

Security Plan for a Small Business

Milestone 1

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IT4983 IT Capstone

Section 1

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Project Summary

Overall Progress is at 33% which is on schedule for Milestone 1.

Research steps completed.

Final Deliverables:

- Final Report
- Security Plan
- Presentation Draft
- Small Business Website Completed

Final Deliverables are on track to be completed as scheduled.



Milestone 1 Assessment

- Document Progress on Small Business Website... Completed
- Documented Research for Security Plan... Completed
- Documented Research for Security Infrastructure... Completed



Website Template Research

open-source website templates, specifically mobile compatible options:

https://www.quackit.com/html/templates/portal_website_templates.cfm



Security Infrastructure Research

- Risk assessment done to find problem areas.
 - What are possible threats?
 - Where are our vulnerabilities?
 - What are possible consequences?
- Access Control - User accounts v.s Admin accounts
 - Example:
<https://www.remsdaq.com/solutions/integrated-security-systems/access-control-software/>
- Firewalls - Separate firewalls for website and database
 - Example:
<https://www.solarwinds.com/security-event-manager/use-cases/firewall-security-management>
- Anti-virus - Prevention of malware attacks
 - Example: <https://www.avast.com/en-us/index#pc>
- Network monitoring tool - keep track of devices, traffic, and servers. Notifies admin of network operations.
 - Example: <https://www.microsoft.com/en-us/download/details.aspx?id=4865>



Security Infrastructure Research Cont.

More options for infrastructure security includes LAMP for a general security base for the server. SNORT, Pfsense and other security tools are helpful as well.

<http://netsniff-ng.org/> - Sniffer that would be helpful for testing the security ourselves

[https://en.wikipedia.org/wiki/LAMP_\(software_bundle\)](https://en.wikipedia.org/wiki/LAMP_(software_bundle)) - General LAMP concept

<https://access.redhat.com/solutions/9203> - Red Hat official policy on antiviruses, comments are useful

https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/8/html/security_hardening/overview-of-security-hardening-security-hardening#threats-to-network-security_overview-of-security-hardening - Redhat on server security for RHEL 8

<https://dev.to/blog/a-12-point-web-hosting-security-checklist-2019-26bh> - General security checklist

<https://www.snort.org/> - Snort official website; is an IDS/IPS.

<https://www.pfsense.org/> - Pfsense official website; open-source firewall



Security Plan Research

Articles for Guidance:

<https://purplesec.us/network-security-plan/>

<https://securityboulevard.com/2021/03/how-to-build-a-strong-information-security-policy/>

<https://www.sciencedirect.com/topics/computer-science/security-planning-process>

NIST for Standards:

<https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-18r1.pdf>

Examples of other Security Plans:

<https://www.ferc.gov/sites/default/files/2020-04/security-plan-example.pdf>

https://www.wisbar.org/SiteCollectionImages/WisconsinLawyer/2015/03/Risk-March15_WISP_sample.pdf

https://www.cdc.gov/selectagent/resources/Security_Plan_Guidance.pdf



Project Experience

Per Guide:

“Report project experience like challenges, lessons learned, areas to improve, etc. ”

- Trying to organize schedules has been a significant challenge.
- We need to improve our communication throughout the week instead of limiting it to only once or twice per week.



Gantt Chart

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Project Name:	Security Solution for a Small Business																
2	Report Date:	9/6/2021																
3						Milestone #1**				Milestone #2**				Milestone #3**				
4	Deliverable	Tasks	% Complete	Current Status Memo	Assigned To**	09/06	09/13	09/20	09/27	10/04	10/11	10/18	10/25	11/01	11/08	11/15	11/29	12/06
5	Creating the Business	Host Business Website	0%		James	10												
6		Research Security Plan	0%		Charles and Phuc		12	5										
7		Research Security Infrastructure	0%		Jessica and Craig		12	5										
8		Pick Security Solution	0%		All				5									
9	Security	Complete Documentation on Security Plan	0%		Charles and Phuc				3	14	5							
10		Complete Documentation on Security Infrastructure	0%		Jessica and Craig				2	14	5							
11		Document Security Testing	0%		All							12	5					
12		Document Findings Report	0%		All								15	5				
13	Final Report	Presentation Preparation	0%		All									8				
14		Formal Presentation	0%		All										15	5		
15		Final Report Submission	0%		All												6	1
16																		
17		Total workload	164			10	24	10	10	28	10	12	20	13	15	5	6	1
18																		
19	Legend																	
20		Planned	2															
21		Delayed	0															
22		Number	Workload: Hours															
23		--	Subject to Change															
24																		
25																		
26																		



Next Steps

Per guide: “Discuss the plan for the next phase.”

Milestone 2 Objectives:

- Complete Security Plan Draft
- Complete Security Infrastructure
- Security Infrastructure Testing Documented
- Findings Report

We are on track to complete these objectives by the due date.