

Mistakes done and learnings made: As I believe its always about learning from your mistakes and getting damn strong

1) Implementation of Static Web Hosting using Apache in Docker with PHP Environment

```
Terminal
PS C:\Users\sreev> mkdir phpPractice

Directory: C:\Users\sreev

Mode                LastWriteTime         Length Name
----                -
d-----         26-02-2026   17:05             phpPractice

PS C:\Users\sreev> cd phpPractice
PS C:\Users\sreev\phpPractice> notepad dockerfile
PS C:\Users\sreev\phpPractice> ren dockerfile.txt dockerfile
PS C:\Users\sreev\phpPractice> ls

Directory: C:\Users\sreev\phpPractice

RAM 1.48 GB  CPU 0.25%  Disk: 8.75 GB used (limit 1006.85 GB)  Terminal  Update available
```

```
Terminal
PS C:\Users\sreev\phpPractice> notepad index.html
PS C:\Users\sreev\phpPractice> ls

Directory: C:\Users\sreev\phpPractice

Mode                LastWriteTime         Length Name
----                -
-a----         26-02-2026   17:08           137 dockerfile
-a----         26-02-2026   17:09            30 index.html

PS C:\Users\sreev\phpPractice> docker build -t phpimage .
[+] Building 1.4s (8/8) FINISHED
=> [internal] load build definition from dockerfile                                docker:desktop-linux 0.1s
=> => transferring dockerfile: 176B                                              0.0s
=> [internal] load metadata for docker.io/library/ubuntu:latest                  0.1s

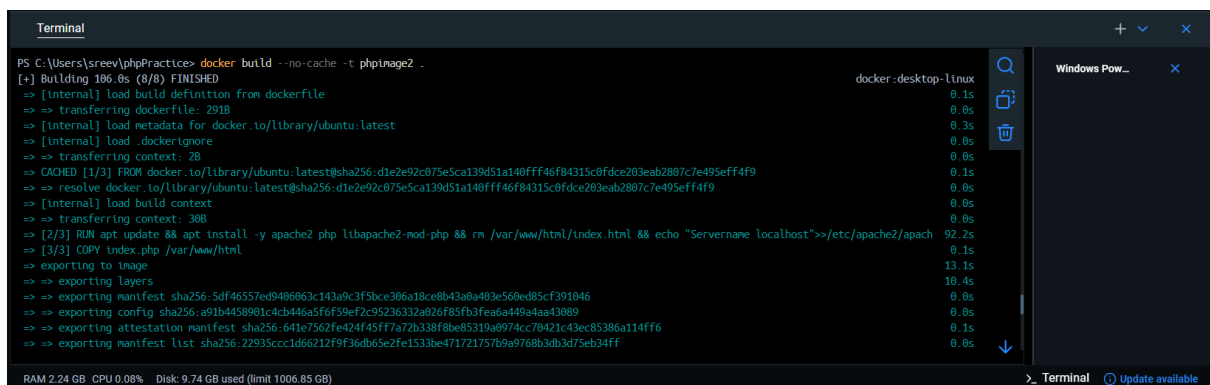
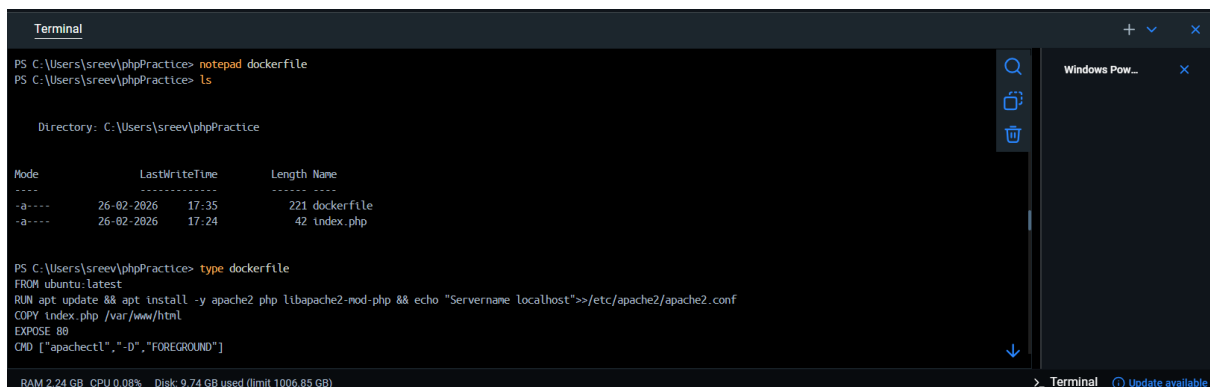
RAM 1.48 GB  CPU 0.33%  Disk: 8.75 GB used (limit 1006.85 GB)  Terminal  Update available
```

```
Terminal
=> => transferring context: 2B                                                    0.0s
=> [1/3] FROM docker.io/library/ubuntu:latest@sha256:d1e2e92c075e5ca139d51a140fff46f84315c0fdce203eab2807c7e495eff4f9 0.1s
=> => resolve docker.io/library/ubuntu:latest@sha256:d1e2e92c075e5ca139d51a140fff46f84315c0fdce203eab2807c7e495eff4f9 0.1s
=> [internal] load build context                                                0.4s
=> => transferring context: 67B                                                  0.3s
=> CACHED [2/3] RUN apt update && apt install -y php                          0.0s
=> [3/3] COPY index.html /var/www/html                                         0.1s
=> exporting to image                                                          0.3s
=> => exporting layers                                                            0.1s
=> => exporting manifest sha256:a2f5c72ba09a050baf337e4b06654dd329a245f8dbb2f5060ad1337e51b04a96 0.0s
=> => exporting config sha256:eab07a85a4fe0fcd854b617c5c3f0420c115db51e7322be8a88c31e1e85225b8 0.0s
=> => exporting attestation manifest sha256:f6ec92ae7f15ed9633d85b4b41f72b2c8f7fb14b0e9d3492eeb22cbe93cd24f 0.0s
=> => exporting manifest list sha256:5ee6805d39c9778d57c9bd29e3e8d28877abef9cc3af82f39680d319363850ef 0.0s
=> => naming to docker.io/library/phpimage:latest                             0.0s
=> => unpacking to docker.io/library/phpimage:latest                           0.0s
PS C:\Users\sreev\phpPractice> docker run -it --name phpcont -p 8880:80 phpimage
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message

RAM 1.48 GB  CPU 0.17%  Disk: 8.75 GB used (limit 1006.85 GB)  Terminal  Update available
```



2) Implementation of Dynamic PHP Web Application using Apache-PHP Integration in Docker



```
Terminal
=> [internal] load .dockerignore
=> transferring context: 2B
=> CACHED [1/3] FROM docker.io/library/ubuntu:latest@sha256:d1e2e92c075e5ca139d51a140fff46f84315c0fdce203eab2807c7e495eff4f9
=> resolve docker.io/library/ubuntu:latest@sha256:d1e2e92c075e5ca139d51a140fff46f84315c0fdce203eab2807c7e495eff4f9
=> [internal] load build context
=> transferring context: 30B
=> [2/3] RUN apt update && apt install -y apache2 php libapache2-mod-php && rm /var/www/html/index.html && echo "Servername localhost">>/etc/apache2/apach
=> [3/3] COPY index.php /var/www/html
=> exporting to image
=> exporting layers
=> exporting manifest sha256:5df46557ed9406063c143a9c3f5bce306a18ce8b43a8a483e560ed85cf391046
=> exporting config sha256:a91b4458901c4cb446a5f6f59ef2c95236332a026f85fb3fea6a449a4aa43089
=> exporting attestation manifest sha256:641e7562fe424f5ff7a72b338f8be85319a0974cc70421c43ec85386a114ff6
=> exporting manifest list sha256:22935ccc1d66212f9f36db65e2fe1533be471721757b9a9768b3db3d75eb34ff
=> naming to docker.io/library/phpimage2:latest
=> unpacking to docker.io/library/phpimage2:latest
PS C:\Users\sreev\phpPractice> docker run -d --name phpcont2 -p 8881:80 phpimage2
21fb9dbdc51ba3e21fdd5844c191c67673025e1e76e81fa7150d1d8208726622
PS C:\Users\sreev\phpPractice> type phpimage2

RAM 2.24 GB CPU 0.08% Disk: 9.74 GB used (limit 1006.85 GB) Terminal Update available
```



PHP is working

```
Terminal
PS C:\Users\sreev\phpPractice> type index.php
<?php
echo "<h1>PHP is working</h1>";
?>
PS C:\Users\sreev\phpPractice> type dockerfile
FROM ubuntu:latest
RUN apt update && apt install -y apache2 php libapache2-mod-php && rm /var/www/html/index.html && echo "Servername localhost">>/etc/apache2/apache2.conf
COPY index.php /var/www/html
EXPOSE 80
CMD ["apache2ctl", "-D", "FOREGROUND"]
PS C:\Users\sreev\phpPractice>

RAM 2.25 GB CPU 0.00% Disk: 9.74 GB used (limit 1006.85 GB) Terminal Update available
```

3) Deployment of a Dynamic PHP Web Application Using Official PHP-Apache Docker Image

```
Terminal
FROM ubuntu:latest
RUN apt update && apt install -y apache2 php libapache2-mod-php && rm /var/www/html/index.html && echo "Servername localhost">>/etc/apache2/apache2.conf
COPY index.php /var/www/html
EXPOSE 80
CMD ["apache2ctl", "-D", "FOREGROUND"]
PS C:\Users\sreev\phpPractice> cd ..
PS C:\Users\sreev> mkdir phpPracticemain

Directory: C:\Users\sreev

Mode                LastWriteTime         Length Name
----                -
d-----          26-02-2026    18:55         phpPracticemain

PS C:\Users\sreev> cd phpPracticemain
PS C:\Users\sreev\phpPracticemain> notepad dockerfile

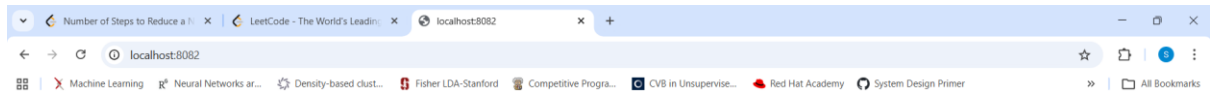
RAM 1.61 GB CPU 9.05% Disk: 10.29 GB used (limit 1006.85 GB) Terminal Update available
```

```
Terminal
PS C:\Users\sreev\phpPracticemain> ren dockerfile.txt dockerfile
PS C:\Users\sreev\phpPracticemain> docker build -t: phptnag3 .
[+] Building 24.8s (8/8) FINISHED
=> [internal] load build definition from dockerfile
=> => transferring dockerfile: 97B
=> [internal] load metadata for docker.io/library/php:8.2-apache
=> [auth] library/php:pull token for registry-1.docker.io
=> [internal] load dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 75B
=> [1/2] FROM docker.io/library/php:8.2-apache@sha256:1628cad804f867286938d9f693bae5d85a2d7db6c58752ff0c3acc1c2b5eebca
=> => resolve docker.io/library/php:8.2-apache@sha256:1628cad804f867286938d9f693bae5d85a2d7db6c58752ff0c3acc1c2b5eebca
=> => sha256:b3c8ac2dbd285c786d959332bebfb0df35cd732f2d4ba485729aa6d3f56691f8 246B / 246B
=> => sha256:784884de071658522f9bccc591b66685acc688294b0bc931b7b5f21d838493726 893B / 893B
=> => sha256:b68232959313f2d9e8852bc01777cc63c37ae539ad0b4125731ceb78c8481b64 258B / 258B
=> => sha256:c3061d5f2e0828c34d79366bd4aa6f1544581f98951c13d2ffb880245397d2dd 2.46kB / 2.46kB
=> => sha256:486ffb9e43b14758415a6d2d21ba41804f8bec14f220ea4527bc08c49170614e 490B / 490B
=> => sha256:feb36511d9bf8aad809b1426c5532a6722ecb0289fedbc1879f299ac6e1e7027 11.46MB / 11.46MB

RAM 1.61 GB CPU 0.00% Disk: 10.29 GB used (limit 1006.85 GB) >_ Terminal Update available
```

```
Terminal
=> => exporting layers
=> => exporting manifest sha256:e887914fa4085e01d6fcdcf8ef710238989b331bcb9f15de7167507321d61a8e
=> => exporting config sha256:850167ddF9F2f7f0a9b5d97482a66caaa7485a9d13cc71fc941020c5206bb5d4
=> => exporting attestation manifest sha256:09a95f6de465e6f1e044d6e7d309e91b46532d04bccb81790841c0ada951621
=> => exporting manifest list sha256:f3d19853a231e6989f7dd848ed03aab4ac6a635f0976899c7af346dbb1e68a0e
=> => naming to docker.io/library/phptnag3:latest
=> => unpacking to docker.io/library/phptnag3:latest
PS C:\Users\sreev\phpPracticemain> docker run -it --name phpcnt3 -p 8082:80 phptnag3
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.2. Set the 'ServerName' directive globally to suppress this message
[Thu Feb 26 13:29:36.153647 2026] [mpm_prefork:notice] [pid 1:tid 1] AH00163: Apache/2.4.66 (Debian) PHP/8.2.30 configured -- resuming normal operations
[Thu Feb 26 13:29:36.153745 2026] [core:notice] [pid 1:tid 1] AH00894: Command line: 'apache2 -D FOREGROUND'
172.17.0.1 - - [26/Feb/2026:13:29:50 +0000] "GET / HTTP/1.1" 200 250 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/145.0.0.0 Safari/537.36"
172.17.0.1 - - [26/Feb/2026:13:29:50 +0000] "GET /favicon.ico HTTP/1.1" 404 529 "http://localhost:8082/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/145.0.0.0 Safari/537.36"

RAM 1.61 GB CPU 0.00% Disk: 10.29 GB used (limit 1006.85 GB) >_ Terminal Update available
```



Hi from php

```
Terminal
PS C:\Users\sreev\phpPracticemain> type dockerfile
FROM php:8.2-apache
COPY index.php /var/www/html
EXPOSE 80
PS C:\Users\sreev\phpPracticemain> type index.php
<?php
echo "<h1>Hi from php</h1>";
?>
PS C:\Users\sreev\phpPracticemain>

RAM 1.60 GB CPU 0.33% Disk: 10.29 GB used (limit 1006.85 GB) >_ Terminal Update available
```