

PRIMER DE TOT INSTAl·LEM EN LOCAL DOCKER I DOCKER COMPOSE !!

L’aplicació s’ha de desplegar en varis contenidors utilitzant Docker Compose.

El contenidor S1 té un servidor NGINX utilizat com a proxy invers. Rep totes les peticions del navegador. Per a les peticions a l’script extagram.php realitza un balanceig de càrrega entre els contenidors S2 i S3.

**/etc/nginx/sites-enabled/default**

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Server {

listen 443 ssl;  *(si añadimos ssl encriptamos)*

*ssl \_certificate* /etc/ssl/cert/site.pem;

ssl\_certifiacte key /etc/ssl/private/site.key;

*server\_name sitioa.com;*

* Creació de claus servidor

openssl req -x509 -nodes -days 365 -newkey rsa:2048 -subj '/CN=mysite.com' -keyout /etc/ssl/private/site.key -out /etc/ssl/certs/site.pem

Els servidors S2 i S3 tenen el servei PHP-FPM que s’encarrega d’executar l’script extagram.php

**apt install php-fpm →** servidor PHP

**/etc/php/7.4/fpm/pool.d/www.conf →** Configuració ‘php’

**systemctl restart php7.4-fpm.service**

**/var/www/html →Creem la carpeta dins del servidor php i posem dins el script php ?**

El servidor S4 té el servei PHP-FPM i executa l’script upload.php. Aquest script emmagatzema els arxius (imatges) en un directori del servidor.

NOMÉS GUARDA

El servidor S5 té un servidor NGINX que s’encarrega de servir les imatges que s’han carregat al directori del servidor.

AQUEST ES EL QUE MOSTRARÀ, DIRA ON SON ELS RECURSOS

El servidor S6 té un servidor NGINX que s’encarrega de servir els arxius style.css i preview.svg

El servidor S7 conté la base de dades MySQL.

Hem d'instal·lar Mysql en aquest servidor i guarder/executar aquest esquema:

CREATE DATABASE extagram\_db;

CREATE USER 'extagram\_admin'@’%’ IDENTIFIED BY 'pass123';

GRANT ALL PRIVILEGES ON extagram\_db.\* TO 'extagram\_admin'@'%';

FLUSH PRIVILEGES;

CREATE TABLE extagram\_db.posts(post TEXT, photourl TEXT);

Database schema:

| CREATE DATABASE extagram\_db;  CREATE USER 'extagram\_admin'@’%’ IDENTIFIED BY 'pass123';  GRANT ALL PRIVILEGES ON extagram\_db.\* TO 'extagram\_admin'@'%';  FLUSH PRIVILEGES;  CREATE TABLE extagram\_db.posts(post TEXT, photourl TEXT); |
| --- |

Codi font:

| extagram.php |
| --- |
| <!DOCTYPE html>  <link rel="stylesheet" href="https://static.extagram.edt/style.css">  <form method="POST" enctype="multipart/form-data" action="upload">  <input type="text" name="post" placeholder="Write something...">  <input id="file" type="file" name="photo" onchange="document.getElementById('preview').src=window.URL.createObjectURL(event.target.files[0])">  <label for="file">  <img id="preview" src="https://static.extagram.edt/preview.svg">  </label>  <input type="submit" value=”Publish”>  </form>  <?php  $db = new mysqli("db.extagram.edt", "extagram\_admin", "pass123", "extagram\_db");  foreach ($db->query("SELECT \* FROM posts") as $fila) {  echo "<div class='post'>";  echo "<p>".$fila['post']."</p>";  if (!empty($fila['photourl'])) {  echo "<img src='https://storage.extagram.edt/".$fila['photourl']."'>";  }  echo "</div>";  }  ?> |

| upload.php |
| --- |
| <?php  if (!empty($\_POST["post"])) {  $photoid;  if(!empty($\_FILES['photo']['name'])){  $photoid = uniqid();  move\_uploaded\_file($\_FILES['photo']['tmp\_name'], 'uploads/' . $photoid);  }  $db = new mysqli("db.extagram.edt", "extagram\_admin", "pass123", "extagram\_db");  $stmt = $db->prepare("INSERT INTO posts VALUES(?,?)");  $stmt->bind\_param("ss", $\_POST["post"], $photoid);  $stmt->execute();  $stmt->close();  }  header("location: /");  ?> |

| style.css |
| --- |
| body {  background: #fafafa;  font-family: sans;  margin: 0;  }  form {  display: flex;  flex-direction: column;  justify-content: center;  align-items: center;  gap: 1em;  background: white;  border-bottom: 1px solid #dbdbdb;  padding: 8px;  }  input[type=text] {  border: 1px solid #dbdbdb;  padding: 8px;  width: 300px;  }  input[type=submit] {  background: #0096f7;  color: white;  border: 0;  border-radius: 3px;  width: 300px;  padding: 8px;  }  #file { display: none; }  #preview { max-width: 300px; }  .post {  max-width: 600px;  margin: 0 auto;  background: white;  display: flex;  flex-direction: column;  border: 1px solid #dbdbdb;  border-radius: 3px;  margin-bottom: 24px;  }  .post img { max-width: 600px; }  .post p { padding: 16px; } |

| preview.svg |
| --- |
| <?xml version="1.0" encoding="UTF-8"?>  <svg version="1.1" xmlns="http://www.w3.org/2000/svg" viewBox="0 0 100 100" width="300" height="300">  <g>  <rect width="100" height="100" fill="#cecece"/>  <path fill="#ffffff" transform="translate(25 25)" d="M48.1,26.3c0,4.3,0,7.2-0.1,8.8c-0.2,3.9-1.3,6.9-3.5,9s-5.1,3.3-9,3.5c-1.6,0.1-4.6,0.1-8.8,0.1c-4.3,0-7.2,0-8.8-0.1 c-3.9-0.2-6.9-1.3-9-3.5c-2.1-2.1-3.3-5.1-3.5-9c-0.1-1.6-0.1-4.6-0.1-8.8s0-7.2,0.1-8.8c0.2-3.9,1.3-6.9,3.5-9 c2.1-2.1,5.1-3.3,9-3.5c1.6-0.1,4.6-0.1,8.8-0.1c4.3,0,7.2,0,8.8,0.1c3.9,0.2,6.9,1.3,9,3.5s3.3,5.1,3.5,9 C48,19.1,48.1,22,48.1,26.3z M28.8,8.7c-1.3,0-2,0-2.1,0c-0.1,0-0.8,0-2.1,0c-1.3,0-2.3,0-2.9,0c-0.7,0-1.6,0-2.7,0.1 c-1.1,0-2.1,0.1-2.9,0.3c-0.8,0.1-1.5,0.3-2,0.5c-0.9,0.4-1.7,0.9-2.5,1.6c-0.7,0.7-1.2,1.5-1.6,2.5c-0.2,0.5-0.4,1.2-0.5,2 s-0.2,1.7-0.3,2.9c0,1.1-0.1,2-0.1,2.7c0,0.7,0,1.7,0,2.9c0,1.3,0,2,0,2.1s0,0.8,0,2.1c0,1.3,0,2.3,0,2.9c0,0.7,0,1.6,0.1,2.7 c0,1.1,0.1,2.1,0.3,2.9s0.3,1.5,0.5,2c0.4,0.9,0.9,1.7,1.6,2.5c0.7,0.7,1.5,1.2,2.5,1.6c0.5,0.2,1.2,0.4,2,0.5 c0.8,0.1,1.7,0.2,2.9,0.3s2,0.1,2.7,0.1c0.7,0,1.7,0,2.9,0c1.3,0,2,0,2.1,0c0.1,0,0.8,0,2.1,0c1.3,0,2.3,0,2.9,0 c0.7,0,1.6,0,2.7-0.1c1.1,0,2.1-0.1,2.9-0.3c0.8-0.1,1.5-0.3,2-0.5c0.9-0.4,1.7-0.9,2.5-1.6c0.7-0.7,1.2-1.5,1.6-2.5 c0.2-0.5,0.4-1.2,0.5-2c0.1-0.8,0.2-1.7,0.3-2.9c0-1.1,0.1-2,0.1-2.7c0-0.7,0-1.7,0-2.9c0-1.3,0-2,0-2.1s0-0.8,0-2.1 c0-1.3,0-2.3,0-2.9c0-0.7,0-1.6-0.1-2.7c0-1.1-0.1-2.1-0.3-2.9c-0.1-0.8-0.3-1.5-0.5-2c-0.4-0.9-0.9-1.7-1.6-2.5 c-0.7-0.7-1.5-1.2-2.5-1.6c-0.5-0.2-1.2-0.4-2-0.5c-0.8-0.1-1.7-0.2-2.9-0.3c-1.1,0-2-0.1-2.7-0.1C31.1,8.7,30.1,8.7,28.8,8.7z M34.4,18.5c2.1,2.1,3.2,4.7,3.2,7.8s-1.1,5.6-3.2,7.8c-2.1,2.1-4.7,3.2-7.8,3.2c-3.1,0-5.6-1.1-7.8-3.2c-2.1-2.1-3.2-4.7-3.2-7.8 s1.1-5.6,3.2-7.8c2.1-2.1,4.7-3.2,7.8-3.2C29.7,15.3,32.3,16.3,34.4,18.5z M31.7,31.3c1.4-1.4,2.1-3.1,2.1-5s-0.7-3.7-2.1-5.1 c-1.4-1.4-3.1-2.1-5.1-2.1c-2,0-3.7,0.7-5.1,2.1s-2.1,3.1-2.1,5.1s0.7,3.7,2.1,5c1.4,1.4,3.1,2.1,5.1,2.1 C28.6,33.4,30.3,32.7,31.7,31.3z M39.9,13c0.5,0.5,0.8,1.1,0.8,1.8c0,0.7-0.3,1.3-0.8,1.8c-0.5,0.5-1.1,0.8-1.8,0.8 s-1.3-0.3-1.8-0.8c-0.5-0.5-0.8-1.1-0.8-1.8c0-0.7,0.3-1.3,0.8-1.8c0.5-0.5,1.1-0.8,1.8-0.8S39.4,12.5,39.9,13z"/>  </g>  </svg> |

Captura de pantalla de l’aplicació en funcionament:

