

Geografski informacioni sistemi

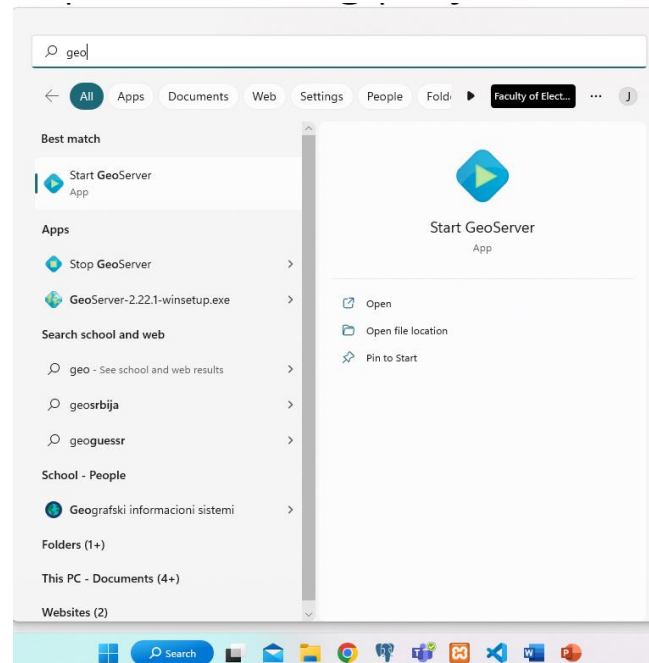
Projekat 2:OGC Geoprostorni Web servisi

Student: Jovan Krstic, 1511

Niš 2023

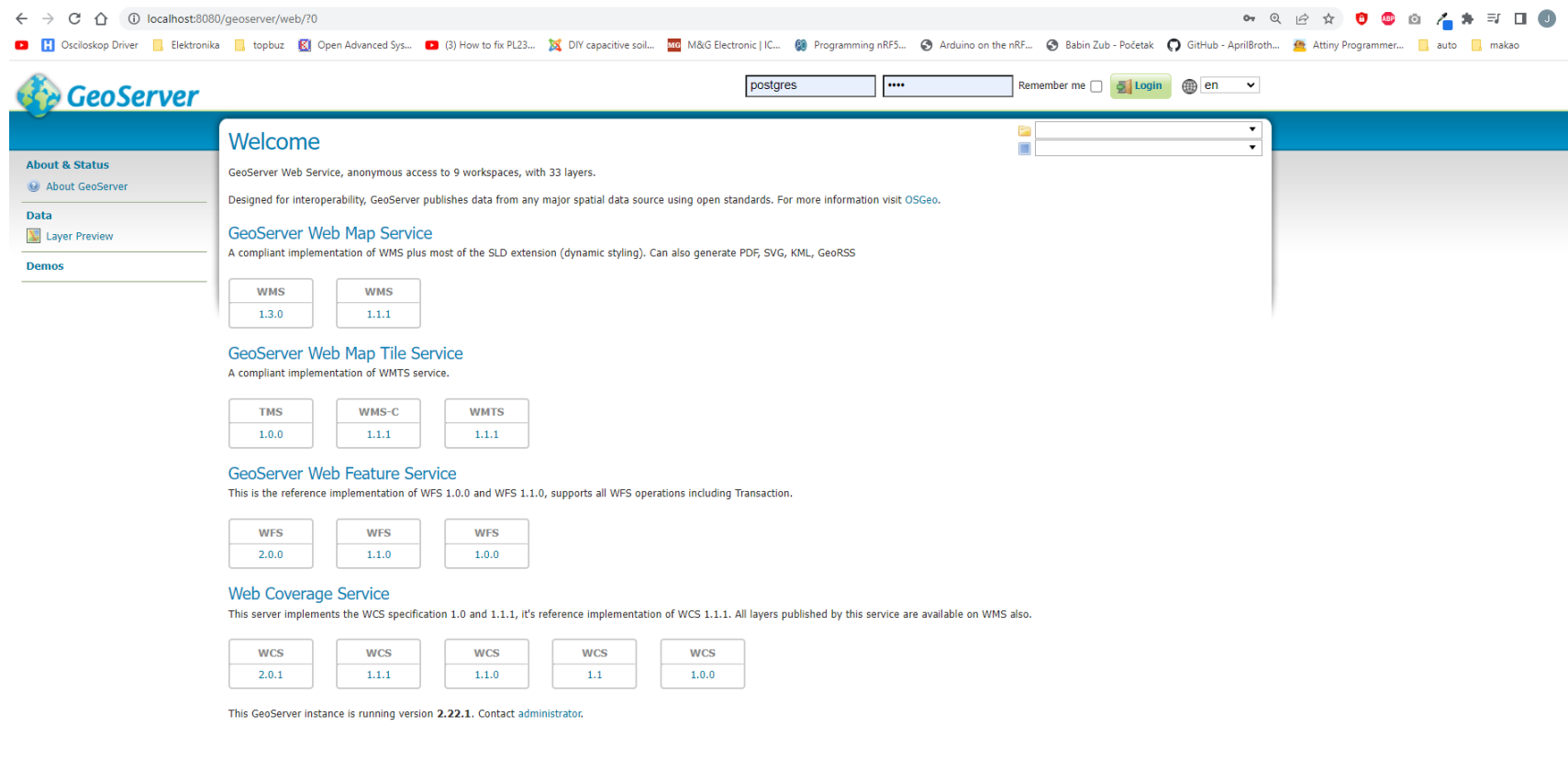
# Za potrebe ovog projekta bilo je potrebno instalirati Geoserver

Nakon instalacije jave i geoservera vrsimo pokretanje servra na sledeci način



# Konfiguraciju servera vrsimo pritupom na portal za administraciju

- Logovanje na portzalu vrsimo pomoc lozinke i korisnickog imena koje smo tokom instalacije uneli.



# Zatim kreiramo Workspaces na serveru

The screenshot displays the GeoServer web interface in a browser. The address bar shows the URL: `localhost:8080/geoserver/web/wicket/bookmarkable/org.geoserver.web.data.workspace.WorkspacePage?6&filter=false`. The browser's tab bar contains several open tabs, including "Oscilloskop Driver", "Elektronika", "topbuz", "Open Advanced Sys...", "(3) How to fix PL23...", "DIY capacitive soil...", "M&G Electronic | IC...", "Programming nRF5...", "Arduino on the nRF...", "Babin Zub - Početak", "GitHub - AprilBroth...", and "Attiny Program".

The GeoServer interface features a left-hand navigation menu with the following sections:

- About & Status**
  - Server Status
  - GeoServer Logs
  - Contact Information
  - About GeoServer
- Data**
  - Layer Preview
  - Workspaces
  - Stores
  - Layers
  - Layer Groups
  - Styles
- Services**
  - WMTS
  - WCS
  - WFS
  - WMS
- Settings**
  - Global
  - Image Processing
  - Raster Access
- Tile Caching**
  - Tile Layers
  - Caching Defaults
  - Gridsets
  - Disk Quota
  - BlobStores
- Security**
  - Settings
  - Authentication
  - Passwords
  - Users, Groups, Roles
  - Data
  - Services

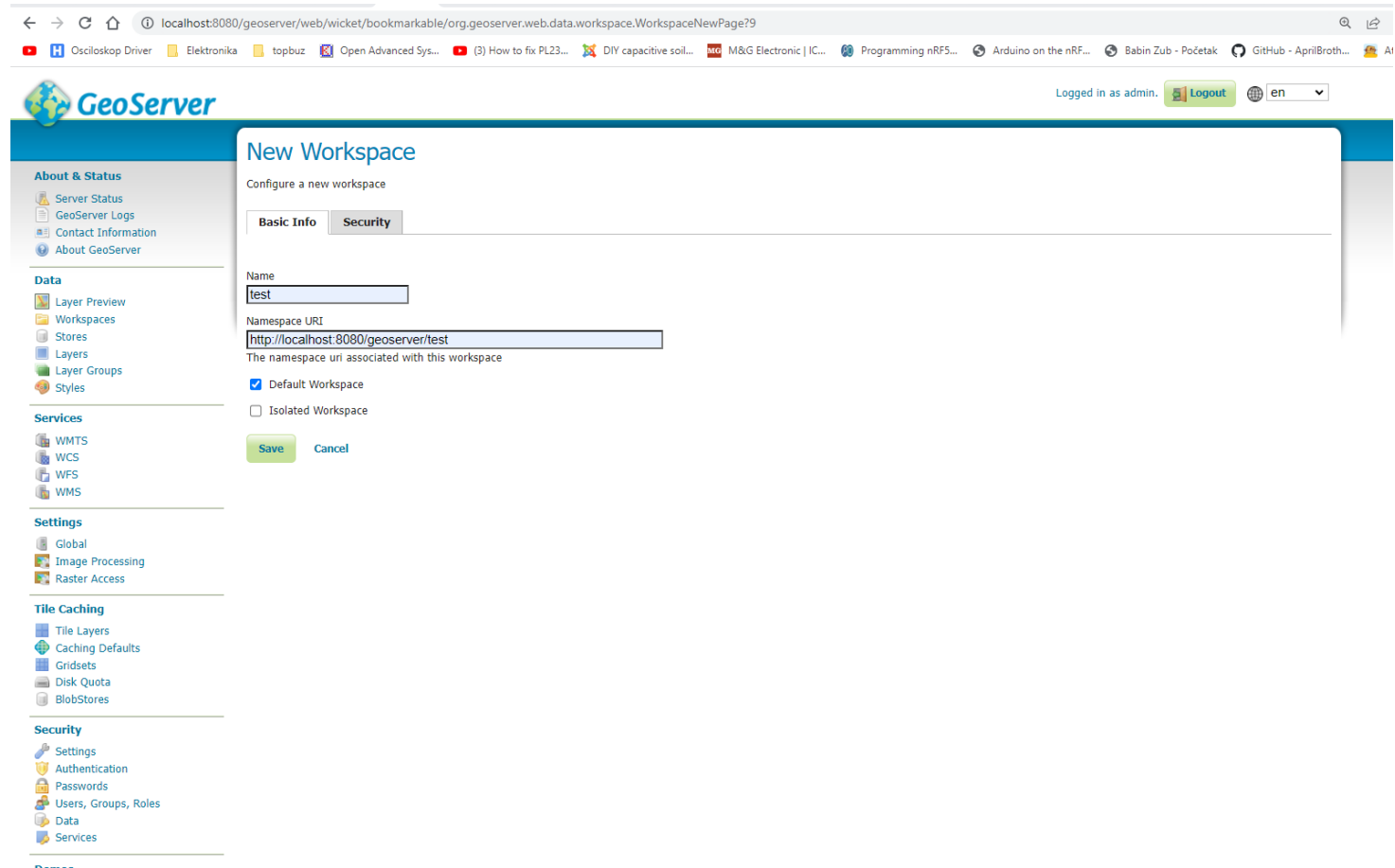
The main content area is titled "Workspaces" and includes the text "Manage GeoServer workspaces". It contains two buttons: "Add new workspace" (with a green plus icon) and "Remove selected workspace(s)" (with a red minus icon). Below these buttons is a pagination control showing "Results 1 to 9 (out of 9 items)".

A search bar with a magnifying glass icon and the text "Search" is located to the right of the pagination control.

<input type="checkbox"/>	Workspace Name	Default	Isolated
<input type="checkbox"/>	cite		
<input type="checkbox"/>	it.geosolutions		
<input type="checkbox"/>	ne		
<input type="checkbox"/>	nurc		
<input type="checkbox"/>	sde		
<input type="checkbox"/>	sf		
<input type="checkbox"/>	test	✓	
<input type="checkbox"/>	tiger		
<input type="checkbox"/>	topp		

Below the table, another pagination control shows "Results 1 to 9 (out of 9 items)".

# Primer kreiranja Workspaces



The screenshot displays the GeoServer web interface in a browser window. The address bar shows the URL: `localhost:8080/geoserver/web/wicket/bookmarkable/org.geoserver.web.data.workspace.WorkspaceNewPage?9`. The browser's tab bar includes several open tabs related to electronics and programming. The GeoServer logo is visible in the top left, and the user is logged in as 'admin' with a 'Logout' button and a language dropdown set to 'en'.

The left sidebar contains a navigation menu with the following sections:

- About & Status**
  - Server Status
  - GeoServer Logs
  - Contact Information
  - About GeoServer
- Data**
  - Layer Preview
  - Workspaces
  - Stores
  - Layers
  - Layer Groups
  - Styles
- Services**
  - WMTS
  - WCS
  - WFS
  - WMS
- Settings**
  - Global
  - Image Processing
  - Raster Access
- Tile Caching**
  - Tile Layers
  - Caching Defaults
  - Gridsets
  - Disk Quota
  - BlobStores
- Security**
  - Settings
  - Authentication
  - Passwords
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  - Services

The main content area is titled 'New Workspace' and contains the instruction 'Configure a new workspace'. It features two tabs: 'Basic Info' (selected) and 'Security'. The 'Basic Info' tab contains the following fields and options:

- Name:** A text input field containing the value 'test'.
- Namespace URI:** A text input field containing the value `http://localhost:8080/geoserver/test`. Below this field is the text: 'The namespace uri associated with this workspace'.
- Default Workspace:** A checked checkbox.
- Isolated Workspace:** An unchecked checkbox.
- Buttons:** 'Save' (green) and 'Cancel' (grey).

# Kada smo kreirali Workspaces vrsimo poveyivanje sa PostgreSQL dodavanjem Stores-a

localhost:8080/geoserver/web/wicket/bookmarkable/org.geoserver.web.data.store.StorePage?10&filter=false

Oscilloskop Driver Elektronika topbuz Open Advanced Sys... (3) How to fix PL23... DIY capacitive soil... M&G Electronic | IC... Programming nRF... Arduino on the nRF... Babin Zub - Početak GitHub - AprilBroth... Attiny Progr

Logged in as admin. Logout en

## GeoServer

### Stores

Manage the stores providing data to GeoServer

[Add new Store](#) [Remove selected Stores](#)

<< < 1 > >> Results 1 to 12 (out of 12 items) Search

<input type="checkbox"/>	Data Type	Workspace	Store Name	Type	Enabled?
<input type="checkbox"/>		ne	GeoPackageSample	GeoPackage	✓
<input type="checkbox"/>		nurc	arcGridSample	ArcGrid	✓
<input type="checkbox"/>		nurc	img_sample2	WorldImage	✓
<input type="checkbox"/>		nurc	mosaic	ImageMosaic	✓
<input type="checkbox"/>		tiger	nyc	Directory of spatial files (shapefiles)	✓
<input type="checkbox"/>		sf	sf	Directory of spatial files (shapefiles)	✓
<input type="checkbox"/>		sf	sfdem	GeoTIFF	✓
<input type="checkbox"/>		topp	states_shapefile	Shapefile	✓
<input type="checkbox"/>		topp	taz_shapes	Directory of spatial files (shapefiles)	✓
<input type="checkbox"/>		test	test	PostGIS	✓
<input type="checkbox"/>		test	test1	PostGIS	✓
<input type="checkbox"/>		nurc	worldImageSample	WorldImage	✓

<< < 1 > >> Results 1 to 12 (out of 12 items)

#### About & Status

- Server Status
- GeoServer Logs
- Contact Information
- About GeoServer

#### Data

- Layer Preview
- Workspaces
- Stores
- Layers
- Layer Groups
- Styles

#### Services

- WMTS
- WCS
- WFS
- WMS

#### Settings

- Global
- Image Processing
- Raster Access

#### Tile Caching

- Tile Layers
- Caching Defaults
- Gridsets
- Disk Quota
- BlobStores

#### Security

- Settings
- Authentication
- Passwords
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- Data
- Services

#### Demos

# Dodavanje Stores-a

localhost:8080/geoserver/web/wicket/bookmarkable/org.geoserver.web.data.store.DataAccessEditPage?11&storeName=test&wsName=test

Logged in as admin. Logout en

## GeoServer

### Edit Vector Data Source

Edit an existing vector data source

PostGIS  
PostGIS Database

#### Basic Store Info

Workspace \*

test

Data Source Name \*

test

Description

test

☒ Enabled

☐ Auto disable on connection failure

#### Connection Parameters

host \*

localhost

port \*

5432

database

gisproba

schema

public

user \*

postgres

passwd

.....

Namespace \*

http://localhost:8080/geoserver/test

☐ Expose primary keys

max connections

10

Save Apply Cancel



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- Demos

Sada je potrebno publikovati slojeve na geoserveru koji se nalaze u bazi i predhodnog projekta

## Layers

Manage the layers being published by GeoServer

 Add a new layer  Remove selected layers

      Results 1 to 25 (out of 27 items)



# Publikovati slojeve na geoserveru

The screenshot displays the GeoServer web interface. At the top, the GeoServer logo is on the left, and the user is logged in as 'admin' with a 'Logout' button and a language dropdown set to 'en'. The left sidebar contains a navigation menu with sections: 'About & Status' (Server Status, GeoServer Logs, Contact Information, About GeoServer), 'Data' (Layer Preview, Workspaces, Stores, Layers, Layer Groups, Styles), 'Services' (WMTS, WCS, WFS, WMS), 'Settings' (Global, Image Processing, Raster Access), 'Tile Caching' (Tile Layers, Caching Defaults, Gridsets, Disk Quota, BlobStores), 'Security' (Settings, Authentication, Passwords, Users, Groups, Roles, Data, Services), 'Demos', and 'Tools'.

The main content area is titled 'Edit Layer' and includes the subtitle 'Edit layer data and publishing'. The layer being edited is 'test:gis\_osm\_water\_a\_free\_1'. Below this, there's a tabbed interface with 'Data', 'Publishing', 'Dimensions', 'Tile Caching', and 'Security'. The 'Publishing' tab is active, showing 'Basic Resource Info'. It includes fields for 'Store Name' (test1), 'Native Name' (gis\_osm\_water\_a\_free\_1), 'Name' (gis\_osm\_water\_a\_free\_1), 'Enabled' (checked), 'Advertised' (checked), 'Title' (gis\_osm\_water\_a\_free\_1), and 'Abstract' (gis\_osm\_water\_a\_free\_1). There is a large text area for the abstract. Below this is the 'Keywords' section, which shows 'Current Keywords' (features, gis\_osm\_water\_a\_free\_1) and a 'Remove selected' button. It also has a 'New Keyword' section with a text input and a dropdown menu, and a 'Vocabulary' section with a text input and an 'Add Keyword' button. The 'Metadata links' section shows 'No metadata links so far'. At the bottom, there are 'Save', 'Apply', and 'Cancel' buttons.

# Primer uspesno publikovanih slojeva

localhost:8080/geoserver/web/wicket/bookmarkable/org.geoserver.web.data.layer.NewLayerPage?54

Logged in as admin. Logout en

## GeoServer

### About & Status

- Server Status
- GeoServer Logs
- Contact Information
- About GeoServer

### Data

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- Layer Groups
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### Services

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- WFS
- WMS

### Settings

- Global
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- Raster Access

### Tile Caching

- Tile Layers
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- BlobStores

### Security

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- Data
- Services

### Demos

## New Layer

Add a new layer

Add layer from

You can create a new feature type by manually configuring the attribute names and types. [Create new feature type...](#)  
On databases you can also create a new feature type by configuring a native SQL statement. [Configure new SQL view...](#)  
Here is a list of resources contained in the store 'test1'. Click on the layer you wish to configure

<< < 1 > >> Results 0 to 0 (out of 0 items) Search

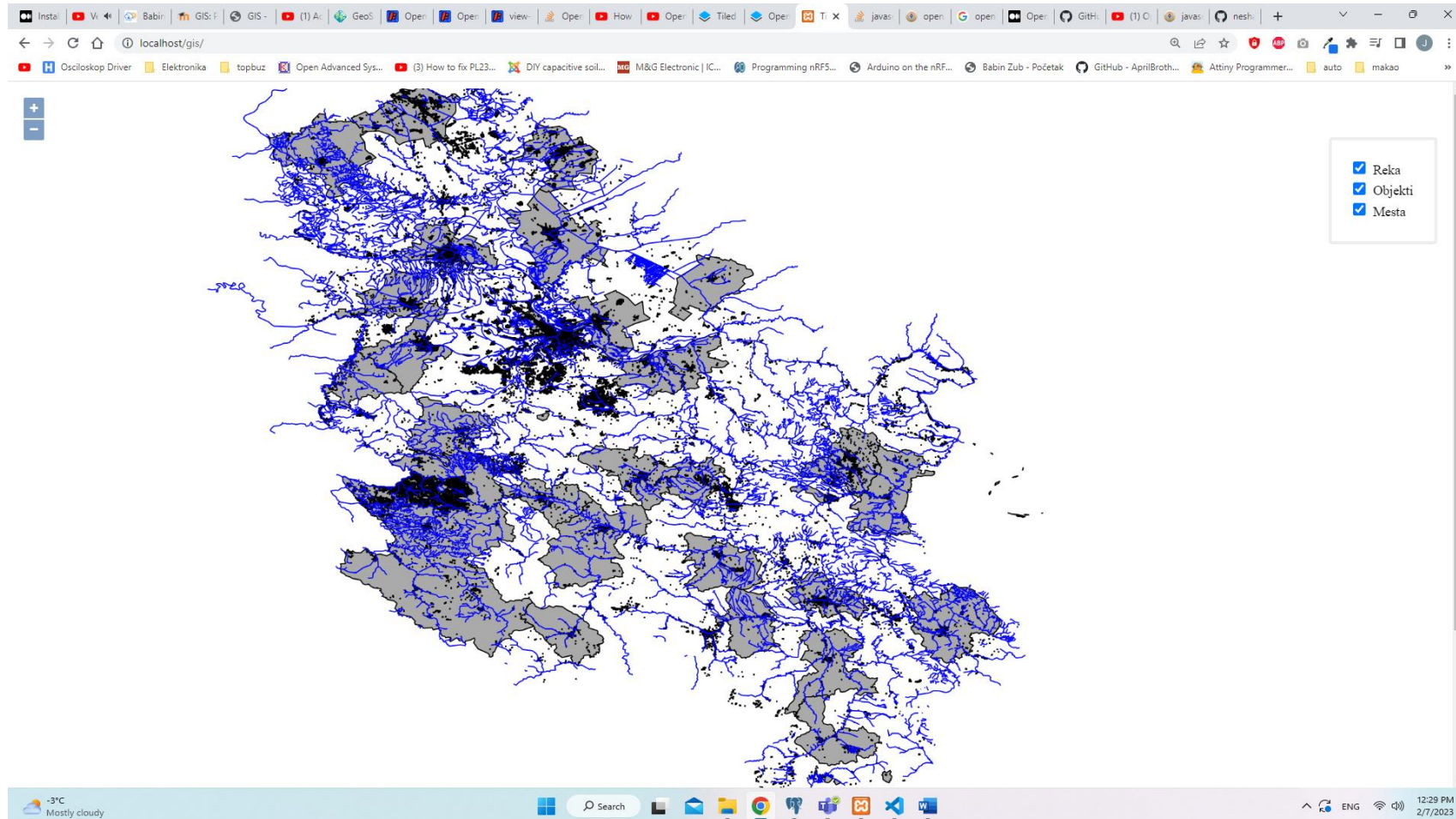
Published	Layer name	Action
✓	gis_osm_buildings_a_free_1	Publish again
✓	gis_osm_landuse_a_free_1	Publish again
✓	gis_osm_natural_a_free_1	Publish again
✓	gis_osm_places_a_free_1	Publish again
	gis_osm_natural_free_1	Publish
	gis_osm_places_free_1	Publish
	gis_osm_pofw_a_free_1	Publish
	gis_osm_pofw_free_1	Publish
	gis_osm_pois_a_free_1	Publish
	gis_osm_pois_free_1	Publish
	gis_osm_railways_free_1	Publish
	gis_osm_roads_free_1	Publish
	gis_osm_traffic_a_free_1	Publish
	gis_osm_traffic_free_1	Publish
	gis_osm_transport_a_free_1	Publish
	gis_osm_transport_free_1	Publish
	gis_osm_water_a_free_1	Publish
	gis_osm_waterways_free_1	Publish
	nisline	Publish
	nispoin	Publish
	nispoly	Publish

<< < 1 > >> Results 0 to 0 (out of 0 items)

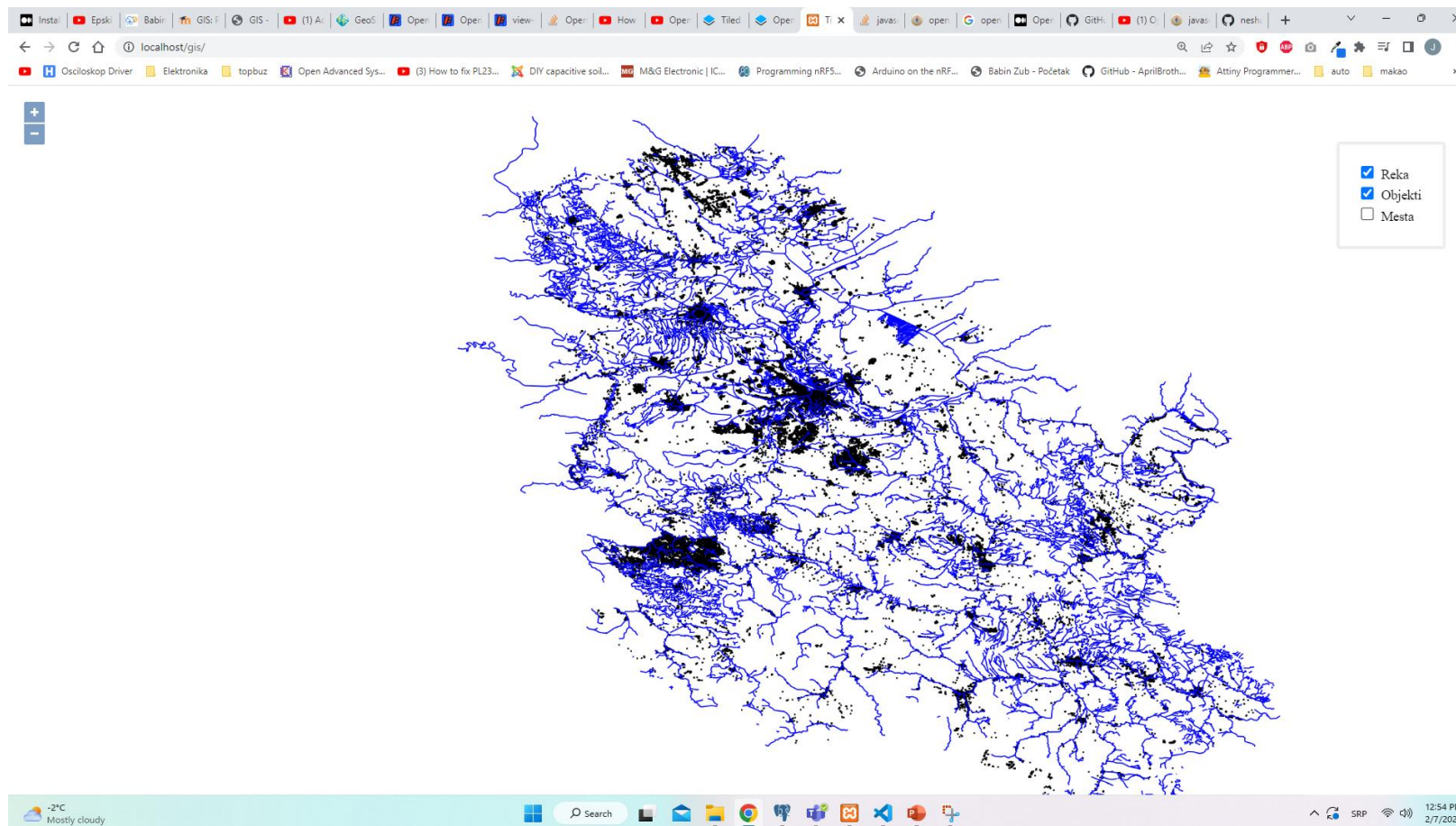
# Kada smo izvršili konfiguraciju servera možemo kreirati našu aplikaciju

- Za izradu aplikacije opredelili smo se za OpenLayers javascript biblioteku.

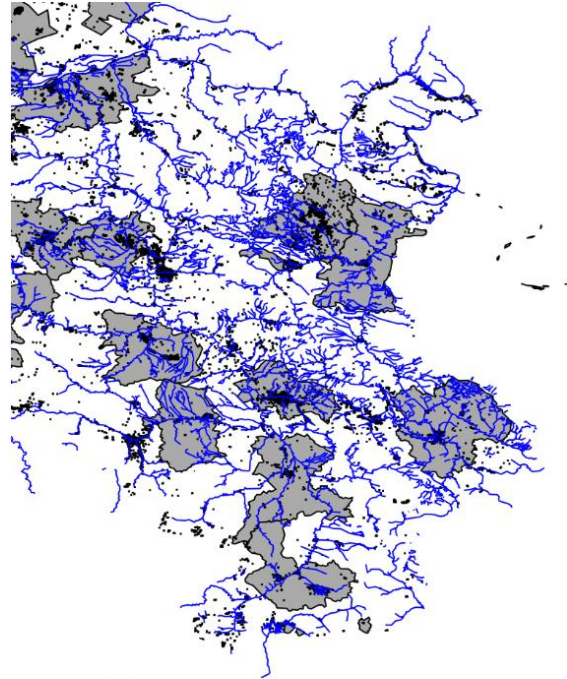
# Izgled aplikacije sa svim slojevima prikazanim



# Prikaz samo sloja reka i objekata



# Prikaz informacija o objektu kliknutom na mapi



23.44182, 44.86612

osm_id	code	fclass	name	type
38375843	1500	building	Библиотека „Стеван Сремац“	
87497658	1500	building	Галеб Група	