**Software Requirements Specification**

**CV Creation Project**

**COP4331C-0002, Fall 2017**

Team Name: Team #15

Team Members:

* Conor Forgey
* Alexander Acevedo
* Zaina Aljallad
* Elizabeth Maspoch
* Anthony

Contents of this Document

Introduction

* Software to be Produced
* Applicable Standards

Definition, Acronyms, and Abbreviations

Product Overview

* Assumptions
* Stakeholders
* Event Table
* Use Case Diagram
* Use Case Descriptions

Specific Requirements

* Functional Requirements
* Interface Requirements
* Physical Environment Requirements
* Users and Human Factors Requirements
* Documentation Requirements
* Data Requirements
* Resource Requirements
* Security Requirements
* Quality Assurance Requirements

Supporting Material

**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

* <You do not have to repeat the standards included in the project plan. Instead, cite any standards that are specific to the system requirements.>

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:

* <List all the assumptions the developers are making. For example: assumptions about other systems this product will interface with; assumptions about the technological environment in which the product will operate (how much memory, what type of processor, ...); assumptions about availability and capability of COTS, GOTS, or other re-used products, ...>
* User has Internet connectivity while using the device
* NOTES:
  + Don’t do super-dumb requirements (e.g. expect user to be in chair)

Stakeholders:

* Developer -
* Customer – someone who wishes to use our service to generate a CV(s)
* <A stakeholder is anyone who has an interest in the software to be developed. For example, the customer, the various classes of users, applicable regulatory agencies, ... List each category of stakeholder and give a phrase or a sentence to describe their interest or concerns>

Event Table:

* <An event table identifies all the external events to which the software must respond. This is a first step in determining the required overall system functionality. The event list should be consistent with the context diagram and the interest of each stakeholder. Make sure that exceptions are considered.>
* Examples:
  + Stimuli: HOW does the user log in?
  + Responses: What happens once they successfully log in? If they don’t?
* <Use the following table format:>

|  |  |  |  |
| --- | --- | --- | --- |
| Event Name | External Stimuli | External Responses | Internal data and state |
| 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” |  |
| Data Input | User enters personal information into their designated fields | Information will appear on-screen. |  |
|  |  |  |  |

Use Case Diagram

* <Include a use case diagram here. It should be consistent with all the above work. >

Use Case Descriptions:

* <Briefly describe each use case included in the above diagram. >

**Section 3: Specific Requirements**

<Use the following template for each requirement. >

|  |
| --- |
| No: CV1 |
| Statement: Users shall register with our website and create a personal account. |
| Source: User |
| Dependency: None |
| Conflicts: None |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: User’s login information is encrypted and stored on our database, and the user can enter their information to sign into their personal account. |
| Revision History: <who, when, what> |

|  |
| --- |
| No: CV2 |
| Statement: Users shall enter their information relevant to a CV document (work/volunteer experience, education, other qualifications, photo of user). |
| Source: User |
| Dependency: CV1 |
| Conflicts: None |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: <How can you tell if the completed system satisfies this requirement? > |
| Revision History: <who, when, what> |

|  |
| --- |
| No: CV3 |
| Statement: Users shall select a CV design template from our list of provided templates. |
| Source: User |
| Dependency: CV2 |
| Conflicts: None |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: <How can you tell if the completed system satisfies this requirement? > |
| Revision History: <who, when, what> |

|  |
| --- |
| No: CV4 |
| Statement: Users shall select the text boxes containing the information they want to include in the current CV. |
| Source: User |
| Dependency: CV3 |
| Conflicts: None |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: Selected text boxes will be highlighted, and once the user says they have finished selecting qualifications, they will be formatted and added to the design template. |
| Revision History: <who, when, what> |

|  |
| --- |
| No: CV5 |
| Statement: Users shall be able to edit and format the document and its contents. This includes resizing/reordering text boxes, as well as editing the information in the text box. |
| Source: User |
| Dependency: CV4 |
| Conflicts: <list each other requirements with which this requirement conflicts. (May be "None")> |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: Users will select the “Download” feature to download the document. |
| Revision History: <who, when, what> |

|  |
| --- |
| No: CV6 |
| Statement: Users shall select to download the completed CV. |
| Source: User |
| Dependency: CV4 |
| Conflicts: <list each other requirements with which this requirement conflicts. (May be "None")> |
| Supporting Materials: <list any supporting diagrams, lists, memos, etc.> |
| Evaluation Method: Users will be delivered the document in a PDF format, encrypted to protect their information. |
| Revision History: <who, when, what> |

3.1 Functional Requirements

* < Describe the fundamental actions that the software must perform. Functional requirements can be partitioned into subfunctions or subprocesses. Note: the software design partition does not have to correspond with the functional requirements partition. Functional requirements include:
  + validity checks on the inputs,
  + exact sequence of operations,
  + responses to abnormal situations
  + relationship of outputs to inputs
    - input/output sequences, formulas for input to output conversion, etc.
  + ...>

3.2 Interface Requirements

* < Describe the interactions of the software with other entities. Interface requirements include a precise description of the protocol for each interface:
  + User inputs name, work experience, volunteering experience, 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 each time a user requests one via a “Download” button
  + how accurate must each data item be?
  + timing issues (synchronous/asynchronous)>
  + how many will be received or sent in a particular time period?
  + how accurate must the data be?

3.3 Physical Environment Requirements

* < Describe the environment in which the software must run. Physical environment requirements include:
  + ...>

3.4 User and Human Factors Requirements

* Describe the users and their constraints:
  + 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
* Describe what documentation is required:
  + on-line, printed, or both?
  + what is the assumed skill level of the audience of each component of documentation?

3.6 Data Requirements

* <Describe any data calculations: what formula will be used? to what degree of precision must the calculations be made? >
* <Describe any retained data requirements: exactly what must be retained?
* ...>

3.7 Resource Requirements

* <Describe the system resources:
  + skilled personnel required to build, use, and maintain the system?
  + physical space, power, heating, air conditioning, ...?
  + schedule?
  + funding?
  + hardware/software/tools?
  + ...>

3.8 Security Requirements

* <Describe any security requirements:
  + must access to the system or information be controlled?
  + must one user's data be isolated from others?
  + how will user programs be isolated from other programs and from the operating system?
  + how often will the system be backed up?
  + must the backup copies be stored at a different location?
  + should precautions be taken against fire, water damage, theft, ...?
  + what are the recovery requirements?
  + ...>

3.9 Quality Assurance Requirements

* <Describe quality attributes:
  + What are the requirements for reliability, availability, maintainability, security, portability ...?
  + How must these quality attributes be demonstrated?
  + Must the system detect and isolate faults? If so, what types of faults?
  + Is there a prescribed mean time between failures?
  + Is there a prescribed time the system must be available?
  + Is there a maximum time allowed for restarting the system after a failure?
  + What are the requirements for resource usage and response times?
  + ...>

**Section 4: Supporting Material**

* <Here is where you put all your analysis work from which you derived the above requirements. It may include UML or other diagrams, notes, memos, etc.)