File Encryptor Project Requirements

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Cybersecurity

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1. Scope of Project

i. Project Use Case

PUC No	PUC Name	Actors/Users	Input/Output
1	File Selection	Software User	Selected Files (in)
2	File Encryption Process	User Computer	Encrypting Files (in)
3	Distribute Encrypted Files	User Computer	Encrypted Files (out)
4	Create Recovery Key	User Computer	Distribute Key (out)
5	Encrypted File Selection	Software User	Select Files (in)
6	File Decryption	User Computer	Decrypt Files (in)
7	Distribute Unecrypted Files	User Computer	Distribute Files (out)

2. Functional

Volere Requirement Template			
Requirement No.: 2i	Requirement Type:	Functional	Use Cases: 1 5
Description: The program w	ill allow for s	ingular or mult	iple file slection
Rationale: Allow user free choice	of which file	s should be enc	rypted or not en masse
Source: Jacob Braddock - Student	/Programmer		
Fit Criterion:			
The user should be able to encrypt as many fil	les as possible in a timely i	fashion but only may decrypt	one file at a time with the proper key
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 3
Dependencies: 2 3 4 6	7	Conflicts:	
Last worked on 22 April, 2024		Supporting Materials:	i PUC
	Volere Requirement Template		
Requirement No.: 2ii		Functional	Use Cases: 2
Description: The program w	ill encrypt the	earlier selected	d files
Rationale: To actually allow for t	he files to be	encrypted	
Source: Jacob Braddock - Student	/Programmer		
Fit Criterion:			
The files encrypted should be sent to a newly created folder within about 30 at max upon the users initial desire to encryt files.			
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: 3 4 5 6		Conflicts:	
Last worked on 22	April, 2024	Supporting Materials:	li PUC

Volere Requirement Template			
Requirement No.: 2iii	Requirement Type:	Functional	Use Cases: 3 7
Description: The program w	ill distribute f	iles upon comp	letion of desired task
Rationale:			
To allow for the files upon comp	letion of decryption	or encryption to be di	stributed in specific folder
Source: Jacob Braddock - Studen	t/Programmer		
Fit Criterion:			
The files should be sent to a newly created fo	lder within about 30 at max	x without any major problems	3
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: 1 4 5		Conflicts:	
Last worked on 22 April, 2024 Supporting Materials: 1i PUC			
	Volere Require	ement Template	
Requirement No.: $2v$	Requirement Type:	Functional	Use Cases: 6
Description: The program will allow	v for the user t	to decrypt their	files
Rationale:			
To allow for the user to have a w	ay to decrypt their f	iles on the same progr	ram should they choose
Source: Jacob Braddock - Studen	t/Programmer		
Fit Criterion:			
The decrypted files should be done and sent to the newly created file within about 30 minutes of runtime			
Customer Satisfaction Rating: 5		Customer Dissatisfaction Rating:	
Dependencies: 5 7		Conflicts:	
Last worked on 22	April, 2024	Supporting Materials:	i PUC

3. Look and Feel

3i. Appearance

Volere Requirement Template				
Requirement No.: 3i	Requirement Type:	Non-Functional	Use Cases:	
The program needs to have a sleek, professional look to it				
	Rationale: To allow for the user to get the impression of a well designed, business oriented program			
Source: Jacob Braddock - Student	/Programmer			
Fit Criterion: The look should match general standard office standards for a business used program				
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5	
Dependencies: None Conflicts:				
History: Last worked on 23 A	April, 2024	Supporting Materials:		

3ii. Style

Volere Requirement Template				
Requirement No.: 3ii	Requirement Type:	Non-Functional	Use Cases:	
Description: The program needs to leave to the program of the prog	The program needs to look like something an average perosn trusts			
Rationale:			•	
To allow for the user to trust the	program instead of	assuming said prograr	n is malicious	
Source: Jacob Braddock - Student	t/Programmer			
Fit Criterion: 60% or higher of the persons using said program in test case should agree the program is safe in apperance				
Customer Satisfaction Rating: 5			n Rating: 5	
Dependencies: 3i Conflicts:				
Last worked on 23	April, 2024	Supporting Materials:		

4. Usability

i. Ease of Use

Volere Requirement Template				
Requirement No.: 4i	Requirement Type:	Non-Functional	Use Cases:	
Description: The program should gen	The program should generally be very simple for such a complicated task			
Rationale:				
To allow for the user to simply a	nd quickly understar	nd how to use and wha	at the program is	
Source: Jacob Braddock - Student	t/Programmer			
Fit Criterion: A user at least at the age of 14 should be able to use the program without major problems				
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5	
Dependencies: 3ii Conflicts:				
Last worked on 23	April, 2024	Supporting Materials:		

ii. Personalization and Internationalization

Volere Requirement Template			
Requirement No.: 4ii	Requirement Type:	Non-Functional	Use Cases:
Description: The program should allow for light/dark mode and allow for english/spanish toggling			
Rationale:			
To allow for the user to have simple person	onal customization opti-	ons for the program that do	not interefere with the main function
Source: Jacob Braddock - Student	/Programmer		
Fit Criterion:			
The users should generally be able to rea	ad all the program in both	languages and be able to fully	y change visibility options
Customer Satisfaction Rating: 5			n Rating: 5
Dependencies: 3i 3ii			
Last worked on 23	April, 2024	Supporting Materials:	

iii. Learning

Volere Requirement Template			
Requirement No.: 4iii	Requirement Type:	Non-Functional	Use Cases:
Description: The program should b	e extremely easy to	pick up and learn with	out major hiccups
Rationale:			
To allow for the user to learn l	how to use the pr	ogram within a reas	onable amount of time
Source: Jacob Braddock - Student	t/Programmer		
Fit Criterion:			
The users should generally be able to use	all the functions and kn	ow what they do within abou	ut 10 minutes of program runtime
Customer Satisfaction Rating: 5			n Rating: 5
Dependencies: 3ii		Conflicts:	
Last worked on 23	April, 2024	Supporting Materials:	

iv. Understandability and Politeness

Volere Requirement Template			
Requirement No.: 41V	Requirement Type: N	on-Functional	Use Cases:
The program will be very general and easy to understand in wording			
Rationale:		•	_
The program should promote gen	eral, easy to understa	nd context of what the pr	ogram is going to do for the user
Source: Jacob Braddock - S	Student/Progran	nmer	
Fit Criterion: The user should have general idea what to do upon opening the program or a few seconds after			
Customer Satisfaction Rating: 5			n Rating: 5
Dependencies: Conflicts:			
Last worked on 23rd	April, 2024	Supporting Materials:	

v. Accessibility

Volere Requirement Template			
Requirement No.: $4 ext{V}$	Requirement Type: N	on-Functional	Use Cases:
The program shall be usable by a partially disabled persons			
Rationale:			*
The program should be easy to us	se for those with a par	tial or minor disability ju	ast like with those without
Source: Jacob Braddock - S	Student/Prograi	nmer	
Fit Criterion: The user should have a general ease of use that a majority of partially disabled users can use			
Customer Satisfaction Rating: 5			n Rating: 5
Dependencies: Conflicts:			
Last worked on 23rd	April, 2024	Supporting Materials:	

vi. Convenience

	Volere Require	ement Template	
Requirement No.: $4 ext{vi}$	Requirement Type: N	on-Functional	Use Cases:
Description: The program shall be usable	upon download wi	thout need of extra ne	eeds to use said program
Rationale:			
The program should be	simple and with	hout needing extra	a paramters to use
Source: Jacob Braddock - S	Student/Prograi	mmer	
Fit Criterion: The program should be approve			users
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: 4i 4ii		Conflicts:	
Last worked on 23rd	April, 2024	Supporting Materials:	

5. Security

5i. Access

	Volere Require	ement Template	
Requirement No.: 51	Requirement Type: N	on-Functional	Use Cases:
Description: The program should only be	accessible in its us	e and files to those w	ho specifically are using it
Rationale:			
The program should maintain th	at only the user of	the program has aces	ss to the files on their device
Source: Jacob Braddock -	Student/Program	mmer	
Fit Criterion: The program should only keep			e and no where else
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: None		Conflicts:	
History: Last worked on 23rd	April, 2024	Supporting Materials:	

5ii. Integrity

	Volere Require	ement Template	
Requirement No.: 511	Requirement Type: N	on-Functional	Use Cases:
Description: The program should only be	able to be used for	file encryption in an	ethical manner
Rationale:			
To prevent the abuse of said prog	gram for a malicio	us intent such as rans	somware
Source: Jacob Braddock - S	Student/Prograi	nmer	
Fit Criterion: The program should unable to be	oe used in other pro	ograms in every atten	npt to try.
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: None		Conflicts:	
Last worked on 23rd	April, 2024	Supporting Materials:	

5iii. Privacy

	Volere Require	ement Template	
Requirement No.: 5111	Requirement Type: N	on-Functional	Use Cases:
Description:			
The program should notify the use	r of the inability for this	program to do anything ex	cept the intended function
Rationale:			
To prevent the breaking of trust	of users that may u	use this program	
Source: Jacob Braddock -	Student/Program	mmer	
Fit Criterion: The program should be approve			alists for its safety
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: 5i 5ii		Conflicts:	
Last worked on 23rd	April, 2024	Supporting Materials:	

5iv. Audit

	Volere Require	ement Template	
Requirement No.: 5iV	Requirement Type: N	on-Functional	Use Cases:
Description:			
The program should follow the Ge	neral Accepted Auditing	Standards or other auditin	g rules in place
Rationale:			
To prevent the breaking of legal	laws or other rules	that may be within p	olace
Source: Jacob Braddock -	Student/Prograi	mmer	
Fit Criterion: The program should be approve	ed by all of the coll	lege's auditors	
Customer Satisfaction Rating: 5		Customer Dissatisfaction	n Rating: 5
Dependencies: 2i-v 5i	-V	Conflicts:	
Last worked on 23rd	April, 2024	Supporting Materials:	

5v. Immunity

	Volere Requirement Template	
Requirement No.: $5\mathrm{V}$	Requirement Type: Non-Functional	Use Cases:
Description: The program should unable to be	be affected by a majority of malicious prog	rams from the outside
Rationale:		
To prevent interference from outs	side malicious programs	
Source: Jacob Braddock - S	student/Programmer	
Fit Criterion:	vithstand most common malicious prog	grams or uncorruptable
Customer Satisfaction Rating: 5	Customer Dissatisfactio	n Rating: 5
Customer Satisfaction Rating: 5 Dependencies: 51-V	Customer Dissatisfactio Conflicts:	n Rating: 5