Requirements Specification
for

Submitted by
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Change History

Date	Version	Description	Updated By
24/10/2012	0.1	Initial Draft For Review	Ronan Carton

Academic Staff Document Approvals

Name	Role	Signature
Patrick Doran	Lecturer	

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1. Introduction

Purpose

The purpose of this document is to set out the requirements for the development of the Workable You Web Application.

This Software Requirements Specification (SRS) defines the requirements for the entire first build of the application.

The intended customers are Workable You an online Employment and Career advice facilitator.

Document Conventions

Crow's feet notation is used for Entity Relationship diagrams

2. Project Scope

The purpose of the project is to develop a recruitment application and online career support community for

Workable You. Ronan Carton was involved in discussions with Margaret O'Shaughnessy from Workable You

to elicit these requirements.

Project Development Duration and Deployment

The Project Development to deployment duration runs from October 20th 2012 to January 18th 2013.

The requirements are initial and there is significant scope to gain feedback from the owners of the company.

As the project is being developed using Agile Web Development

Project Objectives

Workable You Application Objectives.

Workable You Application Objectives.

User Base

The User base for workable you is professional women with a third level education.

The User objectives for Workable You are to:

Provide users with a broad selection of Jobs and Potential Employers.
Enable them to easily search for, find, and apply for the jobs and career enhancement services they want.
Enable them to apply for jobs types and tenures that are not catered for on standard sites.
Enable them to avail of free and paid for career related advice.
Enable them to become part of a community of like minded users.(Workable You will foster a sense of community by providing a discussion forum and a blog with articles relating to working women and work place issues)
Make applying for jobs a simple streamlined operation that is
anytime (i.e. 24 hours a day and 7 days a week) and anywhere
that users have access to the Internet (e.g., at home, at work, while traveling).
Minimize risks associated with supplying personal data over the Internet.

The Employer Employment Agency and Career Advisory Service objectives for Workable You are to:

Provide them with a considerable customer base of potential applicants.
Enable them to easily target and personalize their advertising of appropriate jobs to appropriate potential applicants.
Enable them to monitor the concerns and interests of potential candidates through the blog and forum.
Make advertising more convenient by allowing them to post available positions
anytime (i.e., 24 hours a day and 7 days a week) and

anywhere that the employers have access to the Internet (e.g., at home, at work, while traveling).
Minimize risks associated with accepting applications over the Internet.

The Workable You Organization objectives for the Workable You Application are to:

Minimize the costs of providing job advertising
Maximize income by maximizing the number of quality Employer and Career Advisory Service Providers
paying marketplace fees and to maximize the number of advertisers.

User Classes and Characteristics

1. Unregistered Users will use the site to:

Register and Login.
Search for jobs (but not apply)
View blog posts (but not comment)
Participate in the forum discussions by starting a new thread and or commenting on an existing thread.
View articles on the site.

2. Registered Users will use the site to:

Login and create user profile
Search for and apply for jobs.
Viiew and comment on blog posts.
Participate in the forum discussions by starting a new thread and or commenting on an existing thread.
View articles on the site.
Edit Update and Delete User profile

3. Workable You staff will use the web application to:

Review and correct job postings by employers and agencies.
Monitor and correct comments and threads on the discussion forum.
Publish blog posts and monitor and correct comments relating to posts.
Update all other information on the site.

4. Employers, Employment Agencies and Service Providers will use the application to:

Register, Login, Create, Edit and Delete Employer Profile.
Post, edit and delete available positions.
Post, edit and delete company profile information.
Post, edit and delete event information.

5. Technical support personnel will use the web application to fix data errors.

System Description

System Architecture
The Workable site will consist of the following components:
- A User layer, the public face of the application
- A Business layer accessed by Employers and Service Providers

- An Administration Layer is the interface for managing content and sending bulk emails.
- A Security layer controls the administrative functions that different types users can access.

Application Information Architecture

Application Structure and Navigation.

Workable You must allow visitors easy access to all information. As a general rule, no

piece of content should ever be more than three clicks away from the visitor. Drawing

from discussions, we have formulated a site structure that emphasizes the content visitors

most want to see, it simplifies navigation, but still allows quick access to the majority of the content:

Page Flow

Initial Page Flow will be as follows:
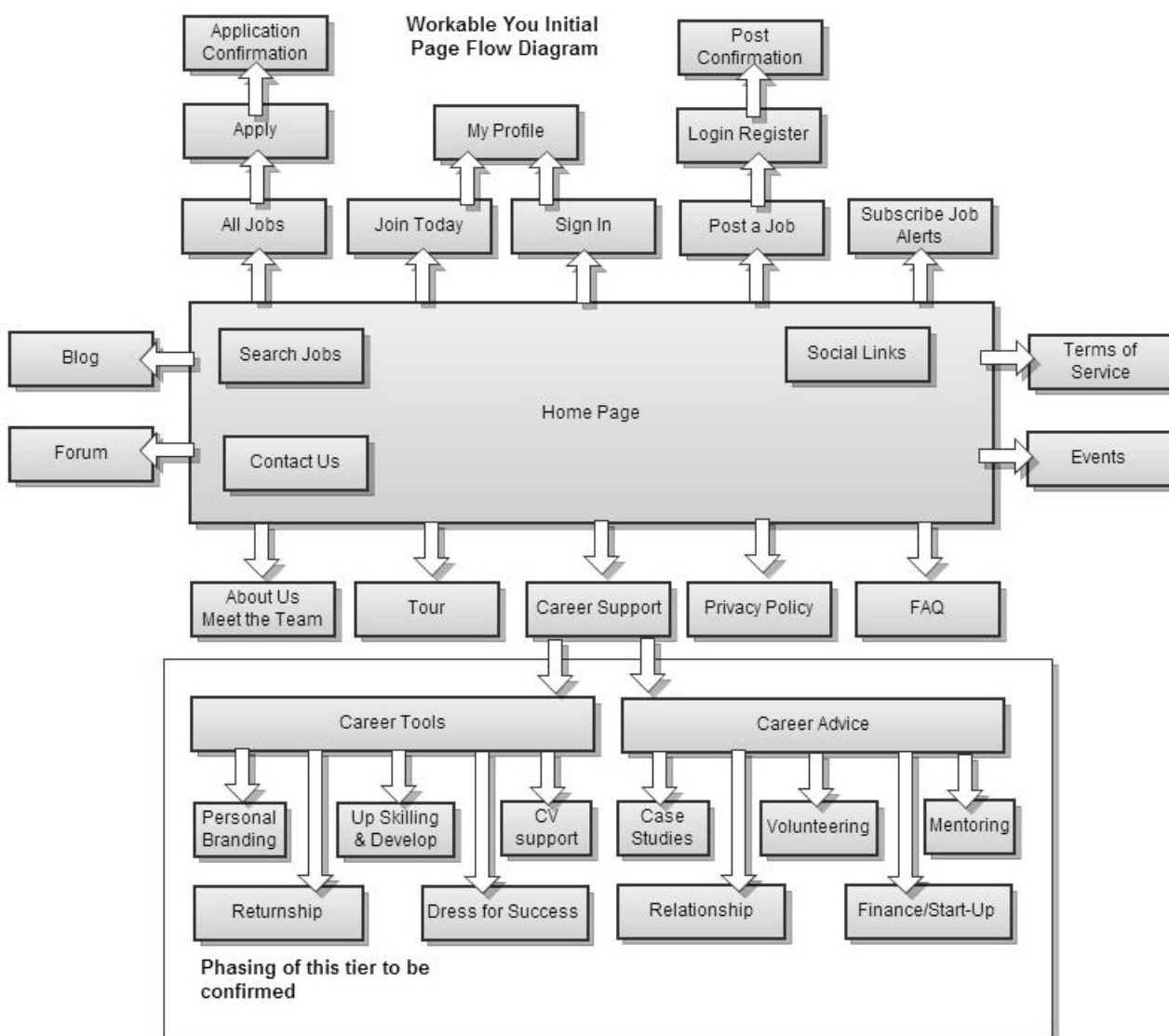
Ubiquitous Links

All pages will include a set of secondary 'standard' links, as well:

About Us, Contact Us, Tour (Slide Show), Privacy Policy, FAQ, Terms Of Service

Site Design Aesthetic - HTML Requirements and Guidelines

The Workable You Application must deliver a compelling user experience. However, it cannot sacrifice simplicity and accessibility in pursuit of this.

Design Guidelines

To insure broadest possible appeal, the web site should use colors that evoke a professional feel The interface must be welcoming, clean, and demonstrate Workable You's status as a leading organization with broad appeal.

Below is an initial wire frame showing the workable you homepage.

Workable You Initial Wire Frame
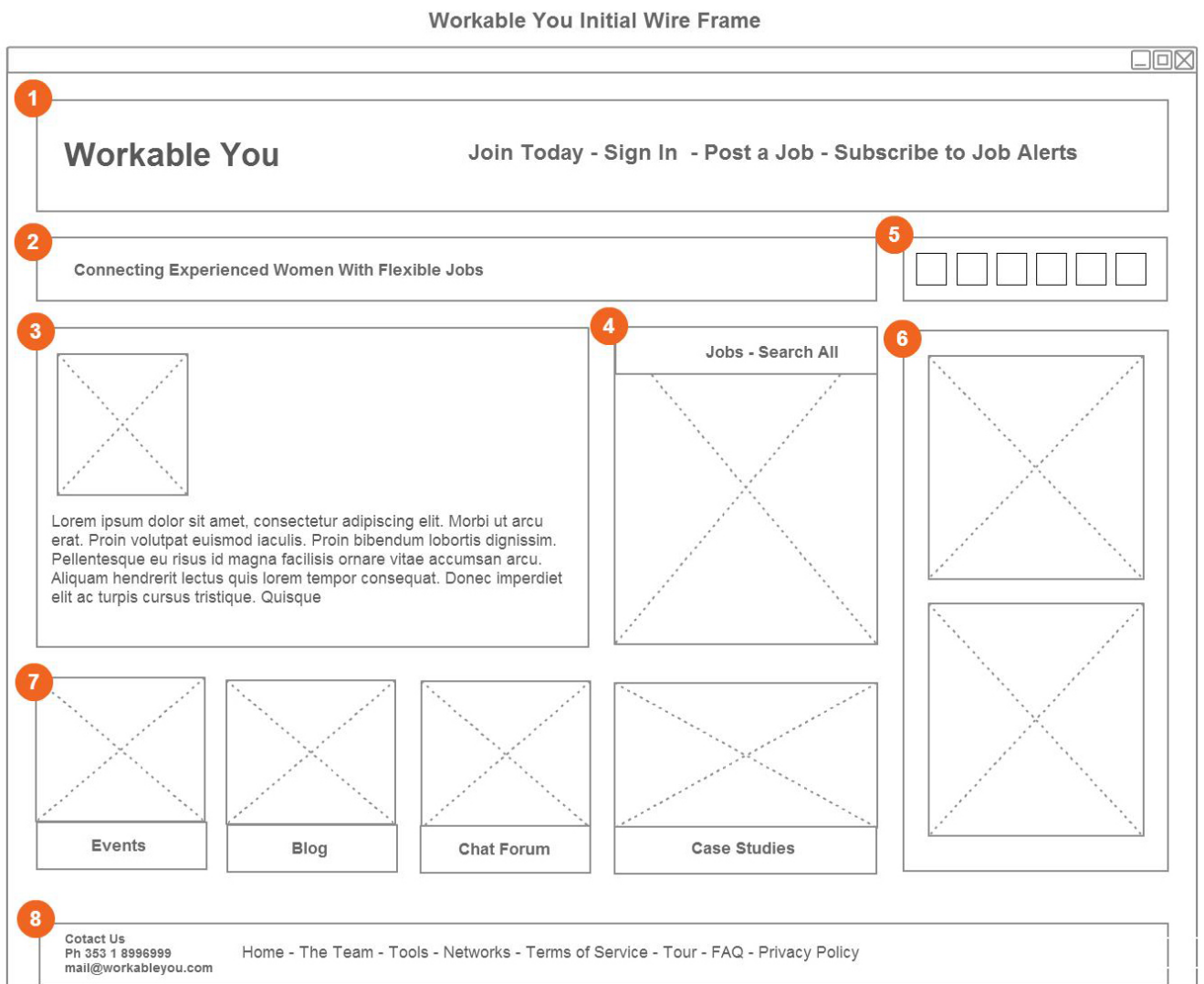
1 Mast Head - Navigation Bar   5 Social Connect Share
2 Heading   6 Advertising
3 About workable   7 Link Boxes
4 Jobs Display   8 Footer

Functional Requirements

1. Job Search

Easily and intuitively, browse, search and select Jobs by a variety of attributes Including but not limited to :
Type (Fulltime, Freelance, Contract, Internship) Location, Employer, Category, ID, Title.
Search form that queries the jobs database, consistent and visible at all times throughout the application.
Variety of views for job listings; grid, table, gallery. Show suggest related jobs.
Auto completion of search key words and/or frequently searched terms.

Specification

Generate searchable Jobs database holding Job Id, Job Title, Job Description, Job Location,Job Type, How to Apply Information.
Employer Name, Employer Website, Job Category displayed as a graphical user interface.

2. User Registration - Log in - Edit Profile

Visitors new to the site should be able to register by themselves. Users will be differentiated by unique user identifiers. Register using user account dialogue. Log in simple password - email for registered users.
Profile access for logged in user can be viewed, edited deleted.

Specification

Register:
User database tables holding user details.
Create Account form that requires a unique and valid user name-email/password combination.
Password encrypted on input.
Validate and store of email and hashed password on User database
Where invalid prompt for valid email.

Login:
Log in form that requires input of valid log in details referencing User database.
"Forgot your User name or Password" dialogue to generate e-mail with temporary password.

Profile:
To be viewed, amended or deleted. Email address, Name, Phone, Experience.
Password.

3. Employer Registration - Log in - Profile

Employers new to the site should be able to register by themselves. Employers will be differentiated by unique employer identifiers. Register using Employer account dialogue. Log in simple password - email for registered Employers
Profile access for logged in Employer can be viewed, edited deleted.

Specification

Register:
Employer database tables holding Employer details.
Create Account form that requires a unique and valid Employer name-email/password combination.
Fields to be validated.
Password encrypted on input.
Validate and store of email and hashed password on Employer database
Where invalid prompt for valid email.

Login:
Log in form that requires input of valid log in details referencing Employer database.
"Forgot your Employer name or Password" dialogue to generate e-mail.

Profile:

To be viewed and amended. Employer Website URL, Logo, Contact Name, Contact Email
Contact Phone, Industry

4. Job post, Edit, Delete.

Specification

Employer to be able to post and manipulate available jobs through online form.

5. Job apply, Upload CV

Specification

Registered users to fill in job application form, attach CV or connect LinkedIn Profile and submit.

Fields to be validated.

Confirmation screen to be displayed on submission. Email confirmation to be sent on Job Application.

6. Blog, post Edit, delete, comment

Specification

Administrators to be able to post edit and delete blog entries, (including images)

Categories and Tags to be generated listed and applied when needed.

Registered users to be able to comment on blog posts.

Administrator to be able to moderate comments.

7. Forum, post Edit, delete comment

Specification

Administrators to be able to post edit and delete forum threads (topics)

Users to be able to start and comment on forum threads (topics)

Administrator to be able to moderate comments

8, Secure site from malicious code injection, redirection.

Specification

Encrypt data,Take measures against injection.Take measures against redirection.

Ensure proper session management.

User credentials are protected at database level using encryption

9. Register with LinkedIn profile.

Specification

Incorporate an OAuth (Open authentication) Gem within Login.

10. Authorization Features

Specification
Privacy and Security of data is assured by the authorization of Registered Users.

Registered users need to be able to change their passwords.

11. Documentation - User Manual

Specification

Develop and deliver Online User Wiki

12. Administrator Requirements

Application administrators should be able to manage the application using Web browsers.
Application administrators should be able to view all user - employer data.
Application administrators should be able to delete users.

13. User Input

Commenting and Job Applications should be secure. That is, a basic authentication mechanism must be built into the application to prevent unauthorized persons from making comments or applications on a user's behalf.
Users should be able to view a complete list of jobs consistently on every page available through the application.
Application users should be able to search the database using relevant keywords to identify jobs of interest.
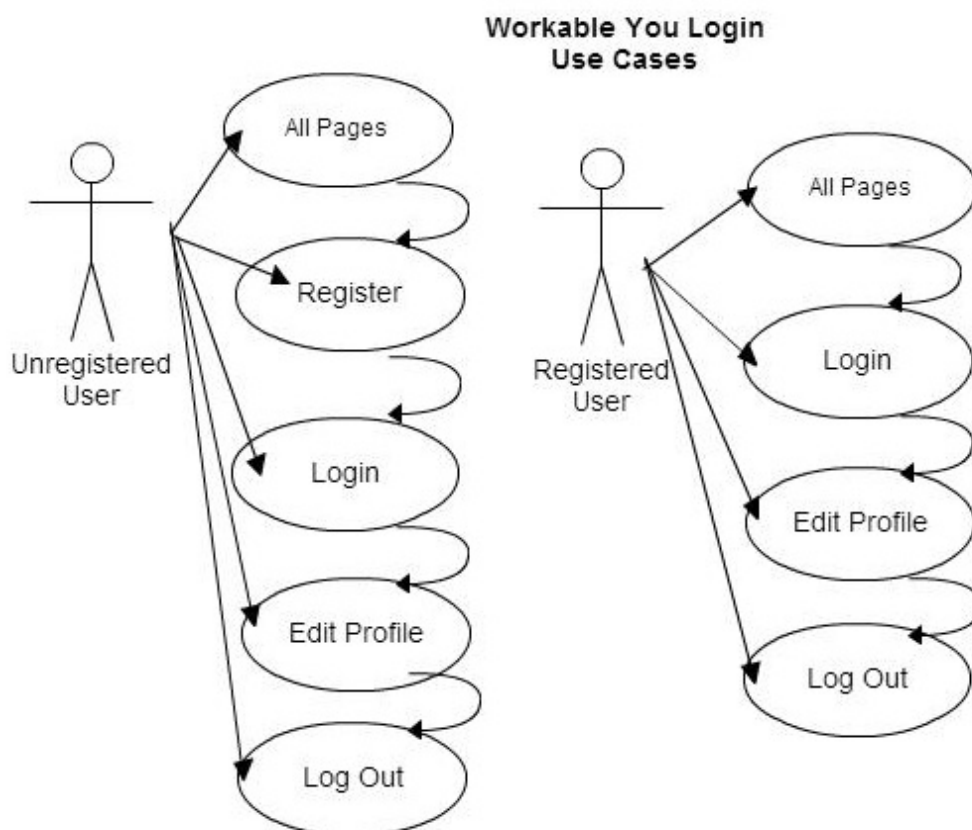

14. Event Post Edit Delete

Specification

Employer to be able to post and manipulate available jobs through online form.

Use Cases

Use Case 1

Workable You Login
Use Cases

| ID	Use case 1
Description	User Registration Login
Actors	Unregistered User, Registered User
Preconditions	Actors to be on all pages with access to Register or Login Dialogue
Basic Steps	Register - Complete Profile - Login - Logout
Alternate Steps	Login - edit profile - Logout
Exceptions	Automatic Logout on Browser Close
Post Conditions	Still in Application but logged out

Use Case 2
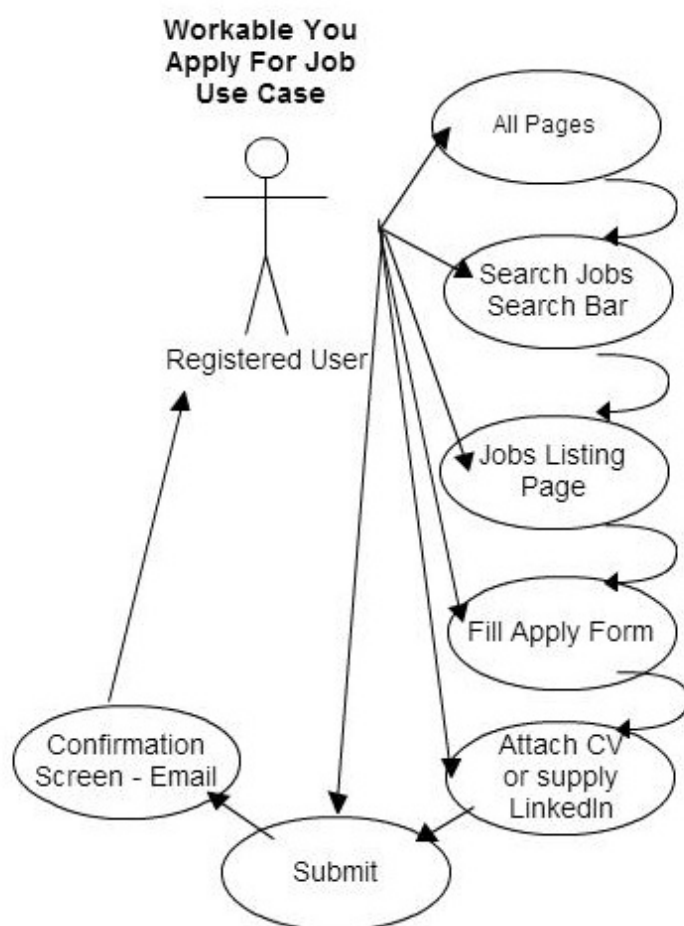
ID	Use case 2
Description	User Job Application
Actors	Registered User
Preconditions	Actor to be on Jobs Listing Page
Basic Steps	View Job - Apply - Attach CV- Submit - Confirmation Page - Confirmation E-Mail
Alternate Steps	View Job - Apply - Connect LinkedIn Profile- Submit - Confirmation Page - Confirmation E-Mail

Exceptions	
Post Conditions	Remain in Application

Entity Relationships

The Following is the draft ER diagram in Crow's Feet notation showing the primary classes and their relationships.

Bounded classes show registration required content.
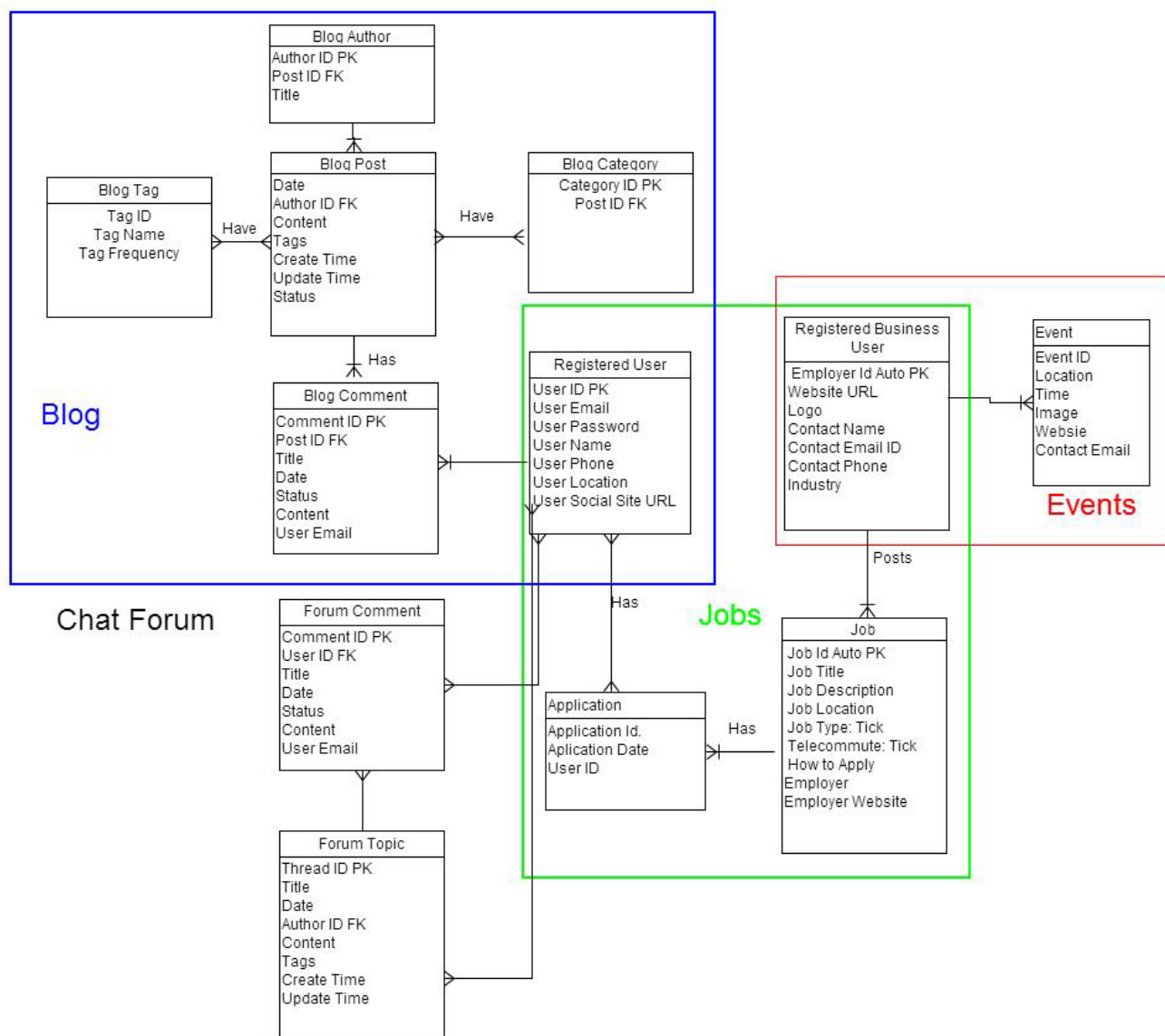
External Interface Requirements

Communications Interfaces

Broadband Internet. All transaction between client and server for Workable You must be done using Secure Socket Layer (SSL) technology to encrypt data.

Technical Requirements (Non functional)

The Non Functional Requirements listed here will suffice for development phase.
It is envisaged that a service level agreement will be drafted in tandem with the Web Application development.

Accessibility: Web Application Should Comply with W3C Web Content Accessibility Guidelines 1.0 as far as possible

Accuracy: All comment fields will be spell checked.

Data Accepted:Date of Birth must be in the past. Emails must be valid.

Availability: Application to be permanently online.

Backup and Recovery Requirements Data to be backed up daily.

Capacity: Up to 500 users in total can access data concurrently. Data: Up to 500,000 registered users can be stored. Up to 1000, registered employers can be stored.

Compatibility: Data: Customer data can be exported in XML format.

Concurrency: Process Up to 300 users may be using "Apply for Job" at any one time.

Error-Handling:
In the event of the user cancelling or quitting the process "Edit User Profile" any changes made by the user will be reversed.

Legal and Regulatory:
All Data Storage must comply with the Data Protection Act 1988 and subsequent amendments.

Localizability: Langauge spelling to be UK English

Performance

The performance of the application should not degrade with an increase in the number of services offered.

Operating Environment

Environment and technology requirements:
Cloud hosting space (Heroku) will be used to entirely host the application.
WEBrick 1.3.1 will be used as a development web-server.
Ruby 1.9.3 will be used as the server side programming language.
Rails 3.2.8 will be used as a Web framework.
The software shall run on all current versions of the following browsers Opera, Safari, FireFox and Internet Explorer. The software shall be tested on Windows 7 but should also run on Mac and Linux platforms using latest operating systems.
Primary Web-pages are required to properly fit on mobile devices, working on iOS and Android platforms.

Search Engine Optimization
The site should be fully optimized during development to achieve high rankings.
Language terms and category titles should be researched using Google Keyword Tools and Google Trends to achieve this.

Scalability

The initial system should factor in the need for highly responsive future scalability

The maximum expected count of users will be several thousands until the end of first year.
The system must be scalable. The maximum expected count of concurrent users for the application is 500.

Security

Passwords and User details are to be encrypted via SSH (Secure Shell) techniques.
No login information is to be stored in the database as plain text.

Usability

The application will be specifically designed for third level educated women.
Graphical user interface is to be designed for this target market. It must not be assumed that all users will be highly computer literate. GUI should be intuitive.
GUI has to be attractive to the target market (warm but businesslike), user friendly and fun. The site should not be text heavy in the upper strata of pages.

Open Issues

Phasing of Career Tools, Career Advice Tier to be resolved. Initial development or post beta version.

Ronan Carton

24 - 10 - 2012