2.

Answer point A

| Test Case ID | Test Case Name | Objective | Precondition | Test Steps | Test Data | Expected Result |
| --- | --- | --- | --- | --- | --- | --- |
| TC-1 | Users can register | End user can register as end user | User at Portal landing page | 1. go on portal website  2. User choose signup button  3. User fill all required informations for register  4. User hit “submit” button  5. User get alert of verification email | Email  Username  Password  Confirm Password  Address  Phone number | User got verification email |
| TC-2 | Login as End user | Users can login as End User | User at Portal landing page | 1. go on portal website  2. User choose signin button  3. User fill Username and password field  4. User hit “login” button  5. User get alert of login succes  6. User redirected to End User dashboard page | End user Username  End User Password | User at End user dashboard page |
| TC-3 | Login as RC Manager | Users can login as RC Manager | User at Portal landing page | 1. go on portal website  2. User choose signin button  3. User fill Username and password field  4. User hit “login” button  5. User get alert of login succes  6. User redirected to RCM dashboard page | RCM Username  RCM Password | User at RCM dashboard page |
| TC-4 | Login as RC Operator | Users can login as RC Operator | User at Portal landing page | 1. go on portal website  2. User choose signin button  3. User fill Username and password field  4. User hit “login” button  5. User get alert of login succes  6. User redirected to RCO dashboard page | RCO Username  RCO Password | User at RCO dashboard page |
| TC-5 | End users can submit product | Users can order at least 1 product | User at End User dashboard page | 1. go on End User dashboard page  2. User choose "Order" button  3. User select at least one of the available Internet Products  4. User hit “Submit” button  5. User get alert of Order submit  6. Order have been sent to Order Inventory | Internet products name | User get alert of Order submit and Order have been sent to Order Inventory |
| TC-6 | RC Manager can assign order to RC Operator | A RC manager can assigns the order to a RC Operator | RC Manager at RCM dashboar page | 1. go on RC Manager dashboard page  2. User choose "Order Inventory" button  3. User choose "order to assign"  4. User select one of available RC operator to be assigning  5. User click submit  6. Alert of Order send status selecterd RC operator  7. System displays the order in the RC Operator’s worklist. | Order information  RC Operator to be assign | System displays the order in the RC Operator’s worklist |
| TC-7 | RC Operator can reject order | RC Operator can reject order when resources is can't be allocated | RC Operator at Worklist page | 1. go on RC Operator worklist page  2. User choose order item to be worked on  3. User choose "alocate resources"  4. User didn't found resources  5. User click "reject order"  6. User fill "reason to be rejected" with "unavailableresources '  7. User click "submit"  8. System displays the RC Operator’s worklist page. | order with unavailable resources | System displays the RC Operator’s worklist page. |
| TC-8 | RC Operator allocate resources | RC Operator can allocate resources from another system | RC Operator at Worklist page | 1. go on RC Operator worklist page  2. User choose order item to be worked on  3. User choose "alocate resources"  4. User choose resources to be used  5. User click "allocate resources to order"  6. User fill "dates to install" with date installation 1,date installation 2,date installation 3  7. User click "submit"  8. System notify customer about installation date  9. System displays status alert. | order to be work on  date installation 1  date installation 2  date installation 3 | System displays status alert. |
| TC-9 | End users approve instalalation | End users can approve instalalation | End User at order page | 1. go on End users order page  2. User choose one out of three installation dates  3. User choose "approve"  4. User click "submit"  5.alert of status | date installation will be choosed | alert of status |
| TC-10 | RC Operator complete the order | RC Operator can complete the order | RC Operator at Worklist page | 1. go on RC Operator worklist page  2. User choose order item has been completed install  3. User choose "mark as completed"  4. System give completed alert | order tobe marked as copleted | completed order alert |

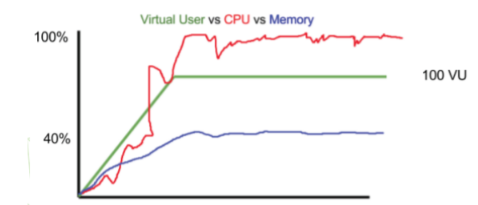
Answer point B

3.

point A answer:

there is deprecated func xmlHttp.open("GET", url, false);

point B answer:



From the images above ,it appears that the website's memory usage stops increasing at around 40% when there are 50 virtual users, but the CPU usage continues to rise until it reaches 100% when there are 100 virtual users. This suggests that the website may be experiencing a CPU bottleneck when the number of virtual users increases, and news-listing API need to be review for slow responses time,

To improve the website's performance, you could consider the following recommendations:

1. Optimize the code: Review the website's code and identify any areas that may be causing high CPU usage. This could include optimizing database queries, minimizing the use of resource-intensive operations, or optimizing the algorithms used in the code.
2. Tune the server and database configurations: Review the server and database configurations and identify any settings that may be contributing to the high CPU usage. This could include adjusting the number of CPU cores, the amount of memory allocated to the server, or the database cache settings.
3. Scale up the hardware resources: If the website is hosted on a physical server, you may need to increase the number of CPU cores or the amount of memory available to the server to handle the increased load. If the website is hosted in the cloud, you may be able to scale up the hardware resources by increasing the size of the virtual machine or adding additional instances.
4. Optimize the app code: CPU usage is high and one of /news-listing API has a slow response time, it may be due to inefficient code or resource-intensive operations. You could try optimizing news-listing API code or implementing performance best practices to improve the website's performance.

point C answer :

