**Software Requirements Specification**

**CV Creation Project**

**COP4331C-0002, Fall 2017**

Team Name: Team #15

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**Section 1: Introduction**

Software to be Produced:

* The software will be a web application which will allow users to generate curriculum vitae (CV) documents. Users will register an account with our website; once complete, users will enter their personal information (work experience, education, etc.), then choose a CV design from a list of templates hosted on our website. Then, their information will be formatted to fit the template (which they can edit and reformat as they choose), and the document will be available for download as a PDF file.

Applicable Standards

* See the Project Management Plan for applicable standards.

Definitions, Acronyms, and Abbreviations

* CV – curriculum vitae, a written overview of a person’s experience/qualifications relevant to a job they are applying for.
* User – someone who interacts with our web application

**Section 2: Product Overview**

Assumptions:

* User’s computer system has a minimum of 256 MB RAM and 400 MHz CPU

Stakeholders:

* Developer – people invested in accurately creating the service as requested by the client
* Customer – someone who wishes to use our service to generate a CV(s)
* Companies Applied to by Customers – as the purpose of the CV’s is for job applications, it is in the companies holding the jobs would be interested in receiving high-quality CV’s that accurately represent the applicant.

Event Table:

|  |  |  |  |
| --- | --- | --- | --- |
| Event Name | External Stimuli | External Responses | Internal data and state |
| Register | User enters information to create an account with the website | Failure: username is already taken, user returned to registration screen and told to choose a new username.  Success: login information is encrypted and added to the database, user is given confirmation of their account’s creation. | User information: encrypted, raw text |
| Log In | User enters login information into the “Log In” fields | Success: page refreshes, user’s username appears on-screen  Failure: page refreshes, user receives prompt: “Login Unsuccessful” | User information: encrypted, raw text |
| Data Input | User enters personal information into their designated fields | Information will appear on-screen. | User information: raw text  User photo: PNG/JPG file |
| File Upload | User uploads file to use for their CV | “Document Select” screen will appear. |  |
| Template Select | User selects CV template | Selected template will be highlighted for the user to view their choice. | Templates: PDF file |
| Download | User clicks on “Download” button | System converts the document into PDF format, encrypts it, then delivers it to the user’s local storage. | CV: encrypted PDF file |

**Section 3: Specific Requirements**

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| --- |
| No: CV1 |
| Statement: Users shall click on the “Register” prompt to create a personal account. |
| Source: User |
| Dependency: None |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: User is taken to a prompt, where they can enter a username, password, and email. |
| Revision History: Conor Forgey; 10/14/17; edited statement. |

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| No: CV2 |
| Statement: Users shall enter their account credentials (username, password, email). |
| Source: User |
| Dependency: CV1 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users can successfully select the “Create Account” prompt without being informed of missing necessary information. |
| Revision History: Conor Forgey; 10/14/17; revised statement and evaluation to steps earlier in the registration process. |

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| No: CV3 |
| Statement: Users shall submit their account credentials, to be compared against our database of other accounts for redundancy. |
| Source: User |
| Dependency: CV2 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will receive a message informing them that their information is already in use, until they enter credentials that don’t already exist in our database. Once successful, they will receive a message confirming the creation of their account. |
| Revision History: |

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| --- |
| No: CV4 |
| Statement: Users shall submit login credentials to log in. |
| Source: User |
| Dependency: CV3 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will receive a message informing them of using incorrect information, until they successfully enter information that matches an existing account, at which point they will be logged into that account. |
| Revision History: Conor Forgey; 10/16/17; reworded evaluation to reference entering *an* account, not necessarily the *users’* account. |

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| No: CV5 |
| Statement: Users shall be informed their information was incorrect. |
| Source: System |
| Dependency: DB5 |
| Conflicts: DB6 |
| Supporting Materials: |
| Evaluation Method: Users are sent back to the login page, and be given a message that their information was incorrect. |
| Revision History: |

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| --- |
| No: CV6 |
| Statement: Users shall navigate to the “Enter Information” section of the website. |
| Source: User |
| Dependency: CV4 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will be brought to a new page; the page will include text boxes to enter “Work Experience”, “Volunteer Experience”, “Education”, “Other Qualifications”, and a box to upload a picture of themselves. There will also be a button titled “Upload Document”, which will allow users to submit a document that contains necessary information. |
| Revision History: |

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| No: CV7 |
| Statement: Users shall manually enter their information into each text box, as well as uploading their photo. |
| Source: User |
| Dependency: CV6 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users’ information will be visible in the appropriate text boxes. |
| Revision History: |

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| --- |
| No: CV8 |
| Statement: Users shall select the “Upload Document” button. |
| Source: User |
| Dependency: <list each other requirement on which satisfaction of this requirement depends. (May be "None")> |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will be prompted to select a locally-hosted document to upload. |
| Revision History: |

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| --- |
| No: CV9 |
| Statement: Users shall select a document to upload. |
| Source: User |
| Dependency: CV8 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: System will attempt to download the document. |
| Revision History: |

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| --- |
| No: CV10 |
| Statement: Users shall hit the “Save” button to save their information. |
| Source: User |
| Dependency: None |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users’ information will be added to the database. |
| Revision History: |

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| --- |
| No: CV11 |
| Statement: Users shall select the “Select Template” section to select a template for their CV. |
| Source: User |
| Dependency: DB6 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users are navigated to a page with a selection of CV templates, as well as a button titled, “Upload CV”. |
| Revision History: Conor Forgey; 10/16/17; formerly required to be completed before entering information, functions involving selecting templates are now independent. |

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| No: CV12 |
| Statement: Users shall select a template to use as the blueprint for their CV. |
| Source: User |
| Dependency: CV11 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: The selected template will be highlighted, and a button titled “Select” will be activated for the user to interact with. |

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| No: CV13 |
| Statement: Users shall press the “Create CV” button to submit their choice in template. |
| Source: User |
| Dependency: CV12 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will be navigated to a page containing the contents of their CV, with formatted information fit to the template. |

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| No: CV14 |
| Statement: Users shall be able to edit each information box’s contents, as well as the size and organization of the boxes. |
| Source: System |
| Dependency: DB12 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Text is editable, boxes can be resized/relocated as the user sees fit. |

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| --- |
| No: CV15 |
| Statement: Users shall press the “Download” button to download the document. |
| Source: User |
| Dependency: None |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Document will be prepared for download (converted to PDF, encrypted, delivered). |
| Revision History: |

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| --- |
| No: DB1 |
| Statement: User’s registration credentials are compared to the registry, to ensure that duplicate credentials are not created. |
| Source: System |
| Dependency: CV3 |
| Conflicts: <list each other requirements with which this requirement conflicts. (May be "None")> |
| Supporting Materials: |
| Evaluation Method: |
| Revision History: |

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| --- |
| No: DB2 |
| Statement: Credentials will be encrypted with our algorithm. |
| Source: System |
| Dependency: DB1 |
| Conflicts: None |
| Supporting Materials: User information should be encrypted before adding to/checking against database, so we don’t spend resources unencrypting each of the already-existing credentials to compare to the new information. |
| Evaluation Method: Credentials will be properly-formatted into the database’s encrypted format. |
| Revision History: Conor Forgey; 10/14/17; changed event to encrypt before adding to database. |

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| --- |
| No: DB3 |
| Statement: Users’ information shall be compared against the database’s stored credentials for redundancy. |
| Source: System |
| Dependency: DB2 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: If the information’s found to be redundant, it will not be added to the database. If not, users’ information will be added to the database. |
| Revision History: Conor Forgey; 10/16/2017; consolidated other two incorrect event tables into the evaluation method. |

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| --- |
| No: DB4 |
| Statement: Users’ login information shall be encrypted for registry comparison. |
| Source: System |
| Dependency: CV4 |
| Conflicts: |
| Supporting Materials: |
| Evaluation Method: Login information will be encrypted and presented in our standard encryption format, for proper comparison with logged credentials. |
| Revision History: |

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| --- |
| No: DB5 |
| Statement: Database shall be searched with the users’ information to determine if the information exists. |
| Source: System |
| Dependency: DB4 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: System will output results based on whether the user information was or was not found in the registry. |
| Revision History: |

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| --- |
| No: DB6 |
| Statement: System shall add users’ information to the session’s browser cookie. |
| Source: System |
| Dependency: DB5 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: User is successfully logged in, and are not logged out as they move from page to page. |
| Revision History: |

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| --- |
| No: DB7 |
| Statement: System shall download the uploaded document to the server. |
| Source: System |
| Dependency: CV8 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: File appears in the server. |
| Revision History: |

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| --- |
| No: DB8 |
| Statement: System shall parse the users’ uploaded document for relevant information (Work Experience, Volunteer Experience, Other Qualifications, Education, Photo and Contact Information). |
| Source: System |
| Dependency: CV9 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Parsed information appears in the information boxes of the “Enter Information” page. |
| Revision History: |

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| --- |
| No: DB9 |
| Statement: System shall add the encrypted user information to the database, tied to that user’s account. |
| Source: System |
| Dependency: DB2 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users’ information will be stored in our database in our encrypted format. |
| Revision History: |

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| --- |
| No: DB10 |
| Statement: System shall add the template document to the list of available CV templates. |
| Source: System |
| Dependency: DB7 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: The new document will be available for users to select. |
| Revision History: |

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| No: DB11 |
| Statement: System shall decrypt the users’ information. |
| Source: System |
| Dependency: CV13 |
| Conflicts: None |
| Supporting Materials: Information must be decrypted before being added to the CV. |
| Evaluation Method: Text information is in plain text format, photo looks as it did when uploaded. |
| Revision History: |

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| --- |
| No: DB12 |
| Statement: System shall format and add the users’ information into the template file. |
| Source: System |
| Dependency: DB11 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Users will be able to view the document with their selected information already loaded into it. |
| Revision History: |

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| --- |
| No: DB13 |
| Statement: System shall convert the contents of the CV document into PDF format. |
| Source: System |
| Dependency: CV15 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Document will be a PDF-formatted file. |
| Revision History: |

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| No: DB14 |
| Statement: System shall encrypt the PDF file. |
| Source: System |
| Dependency: DB13 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: Document will be encrypted in our selected encryption protocol. |
| Revision History: |

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| --- |
| No: DB15 |
| Statement: System shall deliver the encrypted file to the user. |
| Source: System |
| Dependency: DB14 |
| Conflicts: None |
| Supporting Materials: |
| Evaluation Method: The file will be downloaded to the user’s local storage. |
| Revision History: |

3.1 Functional Requirements

* Accept template documents
* Parse uploaded documents for text
* Parse uploaded documents for picture(s)
* Deliver documents to the user
* Encrypt the deliverable documents
* Store user information, including email addresses, work history, volunteer history, contact information, non-work qualifications and education
* Encrypt user information
* Store users’ login information
* Create browser cookies
* Edit browser cookies
* Accept entered login credentials

3.2 Interface Requirements

* User inputs name, work experience, volunteering experience, contact information and education as raw text into pre-generated text boxes
* User inputs photo in PNG or JPG format into the image upload section
* System outputs encrypted PDF file on request
  + PDF files will be output for each press of the “Download” button
* User uploads template files in PDF format

3.3 Physical Environment Requirements

* 256 MB RAM
* 400 MHz CPU

3.4 User and Human Factors Requirements

* The system should be usable for any user who has read the documentation of the service.
* System will prevent misuse of the document’s reformatting by setting a maximum width to each text box, preventing information from not appearing on the page.

3.5 Documentation Requirements

* Online documentation, should be comprehensible by any user with more than one month experience with using computers

3.6 Data Requirements

* User information, in raw text
* Template documents, in PDF format
* User photos, in JPG/PNG format

3.7 Resource Requirements

* Personnel experienced in database management

3.8 Security Requirements

* All stored user information must be encrypted

3.9 Quality Assurance Requirements

* System response in <2 s
* Website available 16 hours/day on average