

Unite Us Software Engineer, Test: Take-Home Exercises

As part of your application for a Software Engineer, Test position with the Unite Us team, we look forward to learning about your approach to test design and implementation through the following exercises.

Please timebox both exercises to 2 hours total.

If you do not complete the exercises in 2 hours, that's fine — in that case, please submit your work in progress.

Application Under Test

The Unite Us Technology team manages five applications, including a Public Resource Directory for the state of North Carolina at <https://nccare360.resources.uniteus.io/>.

The Public Resource Directory enables people to find providers who can assist them in meeting their social care needs (e.g., employment), filtered by location or need.

Exercise 1: Writing Test Cases

For the following acceptance criteria of the Public Resource Directory:

Given I have loaded all providers in North Carolina

When I filter providers by need

Then I should see providers filtered by my selected need

UNITE US - Resource Director x +

ncare360.resources.uniteus.io Incognito

Filters [clear filters](#)

RESULTS (11)

Career Development
Provided by: Goodwill - Southern Piedmont
5301 Wilkinson Boulevard, Charlotte NC 28208
Services:
Employment: Career Skills Development, Job Search/Placement

Deaf-Blind Services
Provided by: North Carolina Division of Services for the Blind - Charlotte District Office
5501 Executive Center Drive, Charlotte NC 28212
Services:
Employment: Job Search/Placement, Career Skills Development, Job Training

Employment Services
Provided by: NCWorks Career Center - Mecklenburg County
7140 Forest Point Boulevard, Charlotte NC 28217
8601 McAlpine Park Drive, Charlotte NC 28211
Services:
Employment: Career Skills Development, Job Search/Placement, Job Training

Family Support Services and Healthy Life Skills
Provided by: Hope Youth Network
701 East Second Avenue, Gastonia NC 28052
Services:
Housing & Shelter: Home Expense Assistance/Repairs
Employment: Career Skills Development
Mental/Behavioral Health: Family Counseling

Please write one test case for each statement in any format you prefer, as if you were contributing to your team's shared documentation. Submit your solution as a text file via Greenhouse.

ex_1-ui_test: Verify you can filter providers by need in a browser-based, user-interface test:
Write a test case with one assertion you would make.

ex_1-api_test: Verify you can filter providers by need in an API test: Write a test case with one assertion you would make.

Exercise 2: Coding UI Test Automation

Automate the UI test case below using any tools you would like. We prefer solutions to be developed in Ruby or Python, but if you do not have experience with either, then feel free to develop in any language. Zip up the folder with your solution and submit it via Greenhouse.

Test Case, with screenshots for reference:

1. Load all providers
2. Submit the keyword “service” in the name search input

The screenshot shows a web browser window for 'UNITE US - Resource Director'. The URL is 'nccare360.resources.uniteus.io'. The search bar contains the text 'exercise 2: search by keyword' and 'service'. The search results are displayed in a table with columns for NAME, LOCATION, and SERVICE TYPE. The first result is 'Administrative Services' provided by 'Government Services - Mecklenburg County' at '600 East Fourth Street, Charlotte NC 28202'. The second result is 'Adult Placement Services' provided by 'Department of Social Services - Mecklenburg County' at '3205 Freedom Drive, Charlotte NC 28208'. The third result is 'Adult Protective Services' provided by 'Department of Social Services - Mecklenburg County' at '3205 Freedom Drive, Charlotte NC 28208'. The fourth result is 'Autism Services' provided by 'Autism Society of North Carolina - Charlotte' at 'Confidential, Charlotte NC 28215'. To the right of the search results is a map of the Charlotte, North Carolina area, showing various towns and roads. A red dot marks the location of the first provider result.

NAME	LOCATION	SERVICE TYPE
Administrative Services	600 East Fourth Street, Charlotte NC 28202	Housing & Shelter: Housing Applications/Recertification
Adult Placement Services	3205 Freedom Drive, Charlotte NC 28208	Services: Physical Health: Long Term Care (Facility-based)
Adult Protective Services	3205 Freedom Drive, Charlotte NC 28208	Services: Individual & Family Support: Social Service Case Management
Autism Services	Confidential, Charlotte NC 28215	Services: Individual & Family Support: Caregiving Services

3. Click on the first provider result card
4. Verify that an opened drawer with detailed information about the same provider you clicked on is displayed

UNITE US - Resource Directory

nccare360.resources.uniteus.io

Filters x clear filters

RESULTS (33)

Administrative Services x

exercise 2: click on provider card

Provided by: Government Services - Mecklenburg County

600 East Fourth Street, Charlotte NC 28202

Services: **Housing & Shelter: Housing Applications/Recertification**

Adult Placement Services

Provided by: Department of Social Services - Mecklenburg County

3205 Freedom Drive, Charlotte NC 28208
301 Billingsley Road, Charlotte NC 28211

Services: **Physical Health: Long Term Care (Facility-based)**

Adult Protective Services

Provided by: Department of Social Services - Mecklenburg County

3205 Freedom Drive, Charlotte NC 28208
301 Billingsley Road, Charlotte NC 28211

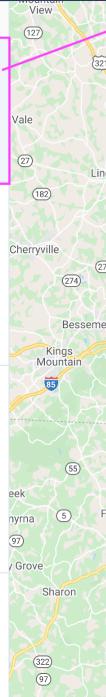
Services: **Individual & Family Support: Social Service Case Management**
Legal: Family Law

Autism Services

Provided by: Autism Society of North Carolina - Charlotte

Confidential, Charlotte NC 28215

Services: **Individual & Family Support: Caregiving Services**



Administrative Services
Provided by: Government Services - Mecklenburg County

600 East Fourth Street, Charlotte NC 28202

Visit Program Website Print Share

Oversees administrative and government services. Board of Elections: Offers election information and voter registration. Register of Deeds: Issues land deeds, marriage licenses, and birth and death certificates. Tax Department: Collects property taxes. People may be eligible for tax payment relief or exemption if they meet income limits and are one of the following: age 65 and over, under age 65 with a disability, a veteran, or a widow of a veteran who has not remarried.

Services: **Housing & Shelter: Housing Applications/Recertification**

Eligibility: Open to all.

Government Services - Mecklenburg County

Visit Provider Website