

Configuration Manual

MSc Research Project Cyber Security

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MSc Project Submission Sheet



School of Computing

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Configuration Manual

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1 Introduction:

The configuration manual will give information about proposed dynamic web application, system configuration for implementing project.

2 System Specification:

To implement the proposed project, we need working web application that should relate to database. Hosting provider need with proper configuration to host the application with DNS configuration.

2.1 Server Configuration:

Item	Details
Hosting Package	StellarPlus18
cPanel Version	94.0 (build 13)
Apache Version	2.4.48
PHP Version	7.2.34
MySQL Version	10.3.30-MariaDB-log-cll-lve
Operating System	Linux
Perl Version	5.10.1
SMTP	Used for mail alert.

2.2 Email Creation:

To send the email alert to the admin (info@shariarparves.info) email has been created.

□→	info@shariarparves.info	✓ Unrestricted	459.04 KB / ∞ / 0%	Check Email	∦ Manage	Connect Devices
•	info@web.shariarparves.info	✓ Unrestricted	76.14 KB / 100 / 0%	Check Email	∦ Manage	Connect Devices

2.3 Application Code:

To implement the project following programming language and database uses.

Bootstrap	Used for design application
РНР	Server-side scripting language, PHP regex algorithm used for SQL injection track.
Database	MySQL

2.4 Code Writing:

Notepad++: To implement the application and write the code Notepad++ has used.

2.5 Xampp:

As a local server xampp has used for developing application, it transferred in web by using the cPanel.

3 Online SQLI Tools:

3.1 Pentest Tools:

Penetration testing tools has used for checking SQL injection. The result was expected, application is not SQLI vulnerable as well as it provides relevant notification to the system admin.

3.2 Nessus:

Nessus is the vulnerability scanner that used for checking the SQLI vulnerability. It also provided the successful and expected result for the application.

3.3 Kali Linux:

Kali Linux has been used for checking the SQLI by using the SQL map.

4 Application installation

4.1 Installation in Local:

For installing the application in local environment, Xampp need to be installed. At the beginning shariar-project file should be extract. After the extraction of the file, there will be a folder under the name of shariar and there is sql database file. Inside the Xampp there will be a folder name htdoc. Shariar folder should be included inside the htdoc folder. Folder will be like below:

🛃 📜 🛛 shariar									
le Home Share View									
→ ~ ↑ 📕 >	This PC > Shariar (E:) > Xampp > htdo	cs > shariar							
	Name	Date modified	Туре	Size					
 Quick access 	Css	23/01/2021 13:25	File folder						
OneDrive	frontend	23/01/2021 13:25	File folder						
This PC	📜 image	23/01/2021 13:25	File folder						
3D Objects	赵 about	15/12/2020 17:52	PHP File	1 KB					
Derktop	📷 add-doctor	15/12/2020 17:52	PHP File	3 KB					
Desuments	all-report	15/12/2020 17:52	PHP File	2 KB					
Documents	📷 all-report-generate	15/12/2020 17:52	PHP File	2 KB					
Downloads	📈 all-users	15/12/2020 17:52	PHP File	2 KB					
Music	📈 appointment	15/12/2020 17:52	PHP File	2 KB					
Pictures	📈 book	20/12/2020 13:36	PHP File	3 KB					
🛃 Videos	赵 book-success	15/12/2020 17:52	PHP File	1 KB					
💺 Windows (C:)	赵 cancel-book	15/12/2020 17:52	PHP File	1 KB					
	III			· · · · ·					

Figure 01: Shariar folder path inside htdoc in Xampp

4.2 Import SQL in database:

To import the SQL file to the database, local Xampp server Apache and MySQL should be start as like following.

83	XAMPP Control Panel v3.2.4										
Service	Module	PID(s)	Port(s)	Actions				Netstat			
	Apache	11584 12340	80, 443	Stop	Admin	Config	Logs	Shell			
	MySQL	2564	3306	Stop	Admin	Config	Logs	Explore			
	FileZilla			Start	Admin	Config	Logs	Service:			
	Mercury			Start	Admin	Config	Logs	Help			
	Tomcat			Start	Admin	Config	Logs	Quit			
19:32:52	[main]	All prerequi	isites found Modules					-			

Figure 02: Start local server.

In the browser need to browse the local server to get access to the phpMyAdmin which is like below:



Figure 03: phpMyAdmin access.

After that we need to create database under the name of urlslhlz_shariar. Then we must import the sql file to get all the data and login credential.

$\leftarrow \rightarrow$ C \textcircled{a}	○ D loc	alhost/phpm	yadmin/db_im;	ort.php?db=	urlslhlz_shariar					E \$		00	9	n 🗉	⊚ ≡
🗀 Hositng Related 🛛 🙏 localhost / 12	7.0.0.1 🗀 NCI Re	lated 🕀 HP	Instant Ink HP®	0_ 🗅 Modu	les 🚡 Online C	ompiler and E	SQL Injection pre	eventi 🕀 Citrix G	iateway 🖸 Differ	ent ways to prev	BG How to get	visitors co.	. >>	C Other 8	Bookmarks
phpMyAdmin	🗕 👩 Server, 1	27 0 0 1 » 🗻	Database urisit	ılz_shariar											¢5 ⊼
<u>소료</u> 😡 🗊 🕸 q	M Structure	📄 SQL	🔍 Search	Query	📑 Export	🖶 Import	🥜 Operations	Privileges	Routines	🕑 Events	36 Triggers	🕚 Tra	cking	▼ More	
Recent Favorites															
New information_schema	Importi	ng into	the data	abase "	urlslhlz_	shariar									
library mysol	File to impor	t													
e performance_schema	File may be co A compressed	mpressed (ga file's name n	zip, bzip2, zip) o nust end in .[for	r uncompresse mat].[compre	ed. ssion]. Exampl	e:.sql.zip									
ersonal	Browse your o	omputer: B	owse) urisihiz	_shariar.sql	(Max: 40	MiB)									
phpmyadmin shariar	You may also	drag and drop	a file on any pa	ige.											
	Character set	of the file:	utf-8	~											
🛞 💮 test															
- urlsthtz_shariar	Partial impor	t:													
ertorm	Allow the	interruption o	f an import in ca	use the script d	etects it is close	e to the PHP ti	meout limit. (This mig	nt be a good way i	to import large file	s, however it ca	n break transacti	ons.)			_

Figure 04: Import SQL file in the database.

4.3 Database Connection:

To generate connection with file as well as database, need to configure host name, database name, database users and password according to the phpMyAdmin. For that reason, we have to modify connection.php

```
1
    ₽<?php
       $dbhost = 'localhost';
2
3
        $dbuser = 'urlslhlz parves';
        $dbpass = 'Shariar123!';
4
        $dbname = 'urlslhlz_shariar';
5
6
        $con = mysqli connect($dbhost, $dbuser, $dbpass,$dbname);
7
8
        if(! $con ) {
    ¢
           die('Could not connect: ' . mysqli error());
9
10
        }
11
    12
       ?>
```

Figure 05: Modify connection page.

If the application host on the local server, email notification will not work but it will store the information to the database. Application should be host properly to get the proper email notification.

5 File Transfer Protocol:

For configuring application in the hosting provider, FTP will be used as it will help for transferring the files within the hosting which is accessible form anywhere. For the FTP connection FileZilla has been used for creating secure FTP connection which has been shown in below:

🛃 urtsthtz@162.0.229.23	0 - FileZilla											\times
File Edit View Transfe	ar Server I	Bookmarks H	elp New version available!									
Host: 162.0.229.230	Username:	urisihiz	Password:		Po	ert: Quickce	onnect 👻					
Status: Retrieving dire	ctory listing.							1				~
Status: Directory listin Status: Retrieving dire	g of "/" succ	essful of "Aveb shari	arpapier info"									
Status: Directory listin	g of "/web.s	hariarparves.in	fo" successful									~
Local site: EX					271	Remote site: (web sh	ariamantes	into				-
											~	
Bess-Vi Bess-Vi Code R	LE.BIN deos elated ate Cricket 20	016				2 tmp web.sharlari ? .well-kno ? cgi-bin	parves.info own					
						Cas						
deadloc	project			-		2 image						~
Filename	Filesize	Filetype	Last modified	-	-	Filename	Filesize	Filetype	Last modifi	Permissi	Owner,	/Gr ^
SRECYCLE.BIN		File folder	22/10/2020 14:		417	.well-known		File folder	11/11/2020	0755	641 63	7
Boss-Videos		File folder	09/10/2021 21:			💻 cgi-bin		File folder	11/11/2020	0755	641 63	7
Code Related		File folder	23/01/2021 10:			CSS CSS		File folder	15/12/2020	0755	641.63	7
Corporate Cricket 2		File folder	26/03/2020 16:			If frontend		File folder	07/02/2021	0755	641 63	7
		File folder	26/03/2020 14:			📜 image		File folder	15/12/2020	0755	641 63	7
deadlock		File folder	10/03/2021 13:			htaccess	136	HTACCE	16/08/2021	0644	641 63	7
django_project		File folder	16/02/2021 06:			about.php	751	PHP File	15/12/2020	0644	641 63	7
Final		File folder	07/11/2021 20:			add-doctor.php	2,932	PHP File	15/12/2020	0644	641 63	/
Greenwich University		File folder	26/03/2020 16:			all-report-gener	1,892	PHP File	15/12/2020	0644	641 63	/ ~
House Related		File folder	09/10/2021 20:	-	1	<						>
1 file and 23 directories. T	otal size: 2,1	68,473 bytes			<u> </u>	58 files and 5 directori	es. Total siz	e: 1,039,838	bytes			
Server/Local file	Direc F	lemote file	Size Prior	ity St	ienti	us						
Queued files Failed tra	ansfers Su	iccessful transf	ors									

Figure 06: FileZilla for FTP connection.