Software Requirements Specification

Version 1.0

WorkGenerator

Domain: Employment
Category: Web Application

Table of Contents

1.0 Introduction

1.1 Background

Finding a new job is never easy, but hiring the right talent can be equally tough. To make it easier, your organization has teamed up with multiple corporates increasing day by day to create a powerful job-match site WorkGenerator that will change the way employers and job seekers connect each other.

WorkGenerator is intended as a Web application that offers the industry-leading expertise of corporates. It offers job seekers access to thousands of jobs and advanced job-search tools to find career opportunities more easily. Employers in turn get unlimited job posting and list of applicants based on their criteria. It has never been easy to find the perfect job or right talent for businesses.

Together with other partners in the statewide WorkGenerator system, your organization will help workers find jobs and map out new careers by connecting to a variety of training programs.

Thus, people who use WorkGenerator job-search services will be able to find work faster and earn more money.

1.2 Need for the System

Latest labor statistics shows there is huge growth in unemployment in cities across the world. The skilled and educated population is facing rising unemployment. At the same time, employers who do have job vacancies are finding it difficult to attract the right talent. Available channels are insufficient to solve these issues, because they only deal with job posts and job search operations. There is a need for a system that can bridge the gap between the employer and a job seeking candidate. Such a system must also help in generating new talents and skills.
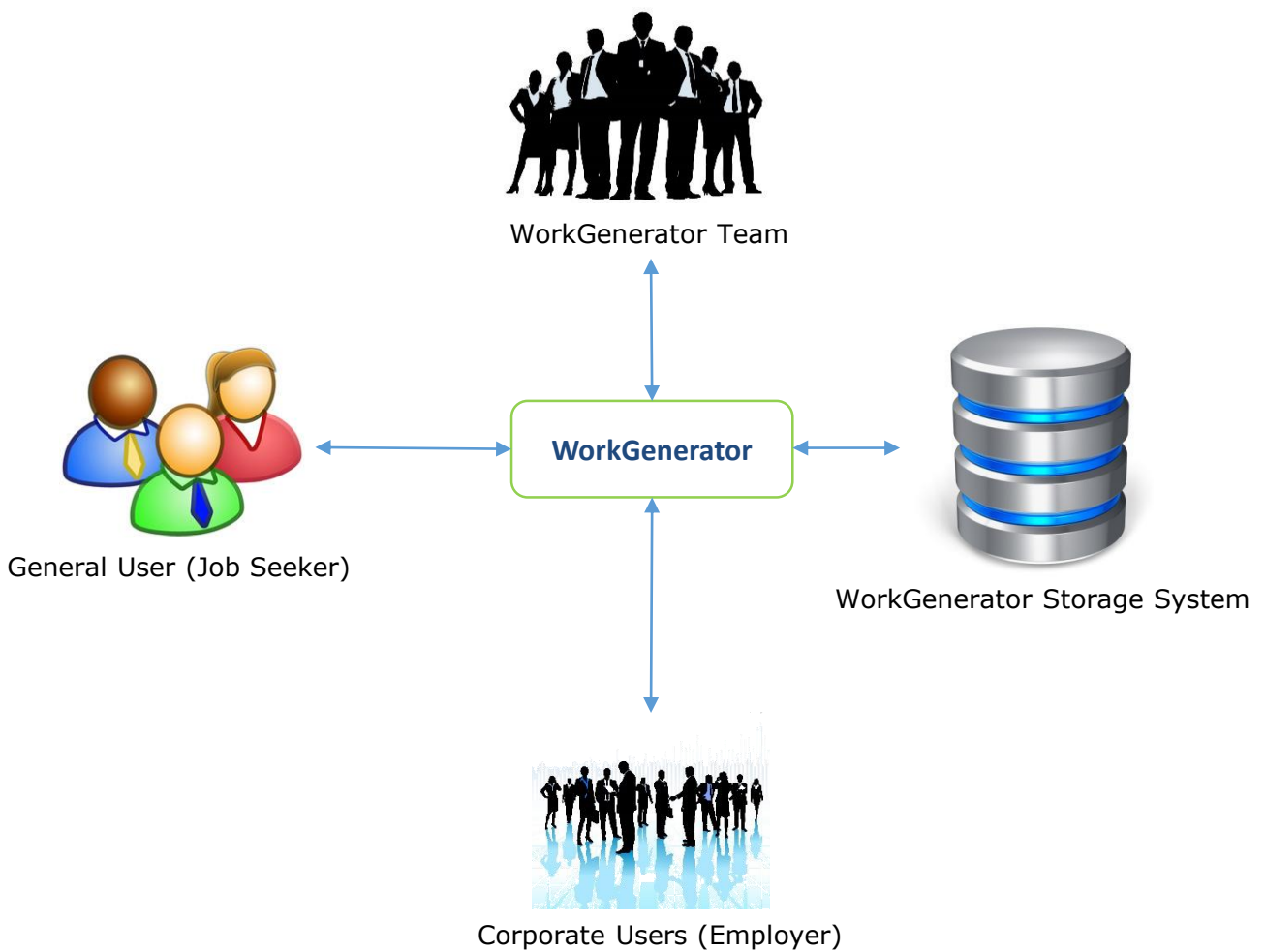
1.3 Proposed Solution

To resolve these issues your organization has decided to develop a Web application named 'WorkGenerator'. This application is intended to help unemployed population and bridge the gap with corporates. Also, the Web application will provide information of various training programs arranged by corporates used generate new workforce out of unemployed people among society. You will be the lead developer for building this application.

The proposed Web application is titled as 'WorkGenerator'. This system will allow various types of users to register and thereafter based on their login types they can create, update, and delete their profiles, view and search job posts, join training programs, view list of associated corporates, attend events, and so on.

Corporates will also use this application to post new job requirements, search talent by specified criteria, arrange training programs, arrange events, and so on.

WorkGenerator team will be act as super user or admin who will manage operations between general users (job seeking candidates) and corporates (employers). The team will also generate notifications regarding new job posts, training program, and nearby events. It will also handle empanelment of corporates (which will be done during registration and validation phase) and so on.

WorkGenerator Team

General User (Job Seeker)

WorkGenerator

WorkGenerator Storage System

Corporate Users (Employer)

Broad View of the System

 1.4 **Need for the System**

This will be a Web application to be used by unemployed individuals, corporate users (employers), and WorkGenerator team. This application will be designed to minimize unemployment and will provide platform to general and corporate users, to search jobs/talents, view/post jobs, and arrange/attend training programs.

1.5 Functional Requirements

Application will be designed with a set of forms/pages with menus representing choice of activities to be performed.

Following are the functional requirements of the system:

- **Home Page**: It will display general purpose information pages through menus such as About Us, Contact Us, Career tools, and Spotlight along with Job Seeker and Employer Login and Registration Options.

> **Note:** Along with the information mentioned here, you can also include job search option. It will search jobs based on Title, Keyword, and Location.

- **Register:**
  It will allow both Job Seeker and Employer to get registered with WorkGenerator. At the time of registration, users' need to provide Name, Email ID, Contact Number, Username, and Password.

  Along, with the mentioned details an employer needs to provide valid Company Address, Phone Number, Number of Employees, Type of Organization, Status details (active or inactive), and existing EIN (Employer Identification Number).

  Appropriate error-checking must be done on the fields of the form to ensure correct data. For example, email id can be checked to see if it is of appropriate format. (Hint: Use client-side validation).

> **Note 1**: Registration sections will be provided separately for both Job Seeker and Employer on home under their respective tabs.
>
> **Note 2**: Super users need not register as they are considered as Administrators. They will have special logins and passwords.

- **Login**: It will allow successfully registered users to get logged in to the WorkGenerator application and access various features of system through menus or other options such as Notification, Account Setting (Create, Update, and Delete Profile), and other specific options according to user type. A profile can include detailed information about the user. For example, a job seeker can include educational qualifications, past work experience (if any), and so on, in his/her profile.

> **Other Menus/Options:**
> **Job Seeker:** Search Job, View Job Details, Apply Job, View list of Companies, Applied Job, Events Nearby, Training Program, and Logout.
>
> **Employer:** Post Job, View Application Details, Create Event, Organize Training, Search Talent (based on skills and experience), and Logout.

- **Notification**: These are notifications regarding any new job posts for job seekers and number of applicants who have applied to a particular job post for employers.

  For example, a sample notification can look like this:

- ❖ Job Seeker:
    a. Job Recommendation: 42
    b. Recruiter Messages: 342

- ❖ Employer:
    New Job application for iOS Developer: 43

- **Accounts Setting**: Both type of users, Job Seeker and Employer, will be able to manage their accounts by using options such as Create, Update, and Delete Profile.

- **Search**: Using this option, employers as well as job seekers will be able to complete their search regarding searching new talent or job posts respectively.

Job Seeker Search: It will allow job seekers to perform job search based on Title, Keyword, or Location.

Employer Search: It will allow employers to perform talent search based on experience and skills.

- **View Job Details:** It will allow job seeker to view details of job searched. It will display Job Title, Category, and Details.

- **View Application Details**: It will allow employers to view details of job application submitted by job seekers and based on that they can take further necessary actions. It will display Name, Email ID, Contact, Experience, and Skills.

- **Apply For Job**: It will allow a job seeker to apply for desired job. His/her details will be sent to the employer for further necessary action.

- **View List of Companies**: This page will allow job seekers to view associated list of companies with WorkGenerator.

- **Applied Jobs**: It will allow users to backtrack their previously applied jobs and view job application history.

- **Events Nearby**: It will allow users to view details of events happing nearby. It will display event categories such as Workshop, Training, Walk-in drives for jobs, and Campus drives along with their locations and other details.

  Sample event example:
  Let's Connect
  March 16 @ 1:00 pm - 3:00 pm
  CPA, Sarmiento 151, Piso 3, Oficina 311 BIS, C1000ZAA BUENOS AIRES, ARGENTINA
  Register here: Registration Link (Optional)

- **Training Program**: It will display list of upcoming training programs organized by corporates. It will display Title, Category such as Online and Classroom, and other details.

- **Post Job**: It will allow employers to post new jobs. It will contain details such as Title, Experience, Salary Offered, Skills, Job Role, and Other Details.

- **Create Event**: It allow employers to post details of various upcoming events. It will contain event categories such as Workshop, Training, Walk-in drives for jobs, and Campus drives along with their locations and other details.

- **Organize Training**: It allow employers to post details of upcoming training programs organized by them. It will contain Title, Category such as Online and Classroom, and other details.

- **Logout**: This feature will allow logged-in users to log out of the system.

On the other hand, WorkGenerator team login has functionality as follows:

- **Employer Request:** It will allow WorkGenerator to see date-wise registered Employer validation requests in terms of Sr. No. and other company details along with Validate and Reject options. WorkGenerator will validate or invalidate the Employers by selecting either of the two options based on valid company details including EIN.

  > **Note**: This is a simplified view of validation. As mentioned earlier, actual validation is beyond the scope of the project.

- **View Job Seeker:** This feature will allow WorkGenerator team to view registered job seekers. It will display date-wise list of job seekers in the form of multiple rows containing Name, Email, Contact, and so on.

- **View Employer**: It will display a list of successfully registered and validated employers. The list will include Name, EIN, Address, Phone number, and Other Company details.

- **Generate Reports:** WorkGenerator will be able to generate and display reports such as year-wise reports for jobs created and training programs organized in the city.

1.6 Non-Functional Requirements

There are several non-functional requirements that should be fulfilled by the system.

The system should be:

- **Safe to use**: The system should not result in any malicious downloads or unnecessary file downloads.

- **Accessible**: The system should have clear and legible fonts, user-interface elements, and navigation elements.

- **User-friendly**: The system should be easy to navigate with clear menus and other elements and easy to understand.

- **Operability**: The system should operate in a reliably efficient manner.

- **Performance**: The system should demonstrate high value of performance through speed and throughput. In simple terms, the system should be fast to load and page redirection should be smooth.

- **Security**: The system should implement adequate security measures such as authentication. For example, only registered users can access certain features.

- **Capacity**: The system should support large number of users.

- **Availability**: The system should be available 24/7 with minimum downtime.

- **Compatibility**: The system should be compatible with latest browsers.

1.7 Interface Requirements

Hardware

- Intel Core i3 Processor or higher
- 4 GB RAM or above
- Color SVGA
- 120 GB Hard Disk space
- Mouse
- Keyboard

Software

Technologies to be used:
1. Frontend: HTML, CSS, Bootstrap, JavaScript, jQuery, AJAX, XML
2. Backend: Java, J2EE/C#, ASP.NET/PHP
3. Database: MySQL/SQL Server

Other Requirements:
1. Operating System: Windows, Linux
2. Browsers: Edge, Chrome, Mozilla Firefox

Database Design

Data Dictionary: Job Seeker, Employer, Registration, Notification, Event, Jobs Post, Job Applications, and Training Program.

Based on the given specifications, you will define suitable entities, attributes for these entities, and identify relationships between the entities.

For example, some entities along with their attributes can be identified as follows:

Job Seeker:

Job Seeker:
1. User ID
2. Name
3. Email ID
4. Contact
5. Username
6. Password

Profiles:
1. User ID
2. Skills
3. Experience
4. Resume
5. Description

Employer:
1. EIN
2. Name
3. Email ID
4. Contact
5. Username
6. Password
7. Company Name
8. Address
9. Number of Employees
10. Type of Organization
11. Status

Jobs:
1. Auto-generated ID
2. Title
3. Category
4. Salary
5. Skills
6. Experience
7. Job Role
8. Description

Applications:
1. Auto-generated ID
2. User ID
3. Name
4. Mobile No
5. Email Id
6. Message
7. Resume
8. Status

Similarly, you can define relationships between entities and methods representing activities on the entities.

1.8 Project Deliverables

You will need to design and build the project and submit it along with a complete project report that includes:

- Problem Definition
- Design specifications
- Diagrams such as flowcharts for various activities, Data Flow Diagrams, and so on
- Database Design
- Source Code
- Test Data Used in the Project
- Project Installation Instructions (if any)

The consolidated project will be submitted as a zip file with a ReadMe.doc file listing assumptions (if any) made at your end and SQL scripts files (.sql) containing database and table definitions.

Over and above the given specifications, you can apply your creativity and logic to improve the system.

Sitemap: To understand the flow of WorkGenerator Web application, you will have to create a Sitemap and add it to the home page of your application.

~~~ End of Document ~~~