

Software Requirements Specification (SRS)

Military-to-Civilian Terminology Translation Tool

Software Requirements Specification

Version 1.0

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1. Introduction

1.1 Purpose

This system shall streamline the resume creation process for veterans transitioning from military to civilian jobs. The VA's current business process is full of many inefficiencies and the quality of the resumes can vary wildly from employee to employee. The system shall use real job postings to determine which skills are most sought after, and auto populate static fields, such as name, in an editable resume.

By streamlining the VA's current business process, the system will not only make it easier for VA employees to do their jobs, but to improve the economic potential of transitioning veterans.

1.2 Scope

Product Name

The main product is Military-to-Civilian Terminology Translation Tool, this can be broken down into sub systems: Job Analysis Report Generator, Terminology Translation Report Generator, and Resume Generator.

Overview

Job Analysis Report Generator:

This system will take real and current job data, and show what skills and terminology are most sought after.

Terminology Translation Report Generator:

This will take a veteran's military history and parse out any skills into civilian terminology.

Resume Generator:

This will generate a basic, editable resume, static fields, such as name and email, will be populated.

Military-to-Civilian Terminology Translation Tool:

This will take all above systems, and combine them. The resume will be populated with the top results from Job Analysis Report and Terminology

Translation Report. The reports will also be available for the VA employee's to view, incase they wish to replace the generated data with other data.

Goals

The goal of the system isn't just to streamline the current workflow, make it easier for VA employees to do their jobs, and create resumes. The goal is to "enrich economically blighted communities." In this case veterans. This lines up perfectly with Intevations goal and mission statement:

As a SBA certified HUBZone Small business, we are committed to providing enrichment to economically blighted communities. This paired with our commitment to meeting and exceeding our customer's expectations is core to our mission.

- The system will increase the efficiency of creating a resume for a veteran.
 - Measurement: Compare average time before system to after system
- The system will increase the quality of the produced resume.
 - Measurement: Have industry experts examine produced resumes.

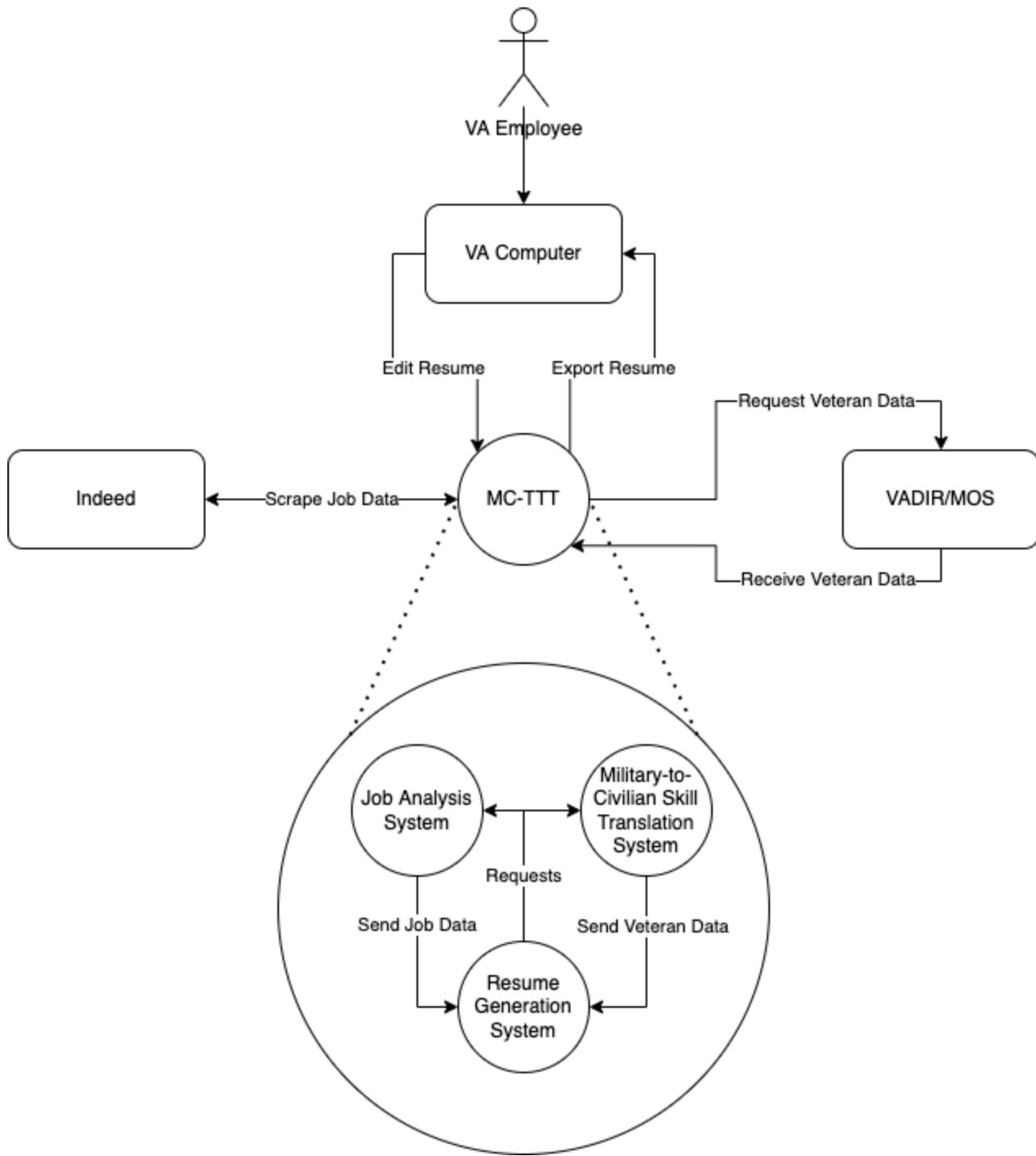
Out of Scope

- The minimal viable product will only include the Job Analysis Generator Report.
- The jobs are specifically for jobs in technological fields. Future releases will expand to other fields.
- The system will not create a perfect resume, the resume will have to be proof read and improved upon. It is designed to be a foundation to work upon, not a ready to go product.

1.3 Product overview

1.3.1 Product perspective

Context Diagram



Constraints

| Key | Summary |
|-------|--|
| RE-57 | Job data must be removed after a year. |
| RE-56 | API requests will be handled as a JSON |
| RE-55 | The systems font must be from Google's Open Sans family. |
| RE-54 | The job analysis UI system must be deployed with AWS ECS Fargate |
| RE-53 | The job analysis UI system must be stored in AWS ECR |
| RE-36 | The resume can be exported as pdf, doc/ docx, txt, rtf, or ppt/pptx. |
| RE-32 | The system must utilize Python 3 |

| | |
|-------|--|
| RE-31 | Much of the data is confidential, so the dev team shall be working with mock data. |
| RE-30 | Any schedule-able downtime must occur outside of VA normal operation times, for all continental US timezones |
| RE-29 | The each subsystem must be able to run independently, to minimize downtime. |
| RE-28 | The system must use AWS for its cloud services. |

11 issues

1.3.2 Product functions

- Generate reports on what skills and terminology are currently in use and frequency of use.
- Sort jobs data by company.
- Store job data for long term analysis.
- Translate military skills into civilian skills.
- Generate a resume.
- Edit the resume.
- Fill in static information, like name and phone number.
- Suggest skills to add to resume, based of job data and military history.
- Export Resume.

1.3.3 User characteristics

- End-User
 - Most common user. They have access to run job analysis and restricted access to veteran analysis, dependent on level of classification.
- Super-User
 - They will have regular trainings on how the system operates and will be the in house support for any issues.
- Administrator
 - They all the same access as the end-user plus oversight and override privileges. Appropriate clearance still needed to access some veterans military history.
- Veteran
 - They are the recipient of the generated resume. The system should benefit them the most.

All of these do not require a high level of technical skills. It would be greatly beneficial if super-users had higher than average technical competency, but not required.

1.3.4 Limitations

| Key | Summary |
|-------|--|
| RE-26 | The system must work with Windows OS. |
| RE-25 | The system should have universal usability, and built in accessibility tools for different disabilities. |
| RE-24 | Updates should occur after working hours (including the contiguous us timezones). |
| RE-23 | Each part must be able to operate independently of the other. If one part goes down, the others will still work. |
| RE-22 | VA employee clearance must be verified for veterans with classified military history. |
| RE-21 | The system must be able to handle several instances running at the same time. |
| RE-20 | The VA prefers using AWS over other cloud providers. |
| RE-19 | Any system dealing with potentially classified data must be secure. |

8 issues

1.4 Definitions

VADIR - VA's database holding veteran's military history

Military Occupational Specialty code - code given to the exact job the veteran held. e.g. 11B is an Army Infantryman

Dev team - The team behind the development of the system. For this project, the dev team is comprises 4 Seniors at Florida Gulf Coast University, studying software engineering.

Translating military history - This is not translating from a foreign language, but taking military specific skills and terminology and making it fit civilian skills and terminology.

2. References

<https://certify.sba.gov/>

























<https://intevations.com/>

Thomas Ritter - Project manager

<https://www.va.gov/>

<https://aws.amazon.com/>

3. Specific requirements

| Key | Summary | T | Linked Issues | P | Labels |
|-------|--|---|---------------|---|-----------------------------|
| RE-58 | The system shall be maintained and improved upon by the next group of FGCU software engineering students that work with Intevations LLC. |  | |  | Non-Functional |
| RE-51 | The system shall use a consistent UI throughout each of its parts. |  | |  | Non-Functional, Usability |
| RE-50 | The system's resume generation will give an approximation of how long is left until initial resume is generated. |  | |  | Functional, Usability |
| RE-49 | The system shall use a color-blind friendly color palatte. |  | |  | Non-Functional, Usability |
| RE-48 | The system's job analysis database shall record a job's title, company which posted it, and description. |  | |  | Databas e, Functional |
| RE-47 | The system's job analysis database shall record when a job posting was scraped. |  | |  | Databas e, Functional |
| RE-46 | The system shall be useable with traditional pointer and keyboard interfaces, along with touch input. |  | |  | Functional, Interface |
| RE-45 | The system shall have explicit and human-readable error messages. |  | |  | Functional, Usability |
| RE-44 | The system shall display job analysis data within 1 second of receiving the request. |  | |  | Non-Functional, Performance |
| RE-42 | If only the job analysis system is functioning, the resume generating system shall auto-populate with data from the afore mentioned system |  | RE-34 |  | Functional |
| RE-41 | If only the translation system is functioning, the resume generating system shall auto-populate with data from the afore mentioned system. |  | RE-34 |  | Functional |
| RE-40 | The system shall work on Windows OS. |  | RE-26 |  | Non-Functional |

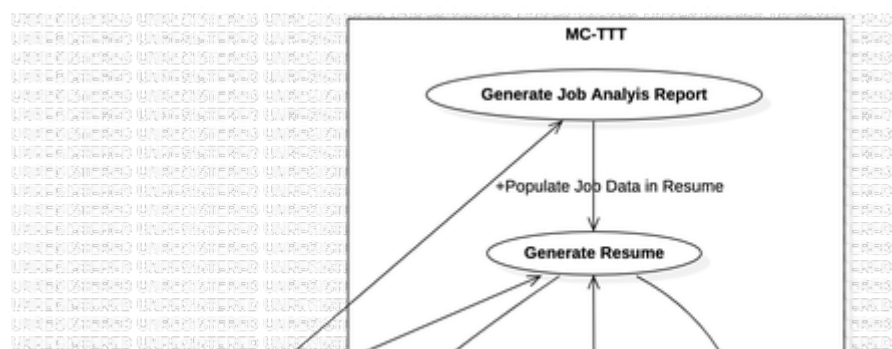
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|-------|---|---|-----------------------|----|----------------|
| RE-39 | The system shall suggest, to the user, which translated skills to use. | ☰ | RE-15 | ▼ | Non-Functional |
| RE-38 | The system shall accommodate a variety of standard input devices, for accesibility. | ☰ | | ⬆ | Functional |
| RE-37 | The resume generation system shall generate an editable resume. | ☰ | RE-16 | == | Functional |
| RE-35 | The system shall have a user choice of what file format to export the resume. | ☰ | RE-18 , RE-36 | == | Functional |
| RE-34 | If both the translation system and job analysis systems are functioning, the resume generating system shall auto-populate with data from the afore mentioned systems. | ☰ | RE-41 , RE-11 , RE-42 | ▼ | Functional |
| RE-33 | The jobs analysis system shall collect new job postings on a weekly basis. | ☰ | RE-8 | ⬆ | Functional |
| RE-27 | The system shall check if the user has a high enough clearance level to access the veteran's military history. | ☰ | RE-14 | ⬆ | Functional |

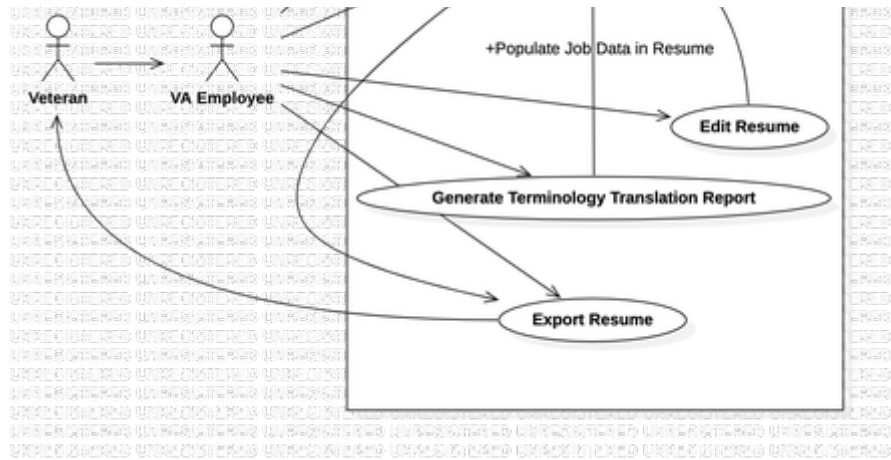
19 issues

Use Cases

| Use Case | ID | Description | Pre-conditions | Post-conditions | Default Flow | Alternative Flow |
|---|------|---|--|---|---|---|
| Generate Job Analysis Report | UC-1 | Generate data point on what skills are currently most sought after, and which companies prefer what skills. | Access to job analysis db. | Report is locally saved and accessible to reduce stress on system | Report requested Data Pulled Data Organized Data Available for loading into resume | Report requested Data Pulled Data Organized |
| Generate Terminology Translation Report | UC-2 | Generate list of skills, in civilian terms, the veteran has from their military service. | Access to veteran's military history. | Report is locally saved and accessible to reduce stress on system | Report requested Data Pulled Data Organized Data Available for loading into resume | Report requested Data Pulled Data Organized |
| Generate Resume | UC-3 | Create a resume template that has veteran information and sought after skills auto populated. | Job Analysis Report and Terminology Translation Report available | Resume saved and editable. | Job Analysis Report and Terminology Translation Report Fill available information into resume template Save locally | Create basic template resume save locally |
| Edit Resume | UC-4 | Edit generated resume | Resume generated | Resume saved and editable. | Load Resume Change Resume Save Resume | None |
| Export Resume | UC-5 | Export Resume | Resume generated | Resume Exported | Save Resume as filetype Email Resume to Veteran | Save Resume as filetype Save to storage device |

Use Case Diagram





4. Verification

| Key | Summary | Verification Approach |
|-------|---|-----------------------|
| RE-58 | The system shall be maintained and improved upon by the next group of FGCU software engineering students that work with Intevations LLC. | Analysis |
| RE-51 | The system shall use a consistent UI throughout each of its parts. | Analysis |
| RE-50 | The system's resume generation will give an approximation of how long is left until initial resume is generated. | Demonstration |
| RE-49 | The system shall use a color-blind friendly color palette. | Inspection |
| RE-48 | The system's job analysis database shall record a job's title, company which posted it, and description. | Inspection |
| RE-47 | The system's job analysis database shall record when a job posting was scraped. | Inspection |
| RE-46 | The system shall be useable with traditional pointer and keyboard interfaces, along with touch input. | Demonstration |
| RE-45 | The system shall have explicit and human-readable error messages. | Analysis |
| RE-44 | The system shall display job analysis data within 1 second of receiving the request. | Test |
| RE-42 | If only the job analysis system is functioning, the resume generating system shall auto-populate with data from the afore mentioned system | Demonstration |
| RE-41 | If only the translation system is functioning, the resume generating system shall auto-populate with data from the afore mentioned system. | Demonstration |
| RE-40 | The system shall work on Windows OS. | Test |
| RE-39 | The system shall suggest, to the user, which translated skills to use. | Analysis |
| RE-38 | The system shall accommodate a variety of standard input devices, for accesibility. | Demonstration |
| RE-37 | The resume generation system shall generate an editable resume. | Test |
| RE-35 | The system shall have a user choice of what file format to export the resume. | Test |
| RE-34 | If both the translation system and job analysis systems are functioning, the resume generating system shall auto-populate with data from the afore mentioned systems. | Demonstration |
| RE-33 | The jobs analysis system shall collect new job postings on a weekly basis. | Test |
| RE-27 | The system shall check if the user has a high enough clearance level to access the veteran's military history. | Test |

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5. Appendices

5.1 Assumptions and dependencies

- Veterans want better resumes.
- VA employees want a streamlined workflow.
- The VA will like our system.
- This system will be at least a minimal viable product by April 14, 2022.
 - Due date for senior project
- Thomas Ritter will continue to provide support.
- FGCU will not change their course requirements.
- The Dev team passes all of their classes.
- The generated jobs data will be relevant and helpful.
- Indeed will not fundamentally change their website, breaking our web-scraper.
- The VA still prefers AWS.

5.2 Acronyms and abbreviations

- VA - The Department of Veteran's Affairs
- Intevations - Intevations LLC.
- Vet - Veteran
- VADIR - VA's database holding veteran's military history
- MOS - Military Occupational Specialty code, code given to the exact job the veteran held
- NC/OER - Non Commissioned/Officer Evaluation Report