**VISOKA TEHNIČKA ŠKOLA**

**STRUKOVNIH STUDIJA**

**S** **U B O T I C A**

**PROJEKAT**

**iz predmeta Web programiranje**

**KANDIDAT MENTOR**

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**SUBOTICA 2023.god.**

**SADRŽAJ**

[Opis zadatka...................................................................................................................3](#opis_zadatka)

[Realizacija zadatka.........................................................................................................4](#realizacija_zadatka)

[Struktura baze...............................................................................................................14](#struktura_baze)

[Opis funkcionalnosti.....................................................................................................15](#opis_funkcionalnosti)

[Literatura......................................................................................................................21](#literatura)

**OPIS ZADATKA**

Kreirati web aplikaciju(sajt) za iznajmlivanje nekretnina(stanova, kuća) u jednom gradu. Pristup sajtu je moguć bez registracije (pregledanje nekretnina u ponudi). Kao registrovan korisnik imamo mogućnost da postavimo oglas za iznajmljivanje nekretnine, iznajmimo nekretninu, postavimo komentar na nekretninu koju smo iznajmili, izvršimo izmene/brisanje prethodno postavljenih oglasa, da kontaktiramo korsnika čiju nekretninu bi smo želeli da iznajmimo, izmenimo profilne podatke. Potrebno je da postavljenu nekretninu pre prikazivanja na web sajtu za iznajmljivanje (index-noj stranici) odobri administrator i ukoliko je potrebno izvrši izmenu iste. Administrator ima mogućnost blokiranja korisničkih naloga, izmene/brisanja komentara/nekretnina. Pretraživanje se vrši filtriranjem tipa nekretnine, cene, lokacije i perioda iznajmljivanja.

**REALIZACIJA ZADATKA**

U ovom delu treba prikazati i delove programskog koda. Programski kod napisati uz pomoć fonta **Courier, veličina slova 10**.

**Povezivanje sa bazom PDO dbconfig**

<?php

// DB credentials.

define('DB\_HOST','localhost');

define('DB\_USER','tim');

define('DB\_PASS','Xj3W3WLgQeQxOp6');

define('DB\_NAME2','tim');

// Establish database connection.

try

{

$dbh1 = new PDO("mysql:host=".DB\_HOST.";dbname=".DB\_NAME2,DB\_USER, DB\_PASS,array(PDO::MYSQL\_ATTR\_INIT\_COMMAND => "SET NAMES 'utf8'"));

}

catch (PDOException $e)

{

exit("Error: " . $e->getMessage());

}

?>

**Index page**

<section class="listing-page">

<div class="container">

<div class="row">

<!-- Show properties from database that are alowed by admin -->

<div class="col-md-9 col-md-push-3" id="insert-rows">

<?php

$sql = "SELECT \* FROM estates";

$query = $dbh1 -> prepare($sql);

$query->execute();

$results=$query->fetchAll(PDO::FETCH\_OBJ);

$cnt=1;

$max=0;

$min=0;

$min\_per=0;

$max\_per=0;

if($query->rowCount() > 0)

{

$max=$results[0]->price;

$min=$results[0]->price;

$min\_per=$results[0]->rent\_period;

$max\_per=$results[0]->rent\_period;

foreach($results as $result)

{

if($result->price>$max)

$max=$result->price;

if($result->price<$min)

$min=$result->price;

if($result->rent\_period>$max\_per)

$max\_per=$result->rent\_period;

if($result->rent\_period<$min\_per)

$min\_per=$result->rent\_period;

if($result->active=="Yes" && $result->approved=="Yes"){

?>

<div class="product-listing-m gray-bg">

<div class="product-listing-img">

<img src="data:image/jpg;charset=utf8;base64,<?php echo base64\_encode($result->foto); ?>" class="img-responsive" alt="Image" />

</div>

<div class="product-listing-content">

<h5><?php echo htmlentities($result->location);?></h5>

<p class="list-price"><?php echo number\_format(htmlentities($result->price),2);?> RSD</p>

<ul>

<li>Tip nekretnine: <?php echo htmlentities($result->estate\_type);?></li>

<li>Period iznajmljivanja: <?php echo htmlentities($result->rent\_period);?> dana</small></li>

<br>

<li>Status nekretnine: <?php echo htmlentities($result->status);?></li>

</ul>

<a href="details.php?id=<?php echo htmlentities($result->id\_estate);?>" class="btn">Detaljnije...<span class="angle\_arrow"><i class="fa fa-angle-right" aria-hidden="true"></i></span></a>

</div>

</div>

<?php

}

}

}

?>

</div>

<!-- Side-Bar search -->

<aside class="col-md-3 col-md-pull-9">

<div class="sidebar\_widget">

<div class="widget\_heading">

<h5><i class="fa fa-filter" aria-hidden="true"></i> Pronađite nekretninu </h5>

</div>

<div class="sidebar\_filter">

<form action="search.php" method="post" id="searchFrm">

<div class="form-group select">

<select class="form-control" name="type" id="type">

<option value="">Tip nekretnine</option>

<option value="kuća">kuća</option>

<option value="stan">stan</option>

</select>

<small></small>

</div>

<label for="price" class="control-label">Cena</label><br>

<input id="price" name="price" class="form-control" type="range" min="<?php echo $min; ?>" max="<?php echo $max; ?>" step=".01" />

<p class="text-center"><span id="show\_price"></span> RSD</p>

<div class="form-group select">

<select class="form-control" name="location" id="location">

<option value="">Lokacija</option>

<?php

$sql = "SELECT location FROM estates ";

$query = $dbh1 -> prepare($sql);

$query->execute();

$results=$query->fetchAll(PDO::FETCH\_OBJ);

$cnt=1;

if($query->rowCount() > 0)

{

foreach($results as $result)

{

$str\_arr = explode (", ", $result->location);

?>

<option value="<?php echo htmlentities($result->location);?>"><?php echo $str\_arr[0];?></option>

<?php

}

}

?>

</select>

<small></small>

</div>

<label for="period" class="control-label">Period iznajmljivanja</label><br>

<input id="period" name="period" class="form-control" type="range" min="<?php echo $min\_per; ?>" max="<?php echo $max\_per; ?>" />

<p class="text-center"><span id="period\_result"></span> dana</p>

<div class="form-group">

<button type="submit" class="btn btn-block"><i class="fa fa-search" aria-hidden="true"></i> Pronađi nekretninu</button>

</div>

</form>

</div>

</div>

</section>

**Deo koda na kome je primenjen OOP PHP. Korišten je za proveru email adrese zakupca prilikom slanja i samo slanje**

<?php

session\_start();

class Message{

const DB\_HOST = 'localhost';

const DB\_USER='tim';

const DB\_PASS='Xj3W3WLgQeQxOp6';

const DB\_NAME2='tim';

private $dbh1;

public function \_\_construct(){

try

{

$this->dbh1 = new PDO("mysql:host=".self::DB\_HOST.";dbname=".self::DB\_NAME2,self::DB\_USER, self::DB\_PASS,array(PDO::MYSQL\_ATTR\_INIT\_COMMAND => "SET NAMES 'utf8'"));

}

catch (PDOException $e)

{

exit("Error: " . $e->getMessage());

}

}

public function checkEmail($id) : string{

$sql = "SELECT email FROM user\_estate WHERE id\_estate=:id";

$dbh=$this->dbh1;

$query = $dbh -> prepare($sql);

$query->bindParam('id',$id,PDO::PARAM\_INT);

$query->execute();

$results=$query->fetchAll(PDO::FETCH\_OBJ);

return $results[0]->email;

}

public function sendEmail($email\_sender,$email\_receiver,$id\_estate,$message){

$sql = "INSERT INTO messages(email\_sender,email\_receiver,id\_estate,message) VALUES (:email\_sender,:email\_receiver,:id\_estate,:message)";

$dbh=$this->dbh1;

$query = $dbh -> prepare($sql);

$query->bindParam(':email\_sender',$email\_sender,PDO::PARAM\_STR);

$query->bindParam(':email\_receiver',$email\_receiver,PDO::PARAM\_STR);

$query->bindParam(':id\_estate',$id\_estate,PDO::PARAM\_INT);

$query->bindParam(':message',$message,PDO::PARAM\_STR);

$query->execute();

if($query->rowCount() > 0)

{

$\_SESSION['message\_send'] = 1;

header("Location: index.php");

}

}

}

$obj=new Message();

$email\_receiver = $obj->checkEmail($\_POST['id']);

$obj->sendEmail($\_POST['email\_sender'],$email\_receiver,$\_POST['id'],$\_POST['message']);

?>

**Primer primene AJAX-a. Provera prilikom registracije da li email adresa već postoji u sistemu. Odgovor i zahtev se šalje u JSON formatu**

<script>

document.getElementById("registerEmail").addEventListener("focusout", validation);

const regEmail=document.getElementById('registerEmail');

function validation() {

if(regEmail.value.trim().length==0){

hideErrorMessage(regEmail);

} else if (!isValidEmail(regEmail.value.trim())) {

showErrorMessage(regEmail, 'Email is in incorrect format!');

} else {

hideErrorMessage(regEmail);

exist();

}

}

function exist(){

let dbParam = JSON.stringify({"email":regEmail.value});

const xmlhttp = new XMLHttpRequest();

xmlhttp.onload = function() {

let respTxt = JSON.parse(this.responseText);

if(respTxt[0].length!=0) {

showErrorMessage(regEmail, respTxt[0]);

}

else {

hideErrorMessage(regEmail);

}

}

xmlhttp.open("POST", "emailLiveProvera.php");

xmlhttp.setRequestHeader("Content-type", "application/x-www-form-urlencoded");

xmlhttp.send("x=" + dbParam);

}

</script>

**...PHP odgovor**

<?php

header("Content-Type: application/json; charset=UTF-8");

$obj = json\_decode($\_POST["x"], false);

$conn = new mysqli("localhost", "tim", "Xj3W3WLgQeQxOp6", "tim");

$stmt = $conn->prepare("SELECT email FROM users WHERE email = ?");

$stmt->bind\_param("s", $obj->email);

$stmt->execute();

$stmt->store\_result();

if($stmt->num\_rows() > 0){

$rez=array('E-mail already in use');

echo json\_encode($rez);

}else

echo '';

**Kod za izdavanje nekretnine i slanje obaveštenja korisniku putem e-mail-a**

<div class="container-fluid">

<div class="row">

<div class="col-md-12">

<h3 class="page-title">Izdaj nekretninu</h3>

<form method="post" action="rent.php" enctype="multipart/form-data" class="form-horizontal" id="rent">

<input type="text" name="id" value="<?php echo $\_GET['id']; ?>" style="display: none">

<input type="text" name="days" value="<?php echo $\_GET['days']; ?>" style="display: none">

<div class="form-group">

<label for="email" class="col-sm-4 control-label">Email korisnika kome se izdaje nekretnina</label>

<div class="col-sm-4">

<input id="email" class="form-control white\_bg" type="text" name="email" placeholder="someone@domain.com">

<small></small>

</div>

</div>

<div class="form-group">

<div class="col-sm-8 col-sm-offset-4">

<input class="btn btn-primary" type="submit" value="izdaj nekretninu">

</div>

</div>

</form>

</div>

</div>

</div>

**...PHP deo**

<?php

session\_start();

use PHPMailer\PHPMailer\PHPMailer;

use PHPMailer\PHPMailer\SMTP;

use PHPMailer\PHPMailer\Exception;

require 'login/PHPMailer/src/Exception.php';

require 'login/PHPMailer/src/PHPMailer.php';

require 'login/PHPMailer/src/SMTP.php';

require\_once "login/config.php";

include('includes/config.php');

$sql\_query="SELECT \* FROM users WHERE email = :email";

$query= $dbh1 -> prepare($sql\_query);

$query->bindParam(':email',$\_POST['email']);

$query->execute();

if($query->rowCount() > 0 && $\_POST['email']!=$\_SESSION['username']) {

$sql = "INSERT INTO rented(email, email\_renter, id\_estate, rent\_end) VALUES (:email,:renter,:id\_estate,DATE\_ADD(now(),interval :n day))";

$query = $dbh1->prepare($sql);

$query->bindParam(':email', $\_POST["email"]);

$query->bindParam(':id\_estate', $\_POST["id"]);

$query->bindParam(':renter', $\_SESSION["username"]);

$query->bindParam(':n', $\_POST["days"]);

$query->execute();

$sql2 = "UPDATE estates SET status='izdato' WHERE id\_estate=:id";

$query2 = $dbh1->prepare($sql2);

$query2->bindParam(':id', $\_POST["id"]);

$query2->execute();

$token = bin2hex(random\_bytes(20));//createToken

try {

$sql3 = "INSERT INTO comments(email,comment\_token,id\_estate,active,granted\_posting,comment) VALUES (:email,:token,:id,'No',DATE\_ADD(now(),interval 14 day),'')";

$stmt = $dbh1->prepare($sql3);

$stmt->bindParam(':token', $token, PDO::PARAM\_STR);

$stmt->bindParam(':email', $\_POST["email"], PDO::PARAM\_STR);

$stmt->bindParam(':id', $\_POST["id"], PDO::PARAM\_INT);

$stmt->execute();

} catch (PDOException $e) {

exit("Error: " . $e->getMessage());

}

$phpmailer = new PHPMailer(true);

try {

$phpmailer->isSMTP();

$phpmailer->Host = 'mail.tim.stud.vts.su.ac.rs';

$phpmailer->SMTPAuth = true;

$phpmailer->Port = 587;

$phpmailer->Username = 'tim';

$phpmailer->Password = 'Xj3W3WLgQeQxOp6';

$phpmailer->setFrom($\_SESSION["username"]);

$phpmailer->addAddress($\_POST["email"]);

$phpmailer->isHTML(true);

$phpmailer->Subject = "Informacija o izdavanju";

$phpmailer->Body = "Tražena nekretnina Vam je izdata na naznačeni vremenski period. Nakon 14 dana je moguće dodati komentar na ovom <a href='https://tim.stud.vts.su.ac.rs/post\_comment.php?token=$token'>linku</a>";

$phpmailer->send();

header("Location: list\_estates.php");

} catch (Exception $e) {

$message = "Message could not be sent. Mailer Error: {$phpmailer->ErrorInfo}";

}

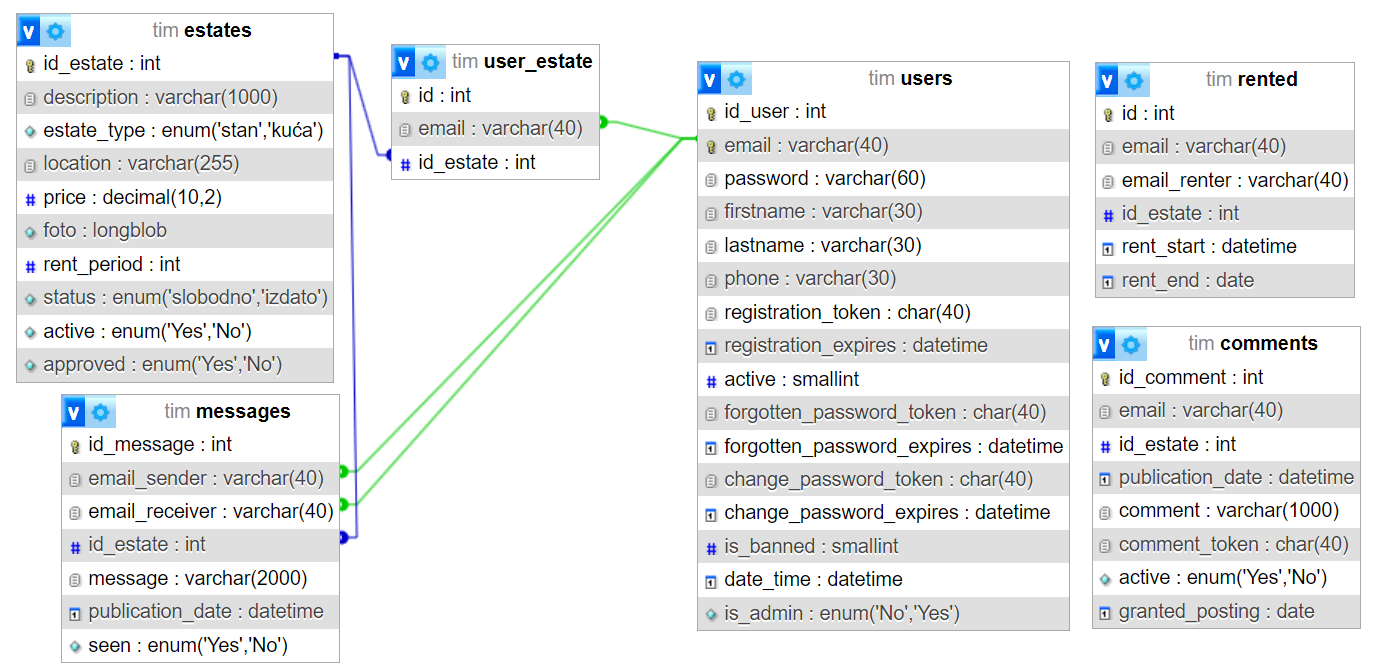
}else{

$\_SESSION['unknown\_usr']=1;

header("Location: rent\_property.php?id=".$\_POST['id']."&days=".$\_POST['days']);

}

**STRUKTURA BAZE PODATAKA (MySQL Workbench)**



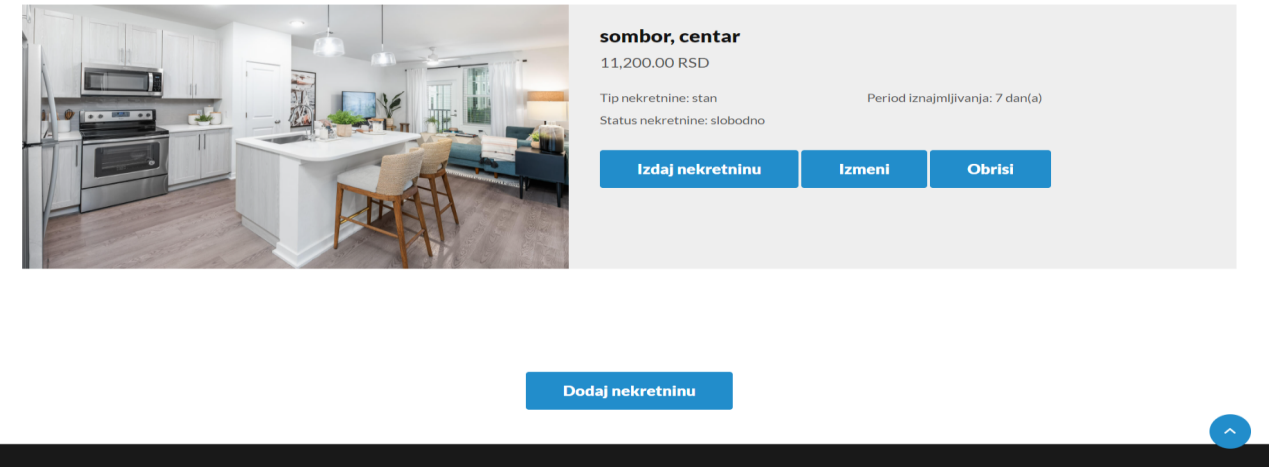
**OPIS FUNKCIONALNOSTI**

Dodavanje nekretnine

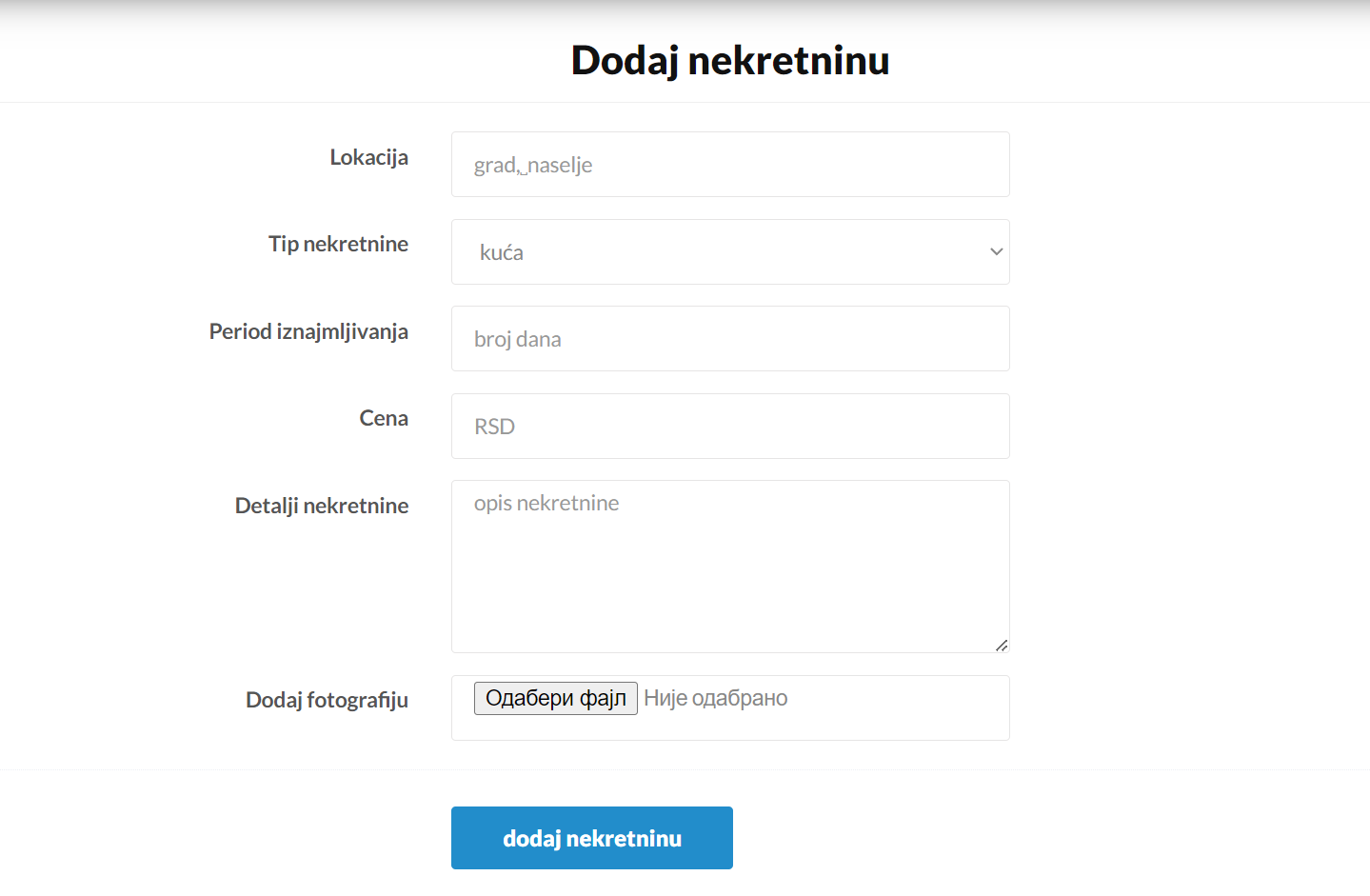
Potrebno je da registrovani korisnik odabere opciju “moje nekretnine” iz padajućeg menija.



Potom je potrebno skrolovati na dno stranice i kliknuti na dugme “Dodaj nekretninu”



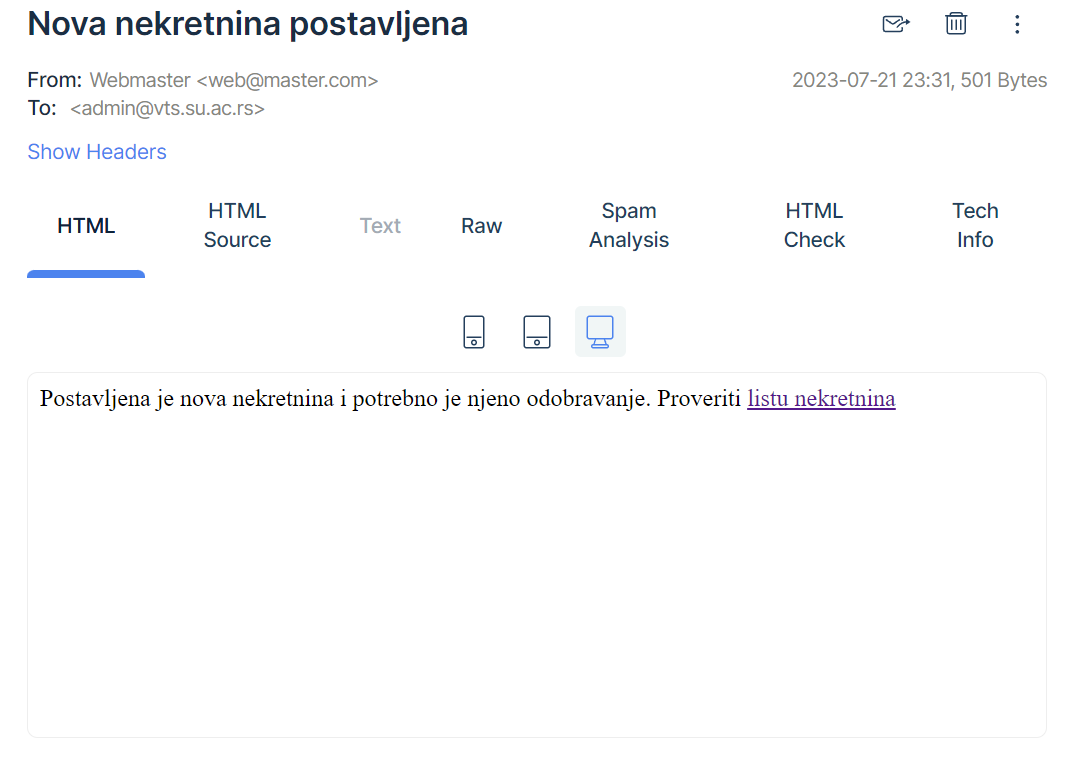
Potrebno je ispravno popuniti navedeni formular.



Da bi nekretnina bila vidljiva svim korisnicima nakon postavljanja potrebno je da administrator odobri nekretninu



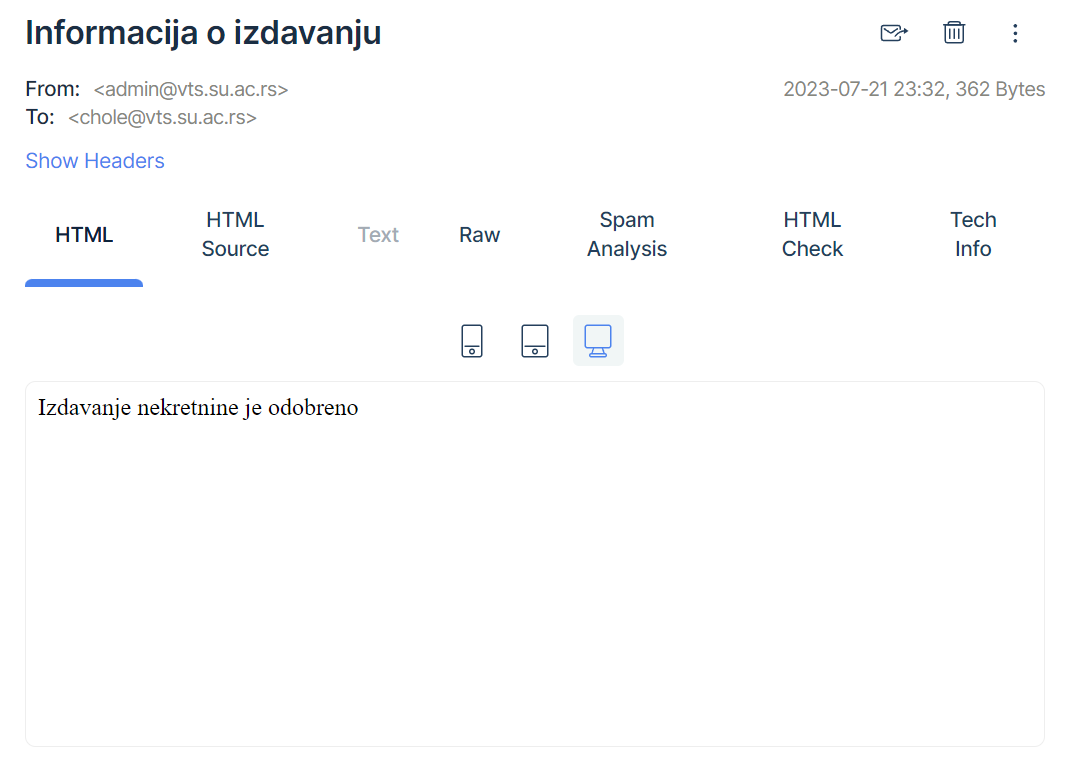
Admin dobija obaveštenje o postavljanju oglasa i potrebno je da ga odobri putem svog naloga



Admin može da izmeni, obriše i odobri nekretninu putem svog naloga



Korisnik dobija povratnu informaciju o odobravanju nekretnine.

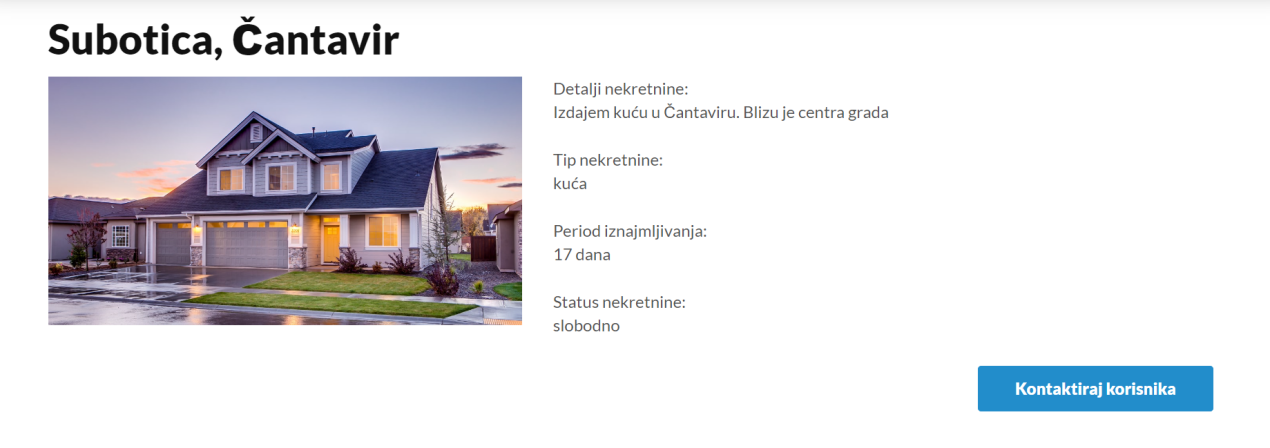


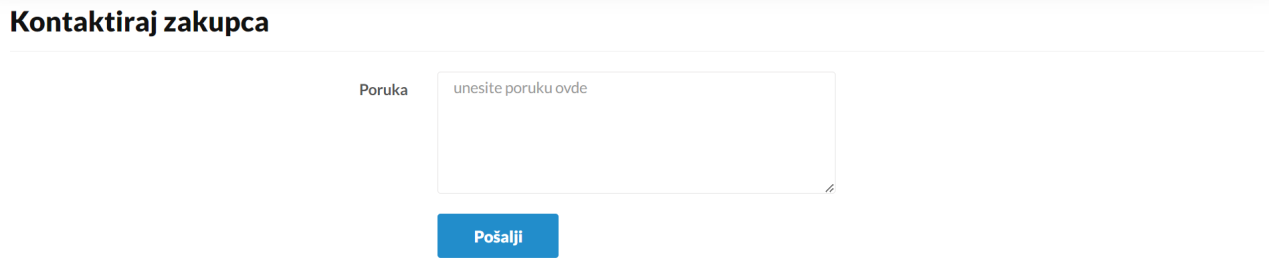
Kontaktiranje zakupca

Korisnik ima opciju da kontaktira zakupca nekretnine odabirom opcije detaljnije za nekretninu čiji ga detalji zanimaju na glavnoj stranici

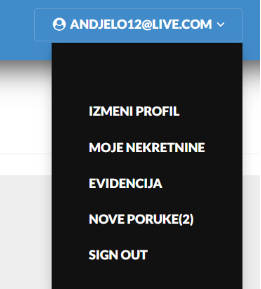


Nakon toga je potrebno izabrati opciju kontaktiraj korisnika





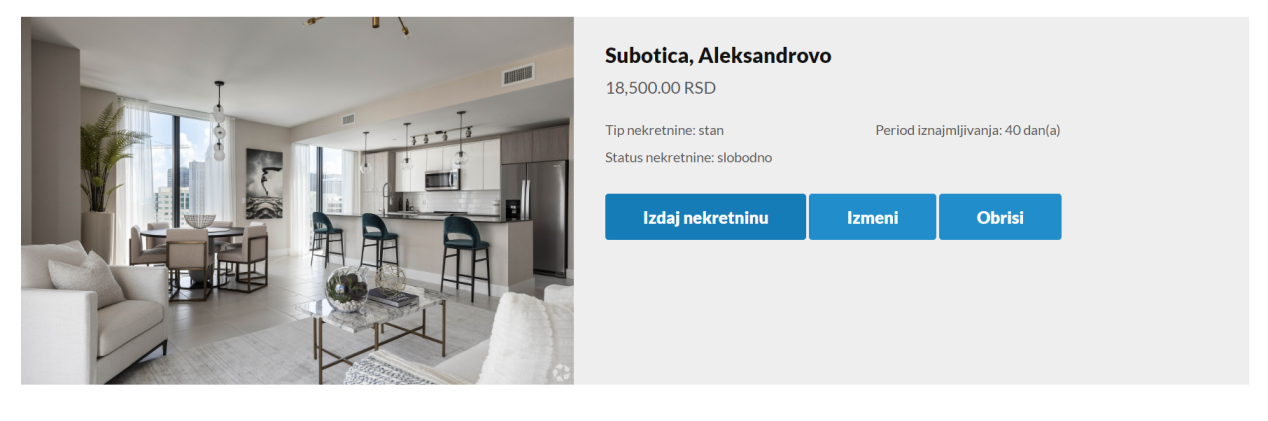
Zakupac ima opciju da pregleda nove poruke i da odgovri na njih

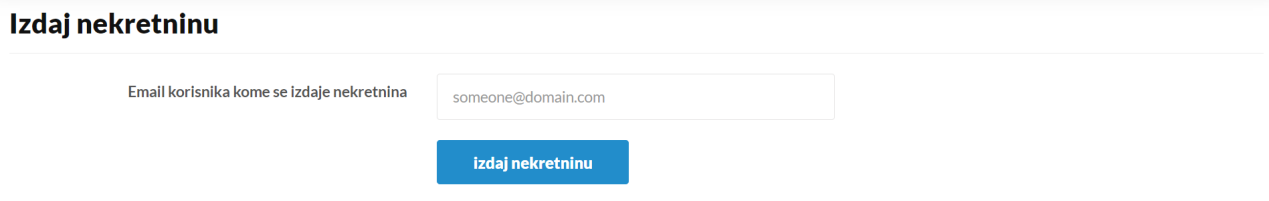




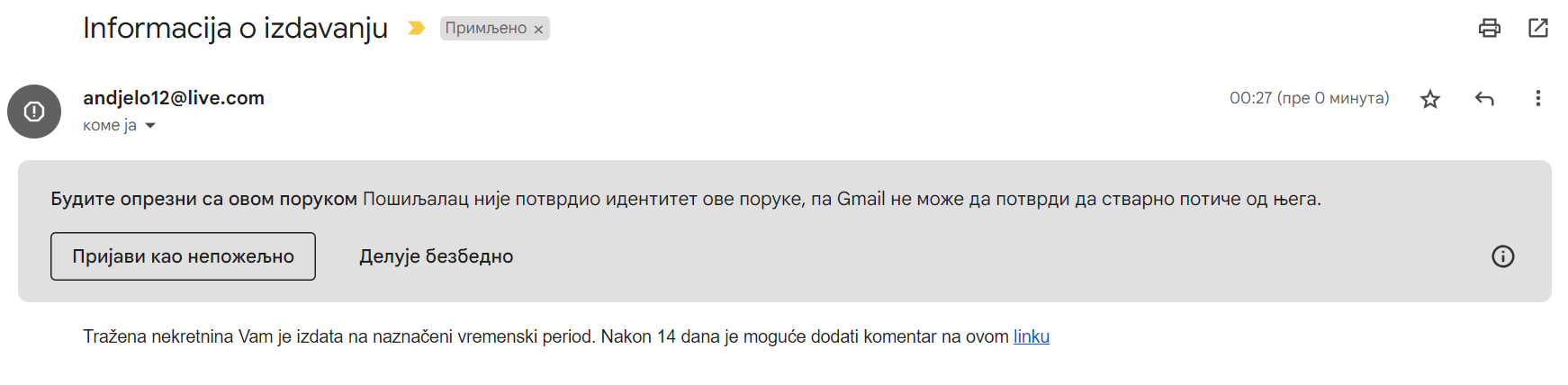
Iznajmljivanje nekretnine

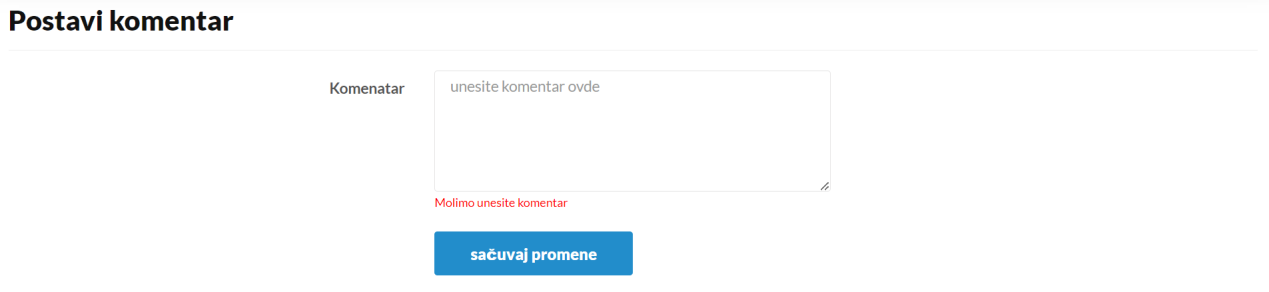
Potrebno je izabrati opciju izdaj nekretninu, a potom uneti email adresu korisnika kome želimo da izdamo nekretninu





Korisnik putem e-mail-a dobija povratnu informaciju o izdavanju i link putem kog može da postavi komentar 14 dana nakon izdavanja nekretnine.

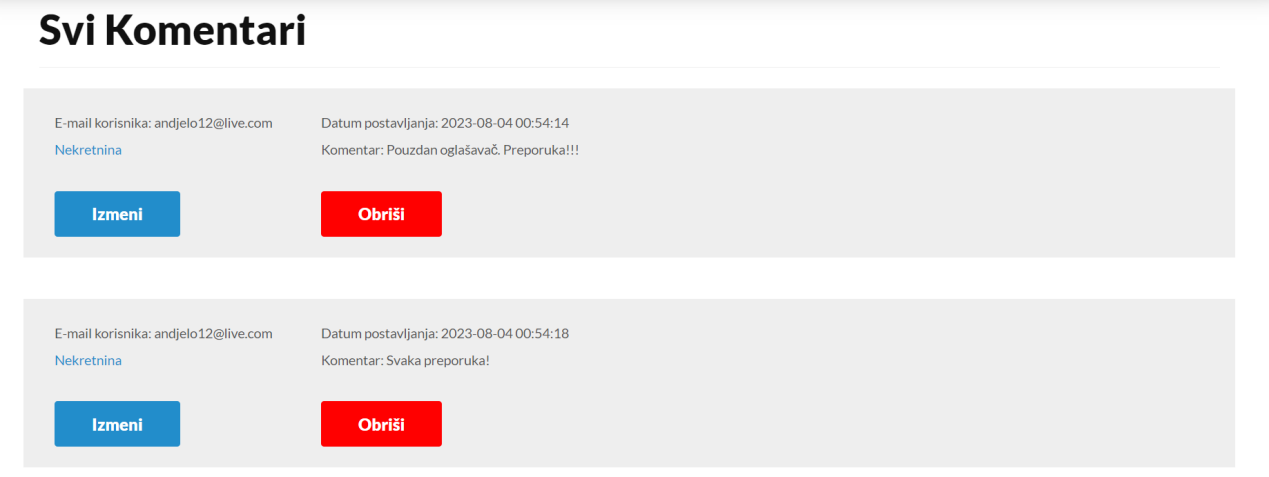




Evidenciju izdatih nekretnina je moguće pregledati u kategoriji evidencija



Administrator ima mogućnost izmene/brisanja komentara



**KORIŠĆENA LITERATURA (WEB IZVORI)**

W1. <https://www.youtube.com/watch?v=DW_OnZQPFTQ>

W2. <https://code-projects.org/car-rental-in-php-css-js-and-mysql-free-download/>

W3. <https://www.w3schools.com/js/js_ajax_intro.asp>

W4. <https://www.w3schools.com/js/js_json_intro.asp>

W5. <https://www.w3schools.com/php/php_oop_classes_objects.asp>