*amount >= price + 1. [if number]*

*amount <= price + 1. [if number]*

*Max amt:*

*amount <= maxBid. [if number]*

**Appendix 2**

* *Provide the test frames output from the tsl program.*

*PostItem- 43 frames*

*Edititems -10 frames*

BidItem- 5 test frames

**Appendix 3**

* *Provide the actual test cases that were executed. Include an indicator for each test of Success or Failure*

#name

**Post Item**

Test Case 1 <single>

Size : Empty

Test Case 2 <single>

Number : X>=0

Test Case 3 <error>

Content : Not a number

Test Case 4 <error>

Value : Less than zero

Test Case 5 <single>

Value : Zero

Test Case 6 <error>

Value : Equal to price

Test Case 7 <error>

Value : Equal to price

Test Case 8 <error>

Value : Equal to minBid

Test Case 9 <error>

Presence of description : Empty

Test Case 10 <error>

Presence of category : Empty

Test Case 11 <error>

Presence of user logged in : False

Test Case 12 (Key = 2.0.1.2.1.3.1.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 13 (Key = 2.0.1.2.1.3.1.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 14 (Key = 2.0.1.2.1.3.1.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 15 (Key = 2.0.1.2.1.3.1.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 16 (Key = 2.0.1.2.1.3.2.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 17 (Key = 2.0.1.2.1.3.2.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 18 (Key = 2.0.1.2.1.3.2.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 19 (Key = 2.0.1.2.1.3.2.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 20 (Key = 2.0.1.2.2.3.1.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 21 (Key = 2.0.1.2.2.3.1.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 22 (Key = 2.0.1.2.2.3.1.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 23 (Key = 2.0.1.2.2.3.1.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 24 (Key = 2.0.1.2.2.3.2.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 25 (Key = 2.0.1.2.2.3.2.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 26 (Key = 2.0.1.2.2.3.2.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 27 (Key = 2.0.1.2.2.3.2.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 28 (Key = 2.0.1.3.1.3.1.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 29 (Key = 2.0.1.3.1.3.1.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 30 (Key = 2.0.1.3.1.3.1.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 31 (Key = 2.0.1.3.1.3.1.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 32 (Key = 2.0.1.3.1.3.2.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 33 (Key = 2.0.1.3.1.3.2.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 34 (Key = 2.0.1.3.1.3.2.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 35 (Key = 2.0.1.3.1.3.2.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 36 (Key = 2.0.1.3.2.3.1.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 37 (Key = 2.0.1.3.2.3.1.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 38 (Key = 2.0.1.3.2.3.1.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 39 (Key = 2.0.1.3.2.3.1.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 40 (Key = 2.0.1.3.2.3.2.1.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 41 (Key = 2.0.1.3.2.3.2.1.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Zero

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 42 (Key = 2.0.1.3.2.3.2.4.1.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

Test Case 43 (Key = 2.0.1.3.2.3.2.4.2.2.2.2.)

Size : Not empty

Number : <n/a>

Content : Is a number

Value : Greater than zero

Format : Not two decimal places

Value : >= dollar more

Format : Not two decimal places

Value : Greater than both

Format : Not two decimal places

Presence of description : Not empty

Presence of category : Not empty

Presence of user logged in : True

**Bid on a item**

Test Case 1 (Key = 1.1.1.1.)

Content : is a number

Format : two decimal places

Value : amount >= price + 1

Max amt : amount <= maxBid

Test Case 2 (Key = 1.1.2.1.)

Content : is a number

Format : two decimal places

Value : amount <= price + 1

Max amt : amount <= maxBid

Test Case 3 (Key = 1.2.1.1.)

Content : is a number

Format : not two decimal places

Value : amount >= price + 1

Max amt : amount <= maxBid

Test Case 4 (Key = 1.2.2.1.)

Content : is a number

Format : not two decimal places

Value : amount <= price + 1

Max amt : amount <= maxBid

Test Case 5 (Key = 2.0.0.0.)

Content : not a number

Format : <n/a>

Value : <n/a>

Max amt : <n/a>

**Edit item**

Test Case 1 <error>

Presence of logged in : Not logged in

Test Case 2 <error>

Presence of owner : Not the owner

Test Case 3 <single>

Item chosen : False

Test Case 4 <single>

To be edited : None

Test Case 5 <single>

Format of to be edited : Empty

Test Case 6 <single>

Size : Empty

Test Case 7 <error>

Submission : Falied

Test Case 8 (Key = 2.2.1.2.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : Price

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 9 (Key = 2.2.1.3.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : Name

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success

Test Case 10 (Key = 2.2.1.4.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : Description

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success

Test Case 11 (Key = 2.2.1.5.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : MaxBid

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 12 (Key = 2.2.1.6.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : MinBid

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 13 (Key = 2.2.1.7.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Owner

Item chosen : True

To be edited : Category

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success

Test Case 14 (Key = 2.3.1.2.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : Price

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 15 (Key = 2.3.1.3.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : Name

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success

Test Case 16 (Key = 2.3.1.4.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : Description

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success

Test Case 17 (Key = 2.3.1.5.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : MaxBid

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 18 (Key = 2.3.1.6.1.2.1.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : MinBid

Format of to be edited : Double

Size : Not empty

Format : Number

Submission : Success

Test Case 19 (Key = 2.3.1.7.2.2.2.2.)

Presence of logged in : Logged in

Presence of owner : Manager

Item chosen : True

To be edited : Category

Format of to be edited : String

Size : Not empty

Format : String

Submission : Success