Our group proposes to test the entire system using End-to-end test procedures. These procedures are tested from bottom-up in which lower levels are tested followed by top levels. This allows for lower levels to tested prior to testing the for integration. Also allows us to test early functionalities that may require information or functionalities that have yet to added through simulating the needed part. Facilitates in early on testing.

Our group will exercise Automatic and Manual processing. A combination of manual and automatic testing will be used for all levels of testing.

Debugging will take place once an error has been found through testing, this is more of a methodical review of the code on the backend and not seen from the user's experience.

**Unit testing -** testing performed on each module or block of code during development. Unit testing is normally done by the programmer who writes the code. As every individual is responsible for writing code, they may seem biased when analyzing their own work. As a result, our group will conduct this test by checking each other’s code in order to ensure that there is no bias.

**Integration testing -** testing done before, during and after integration of a new module into the main software package. This involves testing of each individual code module. One piece of software can contain several modules which are often created by several different programmers. It is crucial to test each module's effect on the entire program model.

**System testing -** testing done by a professional testing agent on the completed software product before it is introduced to the market. The testing will be from the user’s view and not the backend or code. This type of testing will go over every single possible input and combination of functionalities possible for the site.

**Acceptance testing -** beta testing of the product done by the actual end users.

Once a version of the website is complete, then our group will test according to what the user will see. Our group will check for the following:

* Acceptance
* Ease of access
* Bugs

**What is tested**

* Applications
  + GoDaddy - Web Hosting Platform
    - Secure
    - Are payments accepted online
    - Ease of use
    - Does the system need to stay in the domain?
  + Microsoft Access - Database
    - Is all the data in categories?
    - Does everyone have a unique ID
    - Are users separated by location
    - Database are synced up with the website correctly
    - All relatable variables are connected to one another
    - Database works with payment processor
    - System works in conjunction with other systems.
  + PayPal - Payment Processor
    - Does transaction payment process correctly?
* Input
  + User Payments
  + Make a purchase
  + Refund
  + Data Entry
* User Experience
  + Creating an account
  + Changing account information
  + Request refund
  + Transaction log
  + Ease of Access
  + Intuitive - Is everything they expect it to be?
  + Efficiency
  + Account security
  + Ability to log in and out

Expected Results for Website System Test:

1. The user goes to the site, and site launches and all relevant pages, features and logos

on all browsers

1. User can register/login/recover password
2. All available products are available with relevant information
3. User can add items to their cart with varying amounts
4. All users can review their orders prior to processing payments
5. Payment is processed correctly
6. Product is sent to the right address
7. Functionalities such as searching, sorting, adding and removing items work
8. Multiple users can access the site and manipulate their carts simultaneously
9. All transactions are secure for each user
10. Site works on all operating systems including mobile
11. User can submit a return request assuming the request adheres to the return policy
12. There are no visual errors on the site along with spelling errors
13. User's session times out after specified amount of time
14. User can manually log out
15. Review user experience

Step-by-Step System Test:

1.) Type [www.https://DLA.gov](http://www.https://DLA.gov) in the URL

2) Select Login link, if you have no Account see item “a”

a) Select create account

b) Input User Id, password that adheres to the password requirements; enter .mil email address, DOD id number and other applicable information

c) Click the link submit at the bottom of the page

d) If information is valid you will be redirected to the home page, else back to the information page

3) Enter User name and Password

4) Click on the Services link

5) Select any of the Armed Services

6) Select search for appropriate item and quantity

7) Click add to cart, review cart submission

8) Approve cart changes by clicking the submit button and the bottom right

9) If necessary repeat steps 5 through 8

10) Click on Cart link

11) If an item needs to be removed or edited, select the quantity menu for the corresponding item and select the desired quantity

12) Click on update cart

13) Click on checkout link at the middle right of the webpage

14) Next screen will be a transaction verification link, select confirm or deny

15) Now you will be redirected to the payment processor (Paypal)

16) All your payment information will needed to be added to the correct fields on this page

17) A verification page that will allow you to review your payment information and confirm or make changes to the data entered

18) You will be redirected to a page that represents the digital receipt. Either print or download the document, or do nothing

20) Click on the account link in the top right of the page, you will be redirected to the account page

22) Click on the information link under account

23) Scroll down and make sure all information is correct

24) If information is not correct, click on the edit button to the right of the field that needs to be edited

25) Click on the link that says save

26)If refund or return is needed, click on Account link in the top right

27) Select the order history link to the right of the screen

28) Search your transaction history for the correct order number

29) When or if order number is found, click on the order number link

30) Select Request refund link to the right of the order number

31) You will be prompted to explain why you are requesting a refund

32) Select Submit

33) To check the public records within 10 days of the calendar year, select Records at the top right, If within the 10 days you will see the records in a dynamic graph and table

19) Click on log out, you are not redirected to the home page of the DLA.gov