Adam Howard

Cincinnati Job Outlook Portal Vision

Revision History

Version	Date	Description	Author
1.0	Sep 5, 2014	First draft. To be revised after revision by instructor.	Adam Howard
2.0	Oct 28, 2014	Revision made for Iteration 2.	Adam Howard
3.0	Nov 30, 2014	Final revision for iteration 3.	Adam Howard

Introduction

The purpose of this application is to serve as a central location for individuals that are entering the job force to weigh the strength of the job prospects in the Cincinnati area compared to those nationally. The application will store data for various job categories as defined by the 2020 Jobs Outlook data for the Cincinnati Region, and the Bureau of Labor Statistics.

Positioning

Problem Statement

Currently, the data that is available from the Bureau of Labor Statistics (BLS) and data from the Cincinnati 2020 Jobs Outlook data do not have a comparison that allows for job seekers to quantitatively see the difference between the strength of job growth in the Cincinnati region and that of the national growth rate. While regional data is offered by the BLS, it might be of interest for job seekers to see projected growth in 2020 when considering permanent placement for employment.

Product Position Statement

This application is designed to compare the data from the two previously defined datasets to allow for a more detailed look at job outlooks in the region. Users will then be able to see fields in which job prospects look better than the national averages, and those that are expected to do more poorly than the national average.

Alternatives and Competition

There are no known alternatives to creating and using the system outlined in this document. The only alternative to not building the system would be to leave the current state of information unchanged. The pros and cons of this approach is outlined below:

1. Do not create the system, use data available
    a. Pros
        i. Less cost
        ii. Data is accessible
    b. Cons
        i. Not very easy to use
        ii. No central location of data
        iii. No quantitative comparison of job prospects by region

Stakeholder Descriptions

Market Demographics

This application would meet the needs of all job seekers in the Cincinnati area, as well as job seekers that are considering relocation to the Cincinnati area. This could affect the economy of the region and the success of local businesses by attracting talent to the area and encouraging job sectors to keep a rate of job growth that is comparable or better than the national average. Recruiters could find this application useful by comparing the rate of growth in the region by the national average and potentially increasing or adjusting recruiting efforts if necessary. With more and more industries looking for online solutions for various business activities, it can be expected that potential job applicants across all job sectors would be interested in a central location for the purposes of assisting them in their job search.

Stakeholder (Non-User) Summary

1. Developer
   Responsible for the development and support of the application. Does not directly interact with the application as a user.

2. Business Advisor
   Responsible for making business and design decisions for the application.

User Summary

1. Application User
   The application user will be the primary user of the application. The user does not need to be a system expert, with no technical expertise required. They will use the system to search for specific job fields and view the data that was collected from the Bureau of Labor Statistics and 2020 Job Outlooks for the Cincinnati region.

2. Administrator
   The administrator will be responsible for the initial upload of data into the system that will be used to populate the charts and pages in the system. The administrator will also have the ability to remove inappropriate job postings and handle the editing of source data as necessary.

Key High-Level Goals and Problems of the Stakeholders

High-Level Goal	Priority	Problems and Concerns	Current Solutions
Centralization of data	High	Reduced speed as data loads.	View relevant data in two difference locations and cross reference as needed.
Accessibility of data	High	System is confusing and not intuitive for users to access.	Find data from the Bureau of Labor Statistics site and compare it to the data given by the 2020 Jobs Outlook for the Cincinnati region.
Increased understanding of available data	Average	Data is hard to quantify and display in a meaningful way.	Users must interpret and collect data on their own.

User Level Goals

1. Application User
    a. View information about job prospects in the region
    b. Search for jobs based on Occupational Groups
2. Administrator
    a. Manage table data
    b. Sync data from multiple external sources
    c. Designate administrators

User Environment

The user will be working in a web portal environment. No mobile application is planned, so all interaction with the application will be from the desktop or laptop computer. The application itself will use data from the Bureau of Labor Statistics and the 2020 Job Outlook data for the Cincinnati region. The system will also interact with user-given data and data from other sites (such as Monster or CareerBuilder) to form a snapshot of jobs that are available for each industry type.

Product Overview

Product Perspective

The Cincinnati Job Outlook Portal will be accessed from the web, so it will be accessible from any desktop or laptop connection with an internet connection. No support for mobile devices will be included.

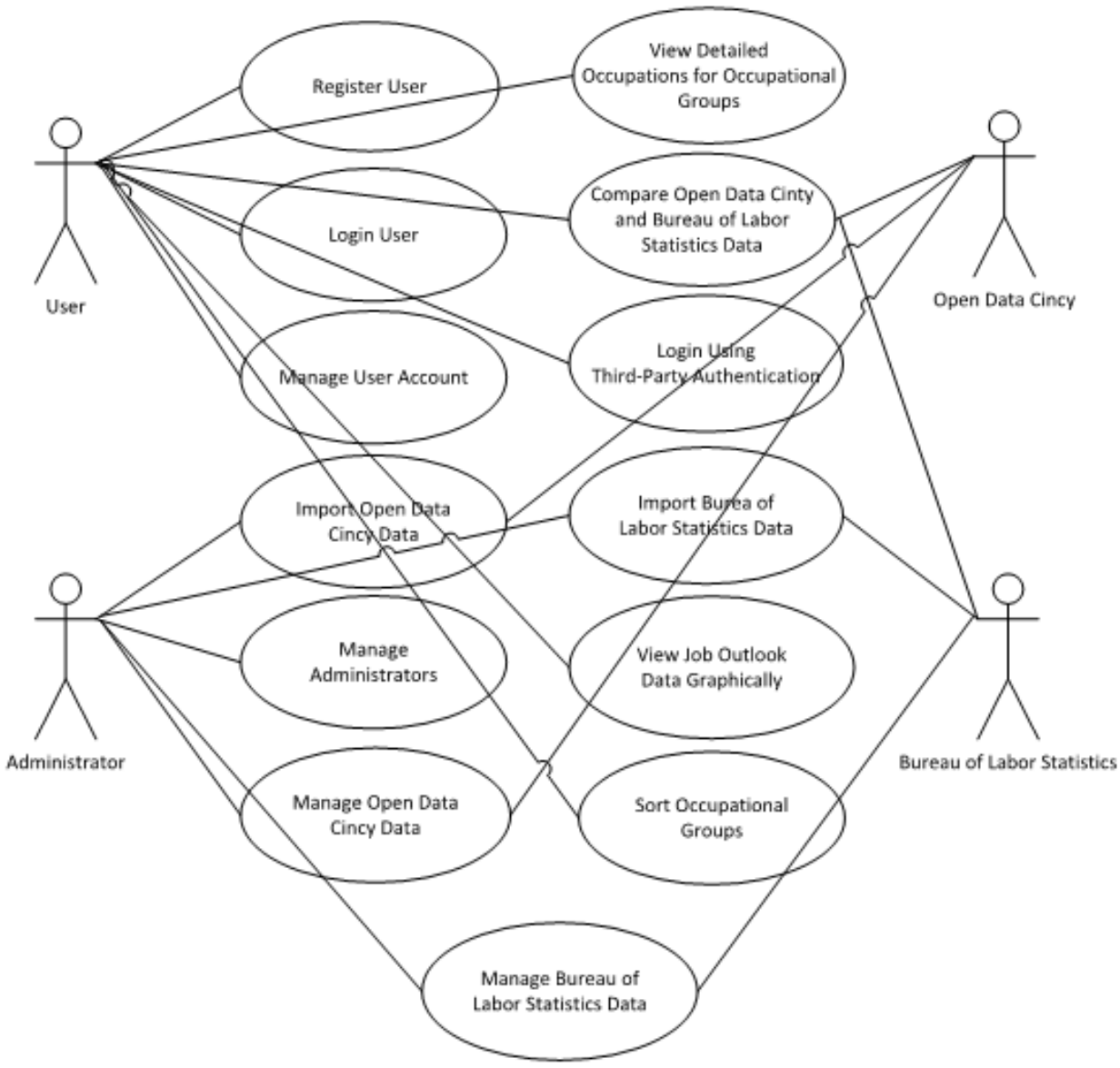

Figure 1.1: Cincinnati Job Outlook Portal Use Case Model

Summary of Benefits

Supporting Feature	Stakeholder Benefit
Interaction with third-party data	Interpretation and display of relevant data is straightforward.
Easy to use portal	Lightweight application makes development and addition of features straightforward. This model also lends itself to ease of use for the end user.
Minimal support required	Because there are not many use cases where users make changes to the data or write to the application, there is a reduced number of potential errors with the application.
Increased error handling	In the situations where users do manually interact with the application, error handling is put in place to make sure that there is a minimal interruption of service for users.
Security	This portal uses encryption to securely store passwords in the SQL database. It also disallows any HTML input and does not use SQL queries that would allow for SQL injection.

Assumptions and Dependencies

This document assumes that users will be accessing the application from an internet browser on a desktop or laptop computer. Support for mobile devices is not included.

Cost and Pricing

This application is being developed at no cost to either stakeholder or user, and the code will be completely open-sourced during and after project completion.

Licensing and Installation

This application will be written using the MVC pattern built on the .NET framework with the C# programming language. The IDE being used for development is Visual Studio 2013. With each of its developers, a license for each development environment is required.

Summary of System Features

1. Collection and display of job outlook data from all sources
2. View data in multiple formats, including data graphs and charts
3. Ability to drill down and filter given data based on user selections
4. Ability to create links to external applications for job search criteria
5. Ability for Recruiters to upload job openings in relevant job fields
6. Ability to administratively upload and edit existing system data

Other Requirements and Constraints

This application will be supported during its lifetime by its developers. It will also require an environment in which to run. This environment must be able to run the .NET framework, version 4.5. Because of this

requirement, the environment will most likely exist on a recent version of Windows Server. The initial application will be published onto a Windows Server 2012 environment.

Documentation and source code for the project will be hosted in GitHub and available as free and open-source software (FOSS).