

Test Task for Front-End Developer Role at Relate Data

Libraries to be Used

Semantic UI Step : <https://semantic-ui.com/elements/step.html>
Semantic UI Accordion : <https://semantic-ui.com/modules/accordion.html>
Semantic MODAL : <https://semantic-ui.com/modules/modal.html#/examples>
REDUX : <https://redux.js.org/introduction/getting-started>

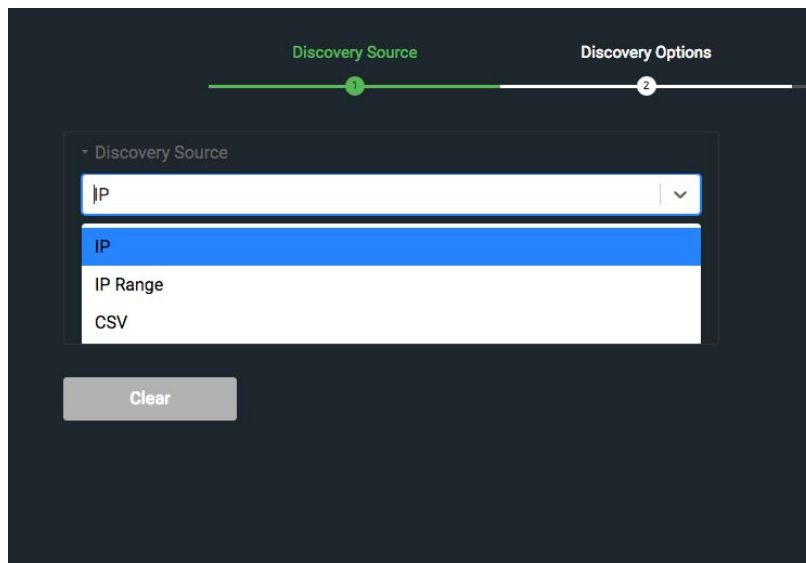
NOTE: All **Form Elements** should be used from Semantic UI Only and the entire component should be built with redux.

Using Semantic UI Step Create a Wizard with the following Steps:

NOTE: Each step should be created inside an accordion using Semantic UI Accordion which can be collapsed as required.

Step 1: Discovery Source

On initial page load, the wizard should be presented with the following Information:
Discovery Source: (Should be a dropdown consisting of 3 choices IP, IP Range and CSV)



The screenshot shows a wizard interface with a dark background. At the top, there are two tabs: "Discovery Source" (active, green) and "Discovery Options" (inactive, grey). Below the tabs is a horizontal progress bar with a green circle at step 1 and a grey circle at step 2. The main content area is titled "Discovery Source" and contains a dropdown menu with the text "IP" selected. Below the dropdown is a "Clear" button.

Upon selection of the option dynamic rendering of form is performed:

In case of IP as the selection:

Display single Textbox with label IP as below (remember to highlight the step which the user is on)

The screenshot shows a dark-themed web interface with a progress bar at the top. The progress bar has two steps: 'Discovery Source' (step 1, highlighted in green) and 'Discovery Options' (step 2). Below the progress bar, there is a form titled 'Discovery Source'. It contains a dropdown menu with 'IP' selected. Below the dropdown is a text input field containing the IP address '1.2.3.4'. At the bottom of the form is a 'Clear' button.

In the case of IP Range as the selection:

Display two Textboxes with labels Starting IP Address and Ending IP Address

The screenshot shows a dark-themed web interface with a progress bar at the top. The progress bar has two steps: 'Discovery Source' (step 1, highlighted in green) and 'Discovery Options' (step 2). Below the progress bar, there is a form titled 'Discovery Source'. It contains a dropdown menu with 'IP Range' selected. Below the dropdown are two text input fields: 'Starting IP Address' containing '192.168.0.1' and 'Ending IP Address' containing '192.168.0.254'. At the bottom of the form is a 'Clear' button.

DATA VALIDATION:

IP Address text boxes should have the following validation and should display an error if invalid in your chosen method:

- IP address should be a valid IP Address i.e. four decimal numbers each ranging from 0 to 255. For example 100.200.201.255
- Only numbers should be allowed to be the input of this field.

- Starting IP address cannot be larger than the Ending IP Address. For example 1.2.3.255 as starting IP and 1.2.3.1 as Ending IP is invalid.

In the case of CSV as the selection:

Display a button “Select a file..” which opens a file selection browser where the user can upload any file. Display path of the file as in the image below.

Discovery Source

Discovery Options

Discovery Source

CSV

Select a file...

Clear

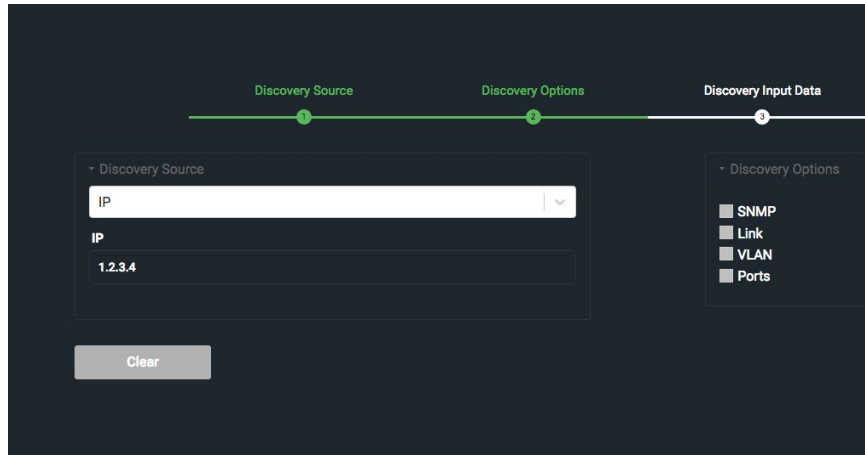
- The path of the uploaded file should be displayed as in the image below.

The screenshot shows a horizontal progress bar at the top with four steps: "Discovery Source" (green), "Discovery Options" (green), "Discovery Input Data" (grey), and "Summary" (grey). Below the progress bar, there are two main panels. The left panel, titled "Discovery Source", contains a dropdown menu currently showing "CSV". Below the dropdown is a red button labeled "Select a file...". Underneath the button, it says "Selected file: C:\fakepath\1706-1809-01-0000000000.csv". The right panel, titled "Discovery Options", is currently empty.

Step 2: Discovery Options

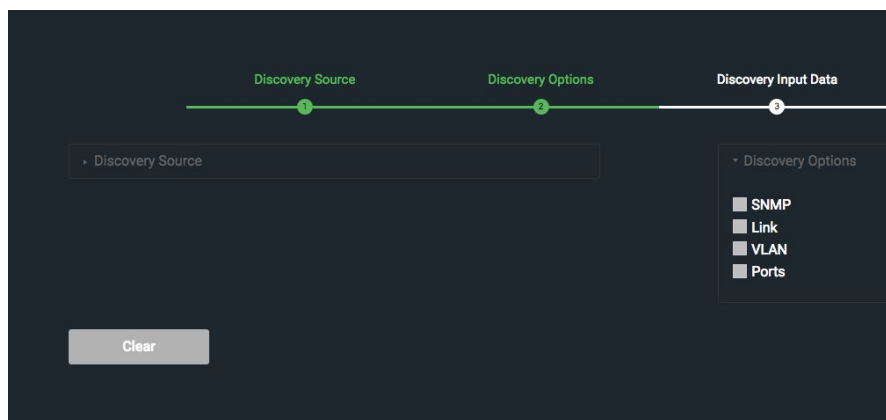
After the Discovery source is input Step 2 “Discovery Options” is presented.

The options should be contained inside the **“Semantic UI Accordion”** in order to allow the user to collapse when needed.



The screenshot shows a three-step process bar at the top: 'Discovery Source' (step 1), 'Discovery Options' (step 2, highlighted in green), and 'Discovery Input Data' (step 3). Below the bar, the 'Discovery Source' section contains a dropdown menu with 'IP' selected and a text input field with '1.2.3.4'. A 'Clear' button is at the bottom left. The 'Discovery Options' section, which is the focus of this step, is an accordion that is currently open, showing four checkboxes: 'SNMP', 'Link', 'VLAN', and 'Ports', all of which are checked.

Note: Discovery Options “Accordion Open” in the image above



This screenshot is identical to the one above, showing the same three-step process bar and 'Discovery Source' section. However, the 'Discovery Options' accordion is now closed, showing only the title 'Discovery Options' and not the list of checkboxes.

Note: Discovery options “Accordion Closed” in the image above

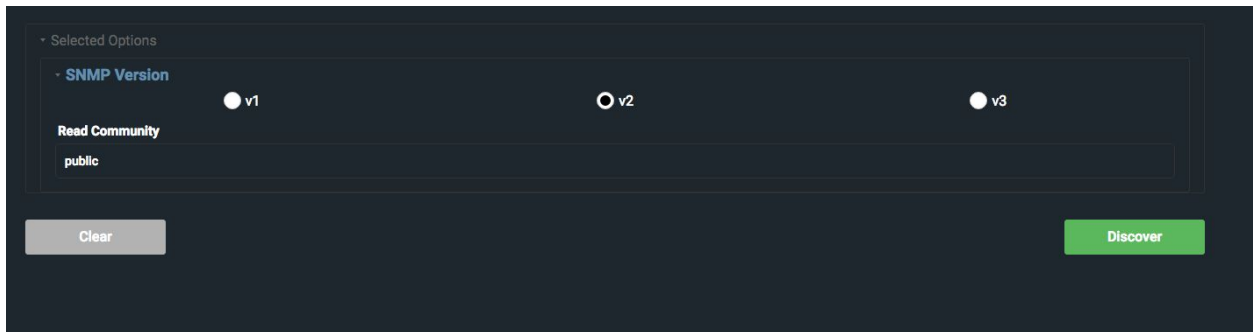
The Discovery Options Component should contain the following “Multi Select Checkboxes”

- SNMP
- Link
- VLAN
- PORTS

For the purpose of this test task, only SNMP Selection will trigger another component to open which displays 3 radio buttons (Only one button should be allowed to be selected)

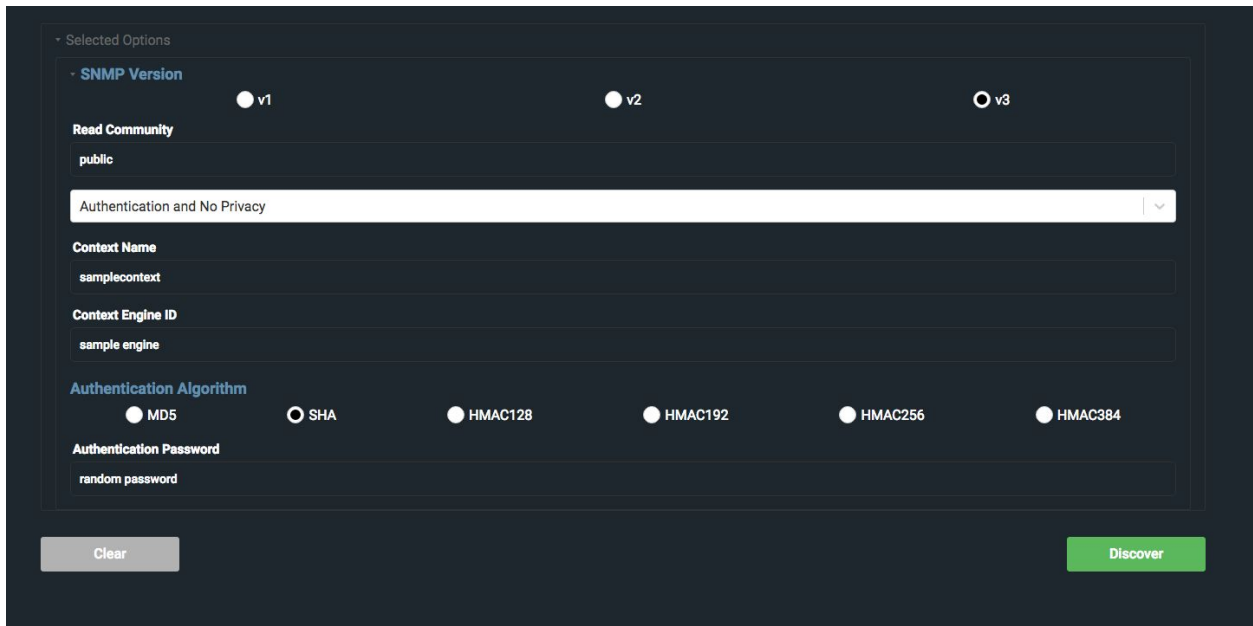
- V1
- V2
- V3

Upon Selecting V1 or V2, Read Community INput box is displayed as in the image below.



The image shows a dark-themed web form titled "Selected Options". Under the "SNMP Version" section, three radio buttons are displayed: "v1" (selected), "v2", and "v3". Below this, there is a "Read Community" label and a text input field containing the value "public". At the bottom of the form, there are two buttons: a grey "Clear" button on the left and a green "Discover" button on the right.

Upon Selecting V3 the following Form is presented with the fields as in the image below.



The image shows a dark-themed web form titled "Selected Options". Under the "SNMP Version" section, three radio buttons are displayed: "v1", "v2", and "v3" (selected). Below this, there are several fields: a "Read Community" label with a text input field containing "public"; a dropdown menu showing "Authentication and No Privacy"; a "Context Name" label with a text input field containing "samplecontext"; a "Context Engine ID" label with a text input field containing "sample engine"; an "Authentication Algorithm" section with six radio buttons: "MD5", "SHA", "HMAC128" (selected), "HMAC192", "HMAC256", and "HMAC384"; and an "Authentication Password" label with a text input field containing "random password". At the bottom of the form, there are two buttons: a grey "Clear" button on the left and a green "Discover" button on the right.

The overall presentation should look like the image below:

Discovery Source

Discovery Options

Discovery Input Data

Summary

Discovery Source

IP

1.2.3.4

Discovery Options

☒ SNMP

☐ Link

☐ VLAN

☐ Ports

Selected Options

SNMP Version

☒ v1

☐ v2

☐ v3

Read Community

public

Authentication and No Privacy

Context Name

samplecontext

Context Engine ID

sample engine

Authentication Algorithm

☒ MD5

☐ SHA

☐ HMAC128

☐ HMAC192

☐ HMAC256

☐ HMAC384

Authentication Password

random password

Clear

Discover

Upon Clicking **Discover** the input data should be captured and displayed in the following format using "**Semantic MODAL Component**" in a modal window.

```
{
  "content": {
    "inputType": "IP",
    "ipAddress": "1.2.3.4",
    "snmpConfig": {
      "version": "3",
      "snmpv1": null,
      "snmpv2": null,
      "snmpv3": {
        "readCommunity": "public",
        "securityOptions": "Authentication and No Privacy",
        "contextName": "samplecontext",
        "contextEngineID": "sample engine",
        "authenticationAlgorithm": {
          "password": "random password",
          "code": "sha"
        },
        "encryptionAlgorithm": {
          "code": ""
        }
      }
    }
  }
}
```

NOTE: InputType and ipAddress should change to "IP Range" and add "startIPAddress" and "endIPAddress" to the Json.

RESULT INSTRUCTIONS

You can deploy a heroku app or github page and also upload the code to a github page and send the link.

DURATION:

The DURATION For this task is maximum 4 days. The earlier its completed the better.