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Open Data Cincy

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Use Case UC1: Register User

Primary Actor: User

Stakeholders and Interests:
- User: Wants to create an account to use the Job Outlook Portal
- System: Wants user data to allow access to full functionality of Job Outlook Portal

Preconditions:
- User has a valid email and password to use to create an account

Postconditions:
- User is redirected to the home page of the application and can see 'Hello USERNAME!' in the top right corner of the navigation bar.

Summary: After the student registers as a user, the application will be able to authenticate them and they will be able to use all of the features of the Job Outlook Portal.

Basic Flow:
1. User navigates to the Portal and clicks 'Register' in the navigation bar.
2. User is prompted for a Username/Password combination of credentials.
3. User enters valid credentials and submits the form.
4. User is registered as a user of the application and will see themselves logged in.

Alternate Flows:
1a. System detects that the credentials provided by the potential user do not meet length and complexity requirements.
    1. System displays the relevant error message for the credentials supplied.
    2. User rectifies the issues with their credentials and resubmits.
    3. User is registered as a user of the application and will see themselves logged in.
1b. System detects that the username supplied by the user is already taken.
    1. System displays that the chosen username is already taken.
    2. User chooses a new username and resubmits the form.
    3. User is registered as a user of the application and will see themselves logged in.

Use Case UC2: Login User

Primary Actor: User

Stakeholders and Interests:
- User: Wants to be able to authenticate with the system.
- System: Wants to authenticate the user with the given credentials.

Preconditions:
- User has registered as a user with the Job Outlook Portal.
- User is not currently logged in.

Postconditions:
- User is redirected to the home page of the application and can see 'Hello USERNAME!' in the top right corner of the navigation bar.

Summary: If a user has registered with the application previously, they are able to authenticate with the credentials they provided at any time in the future so long as their user account remains in the system.

Basic Flow:
1. User clicks 'Log in' in the top right of the navigation bar.
2. User is taken to the Sign in page.
3. User enters their credentials.
4. User is redirected to the page they were on and see themselves logged in.

Alternate Flows:
   3a. System detects that the credentials provided by the user are invalid.
   1.   System displays the error and prompts the user to try again.
   2.   User retries with correct credentials.
   3.   User is logged in successfully.

Use Case UC3: Manage User Account

Primary Actor: User

Stakeholders and Interests:
- User: Wants to change information related to their account.
- System: Wants to maintain the most recent information about a user.

Preconditions:
- User is registered with the system.
- User is logged into the system.

Postconditions:
- User sees the relevant account changes made.

Summary: User is able to change the information associated with their user account. If they are successful, they will see the appropriate changes made.

Basic Flow:
1. User clicks the "Hello USERNAME!" message in the top right of the page.
2. User clicks the link under the Password section to manage their password.

Alternate Flows:
   2a. A user uses a third-party application to authenticate to the Portal.
   1.   User clicks 'Manage' under External Logins to manage their third-party logins.

Use Case UC4: Import Open Data Cincy Data

Primary Actor: Administrator

Stakeholders and Interests:
- Administrator: Wants to sync system with Open Data Cincy data.
- User: Wants to view the most up to date data from Open Data Cincy.
- System: Wants to correctly parse the data and save it to the database.

Preconditions:
- System has been initialized and the required table structure exists in the database.
- User is logged in as an administrator.
- System has access to the current Open Data Cincy data.

Postconditions:
- System displays success message after data sync is initiated.
- Data is imported into the application and is shown on the homepage and relevant subpages.

Summary: An administrator is able to sync the application with the most recent Open Data Cincy data as defined by the endpoint. The endpoint containing the data is read and imported into the database.

Basic Flow:
1. User clicks the Administration tab at the top of the page.
2. User clicks 'Sync Open Data Cincy data' under Data Management.
3. User clicks Sync to sync the data.

Alternate Flows:
> 3a. The endpoint specified by Open Data Cincy is not valid.
>> 1. The user does not receive a 'Success' message and the data is not synced.
> 3b. There is an issue parsing the given data.
>> 1. The user does not receive a 'Success' message and the data is not synced.

Use Case UC5: Manage Administrators

Primary Actor: Administrator

Stakeholders and Interests:
- Administrator: Wants to make sure they can designate new administrators.
- System: Wants to make sure only administrators have access to modify the system.

Preconditions:
- At least one administrator has been designated in the system.
- User is logged in as an administrator.

Postconditions:
- A user that has been selected to be an administrator is successfully registered as an administrator in the system.

- The user that has been promoted to administrator can perform administrative functions.

Summary: An existing administrator is able to search users and designate additional administrators as needed. An administrator also has the ability to revoke administrative privileges from users if necessary.

Basic Flow:
1. User clicks the Administration tab at the top of the page.
2. User clicks 'Manage Administrators' under User Management.
3. User clicks Edit to edit a given user.
4. User selects the appropriate value for the IsAdmin field.
5. User clicks Save.
6. User clicks 'Back to list'.

Alternate Flows:
    N/A

Use Case UC6: Manage Open Data Cincy Data

Primary Actor: Administrator

Stakeholders and Interests:
- Administrator: Wants to be able to edit or delete data when necessary.
- System: Wants to display valid data that does not cause errors.

Preconditions:
- Open Data Cincy data exists in the database.
- User is logged in as an administrator.

Postconditions:
- If a change was made to the Open Data Cincy data, that change is reflected both in the administrative view and the view on the relevant page for users.
- If the portal is synced with the Open Data Cincy endpoint after changes, the changes made manually will be lost.

Summary: Administrator is able to edit and delete Open Data Cincy data if necessary.

Basic Flow:
1. Administrator clicks 'Administration' in the navigation bar.
2. Administrator selects the appropriate link for editing, either 'Edit Occupational Groups' or 'Edit Detailed Occupations'.
3. Administrator selects a row and clicks Edit or Delete for a selected record.
4. When an administrator is finished making changes, they click 'Save'.
5. Administrator clicks 'Back to list' to return to the index of records.

Alternate Flows:
    3a. User deletes a record.
            1.   The record is deleted without the user navigating away from the page.

Use Case UC7: View Detailed Occupations for Occupational Groups

Primary Actor: User

Stakeholders and Interests:
- User: Wants to view Detailed Occupations associated with a chosen Occupational Group.

Preconditions:
- There is Detailed Occupation and Occupational Group data in the database.

Postconditions:
- User is able to view related Occupational Group and Detailed Occupation data.

Summary: Users are able to see Detailed Occupations and their relationship to Occupational Groups. They are also able to see data related to each Detailed Occupation and compare it to others both within and without a specific Occupational Group.

Basic Flow:
1. At the home page, a user clicks the name of a given Occupational Group.
2. The user is taken to the Occupational Group page, where they can then view all the Detailed Occupations associated with that Occupational Group, along with any relevant data.

Alternate Flows:
  N/A

Use Case UC8: Compare Open Data Cincy and Bureau of Labor Statistics Data

Primary Actor: User

Stakeholders and Interests:
- User: Wants to compare the data given for a given Occupational Group from Open Data Cincy and the Bureau of Labor Statistics.

Preconditions:
- There is both Open Data Cincy (ODC) and Bureau of Labor Statistics (BLS) data in the database.

Postconditions:
- User is able to view data comparing BLS and ODC data.

Summary: User is able to see a graphical representation between ODC data and BLS data. This helps users to determine how local job prospects compare to national data.

Basic Flow:
1. User selects an Occupational Group from the home page.
2. User sees graphical data displayed at the top of the Occupational Group page, distinguishing between data from ODC and BLS.

Alternate Flows:
    N/A

Use Case UC9: Login Using Third-Party Authentication

Primary Actor: User

Stakeholders and Interests:
- User: Wants to be able to use a third-party service instead of creating a new account.

Preconditions:
- User has a valid Google or Facebook account that can be used for authentication.
- User is not currently registered with a system account.

Postconditions:
- User is able to authenticate to the Portal using a Google or Facebook account.

Summary: Users that have existing third-party accounts can use them to authenticate with the Job Outlook Portal without creating an account in the system.

Basic Flow:
- User visits the Cincinnati Job Outlook Portal.
- User clicks 'Log in' at the top of the page.
- User clicks the appropriate link at the right hand side of the page.
- User is prompted to authenticate with their third-party application.
- User is redirected to the homepage and can see that they are logged in with a new account.

Alternate Flows:
    N/A

Use Case UC10: Import Bureau of Labor Statistics Data

Primary Actor: Administrator

Stakeholders and Interests:
- Administrator: Wants to make sure that the Bureau of Labor Statistics Data is uploaded appropriately.
- User: Wants to be able to view and compare Open Data Cincy data and Bureau of Labor Statistics data.

Preconditions:
- User is logged in as an administrator.
- System has connectivity to the current BLS data.

Postconditions:
- System displays success message after data sync is initiated.
- Data is imported into the application and is shown on the relevant subpages and graphics.

Summary: Administrators can sync the application with Bureau of Labor Statistics data. After this is done, users can view the relationship between Open Data Cincy data and Bureau of Labor Statistics data graphically.

Basic Flow:
1. Administrator clicks 'Administration' from the navigation bar.
2. Administrator clicks 'Sync Bureau of Labor Statistics Data' under Data Management.
3. User clicks 'Sync' to sync the data.

Alternate Flows:
> 3a. The endpoint specified by the Bureau of Labor Statistics is not valid.
>> i. The user does not receive a 'Success' message and the data is not synced.
> 3b. There is an issue parsing the given data.
>> i. The user does not receive a 'Success' message and the data is not synced.

Use Case UC11: View Job Outlook Data Graphically

Primary Actor: User

Stakeholders and Interests:
- User: Wants to be able to view a graphical representation of the data that compares Cincinnati job prospects to national prospects, and the current Cincinnati job openings compared to the projected future openings.

Preconditions:
- User is currently registered with a system account.

Postconditions:
- System displays graphs correctly.

Summary: Users that have access to the system can view a graphical representation of the data that compares Cincinnati job prospects to national prospects, and the current Cincinnati job openings compared to the projected future openings.

Basic Flow:
1. User visits the Cincinnati Job Outlook Portal.
2. User clicks 'Log in' at the top of the page.
3. User selects an Occupational Group from the list on the home page.
4. User views relevant graphs at the top of the Occupational Group's page.

Alternate Flows:
> 4a. Data has not been updated in the system.
>> i. The graph is not displayed with all of the most accurate data.

Use Case UC12: Sort Occupational Groups

Primary Actor: User

Stakeholders and Interests:
- User: Wants to be able to sort the Occupational Groups on the homepage based on various categories.

Preconditions:
- User is currently registered with a system account.

Postconditions:
- User can view sorted Occupational Groups on the homepage.

Summary: Users can sort the list of Occupational Groups on the homepage by category.

Basic Flow:
1. User visits the Cincinnati Job Outlook Portal.
2. User clicks 'Log in' at the top of the page.
3. User logs in with their credentials.
4. User clicks the relevant column header to sort by that value.
5. User sees the updated Occupational Groups displayed.

Alternate Flows:
8a. Data has not been uploaded to the portal.
   i. User does not see any data to display and sorting does not do anything.

Use Case UC13: Manage Bureau of Labor Statistics Data

Primary Actor: Administrator

Stakeholders and Interests:
- User: Wants to be able to edit BLS data.

Preconditions:
- User is currently registered with a system account.
- User is an administrator.

Postconditions:
- User can view the modified data.

Summary: Administrators can change data that was uploaded from the Bureau of Labor Statistics.

Basic Flow:
1. User visits the Cincinnati Job Outlook Portal.
2. User clicks 'Log in' at the top of the page.
3. User authenticates with the system.
4. User clicks 'Administration' in the top of the page.
5. User clicks 'Edit Occupational Groups'.
6. Administrator selects a row and clicks Edit or Delete for a selected record.
7. When an administrator is finished making changes, they click 'Save'.
8. Administrator clicks 'Back to list' to return to the index of records.

Alternate Flows:

        6a. User deletes a record.

                i.   The record is deleted without the user navigating away from the page.