



dreamstime.com

# Pametni telefoni u nastavi geografije

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# Poznate slike ?



# Malo statistike

- Mladi u uzrastu između 18 i 25 godina koriste pametni telefon u prosjeku tri i po sata dnevno
- Više od jednog sata dnevno otpada na chat-aplikacije (kao WhatsApp).
- Na drugom mjestu, sa 44 minuta dnevno, nalaze se društvene mreže (Facebook).
- Klasične funkcije mobilnog telefona, dakle telefoniranje i pisanje SMS-poruka, imaju sada sasvim sporednu ulogu: na njih odlazi u prosjeku samo 13 minuta dnevno.

Istraživanje iz rujna 2013. (Njemačka)

# Poslovica...

**Ako ih ne možeš pobijediti, onda im se pridruži**

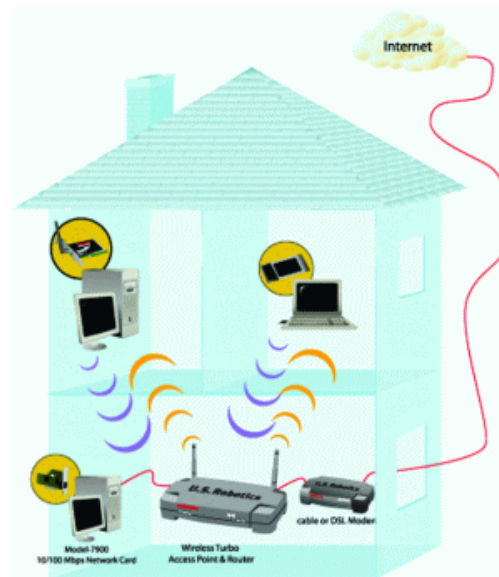


# Što je *smartphone* ili pametni telefon ?

- mobilni telefon s većim mogućnostima za pohranu podataka i povezanosti, koji se može koristiti i kao džepno računalo
- ima zaslon na dodir visoke razlučivosti
- **korisnicima pružaju mogućnost instaliranja dodatnih aplikacija**
- višezadaćne (multitasking) funkcije
- pristup internetu preko WiFi ili 3G mreže
- GPS navigacija

# WiFi ili 3G mreže ?

- WiFi – radi na malim udaljenostima i najčešće je nadgradnja lokalne mreže kod kuće ili u školi radi jednostavnijeg korištenja računala. Podaci od pristupne točke idu po žičanoj infrastrukturi, što znači da je besplatno/jeftino



# WiFi ili 3G mreže ?

- 3G – radi na velikim udaljenostima, brzina je promjenjiva i korištenje se naplaćuje od strane mobilnih operatera



# Vrste pametnih telefona

- Podjela po operativnom sustavu:
  - Android
  - iOS
  - Windows Phone
  - Blackberry ?...

# Android



# iOS

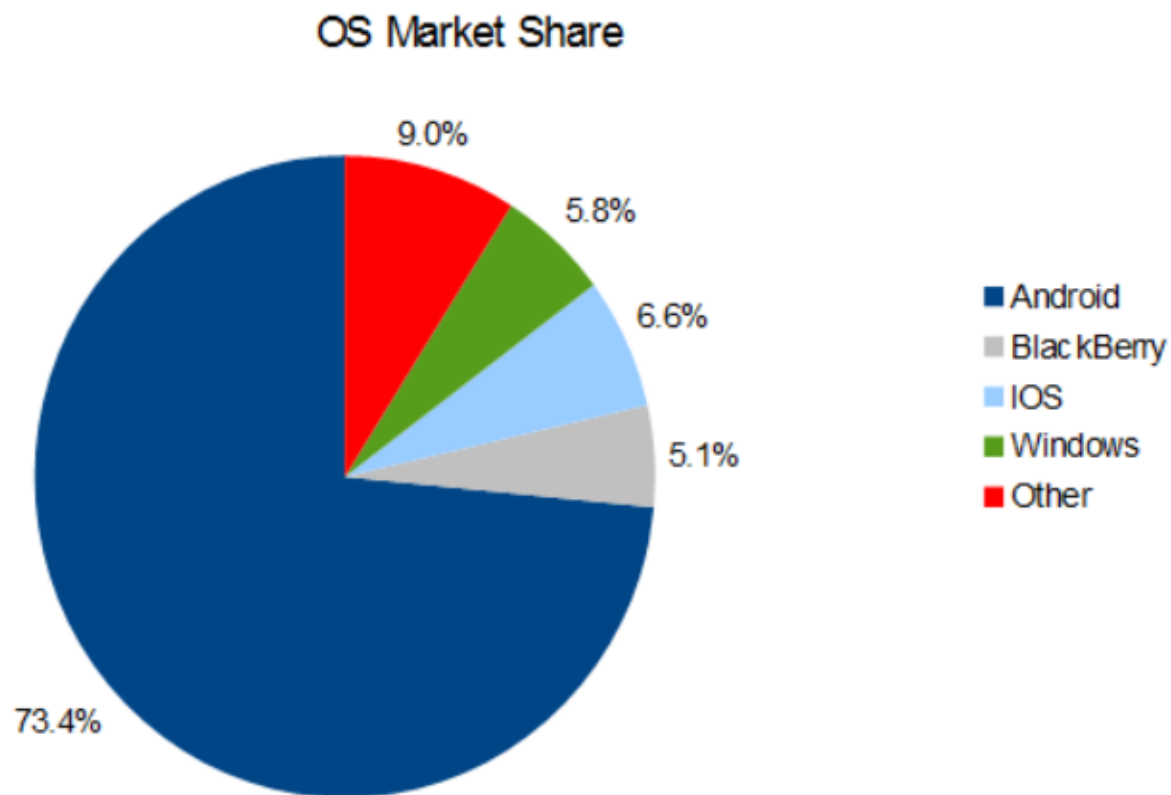


# Windows Phone



# Zastupljenost ?

**Brazil, Argentina, Mexico smartphone OS market share (Q3 2013)**



# Android !



# Programmi:

- **Earth**
- **Karte**
- **Foursquare**
- **GPSLogger**
- **Smart tools**
- **c:geo**



# Programi:

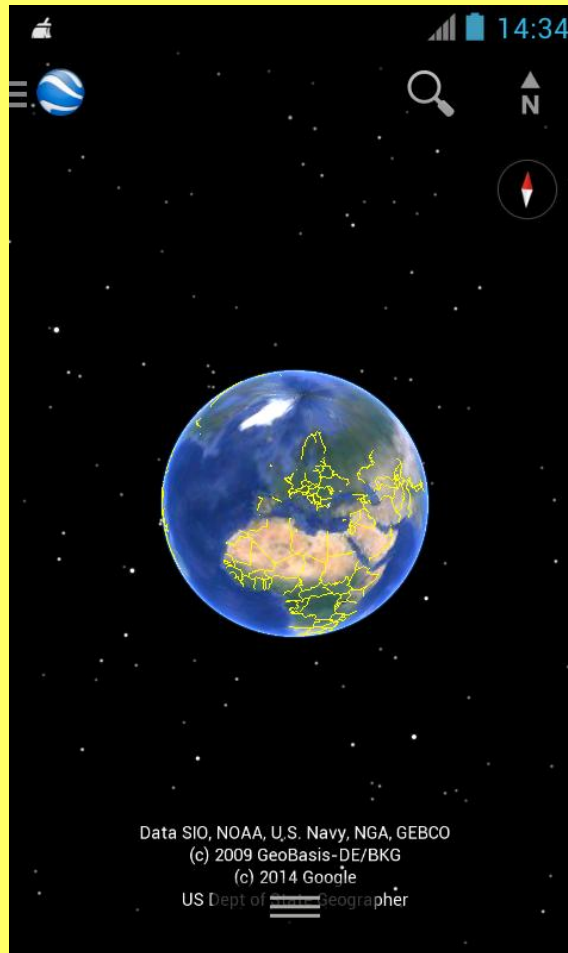
- **Besplatni !**
- **Jednostavno se instaliraju !**
- **Različite namjene**



# Earth



# „Google” earth



# Upute 1/3

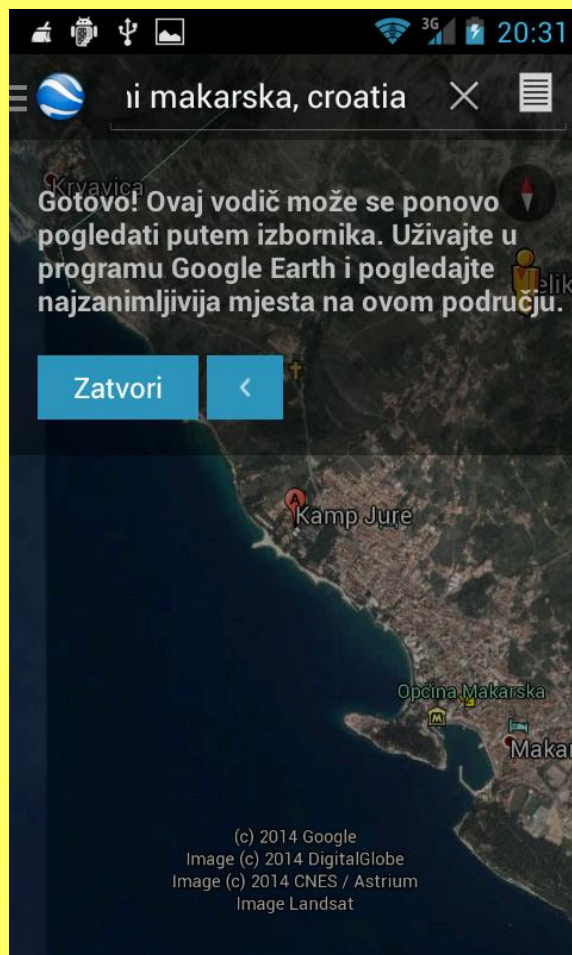


# Upute 2/3

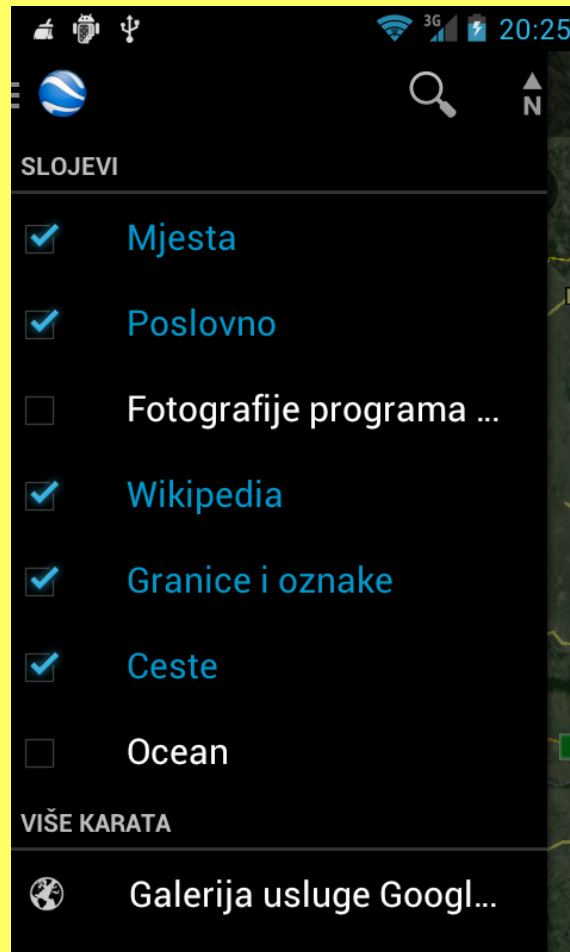


# Upute 3/3

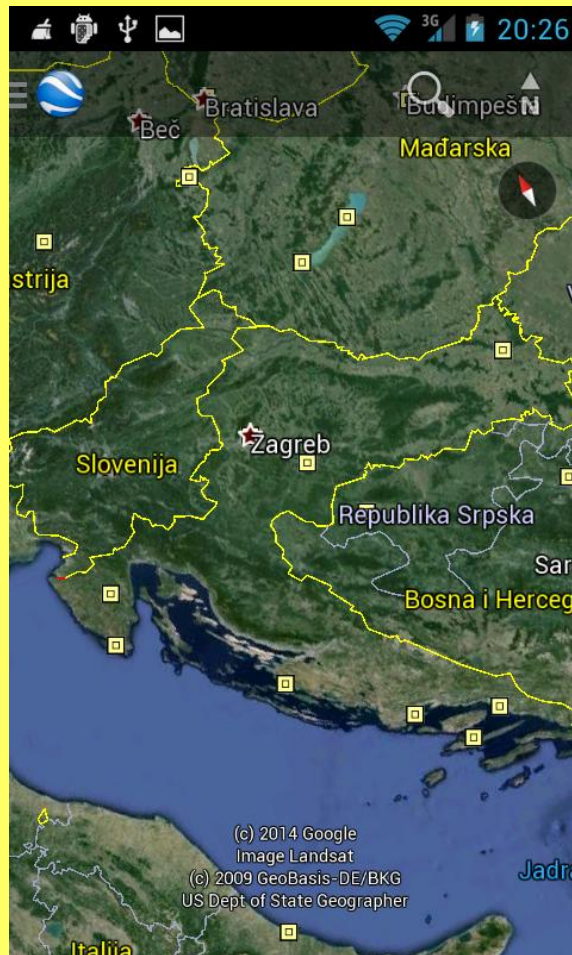




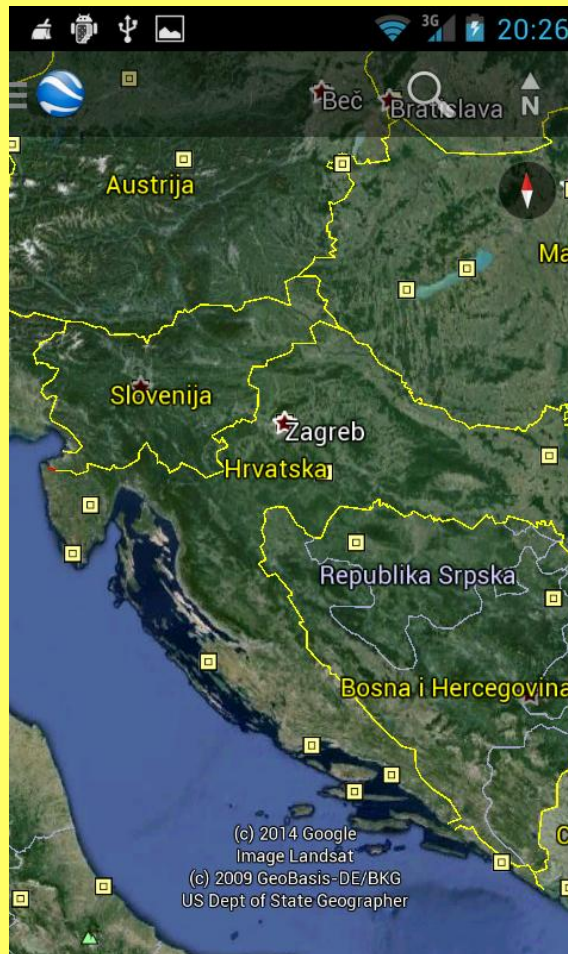
# SLOJEVI



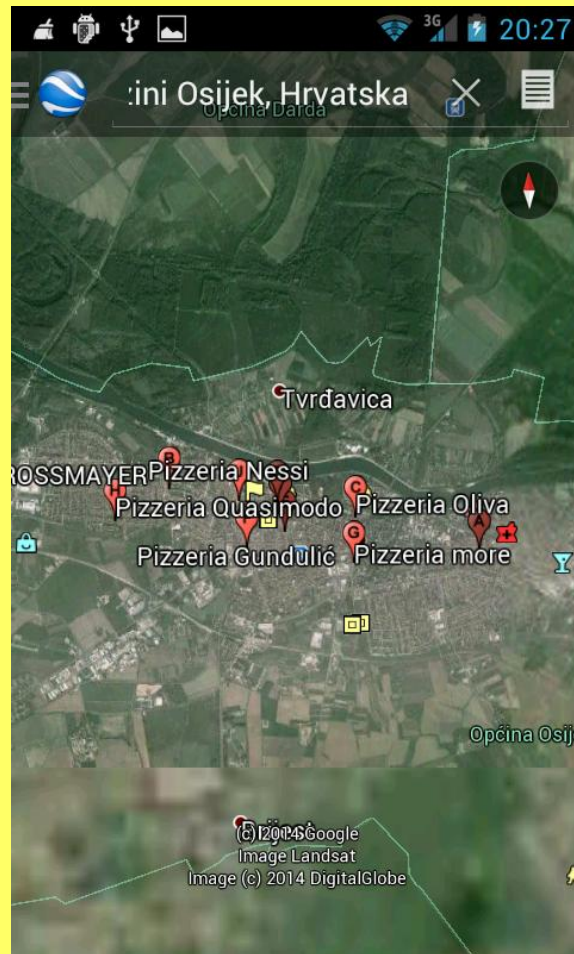
# Postavljanje sjevera



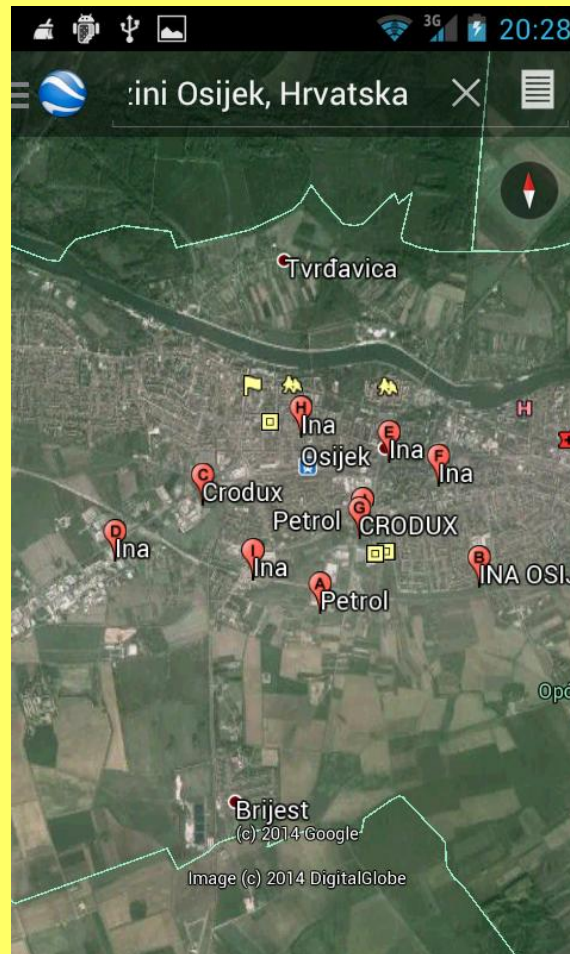
# Sjever je gore...



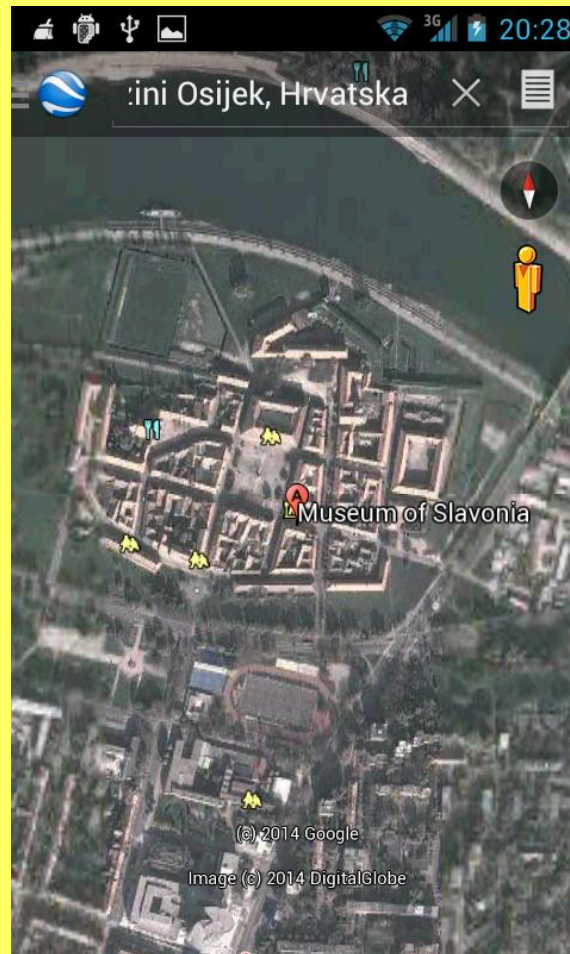
# Traženje: Pizza u blizini Osijek, Croatia



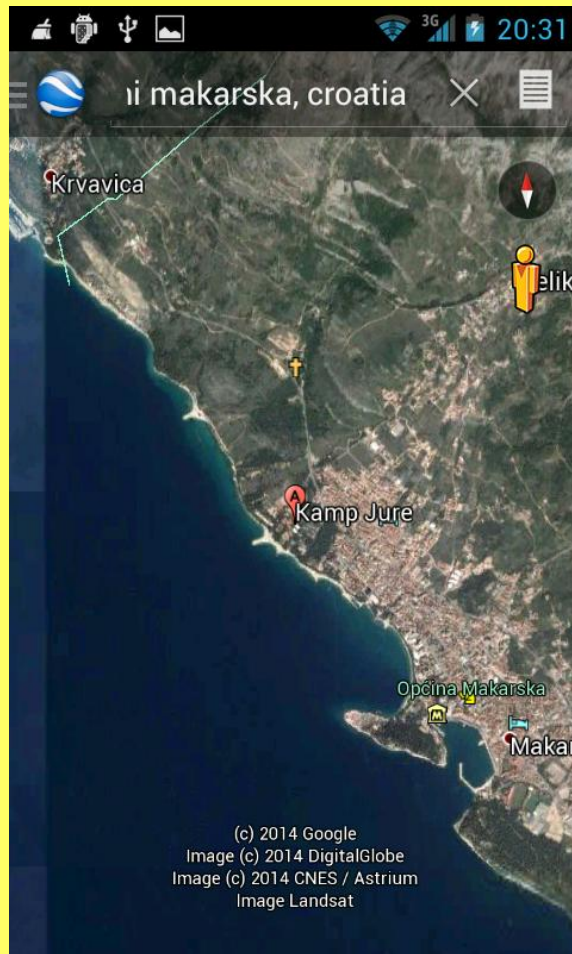
# Traženje: Gas station u blizini Osijek, Croatia



# Traženje: Musseum u blizini Osijek, Croatia



# Traženje: Autocamp u blizini Makarska, Croatia

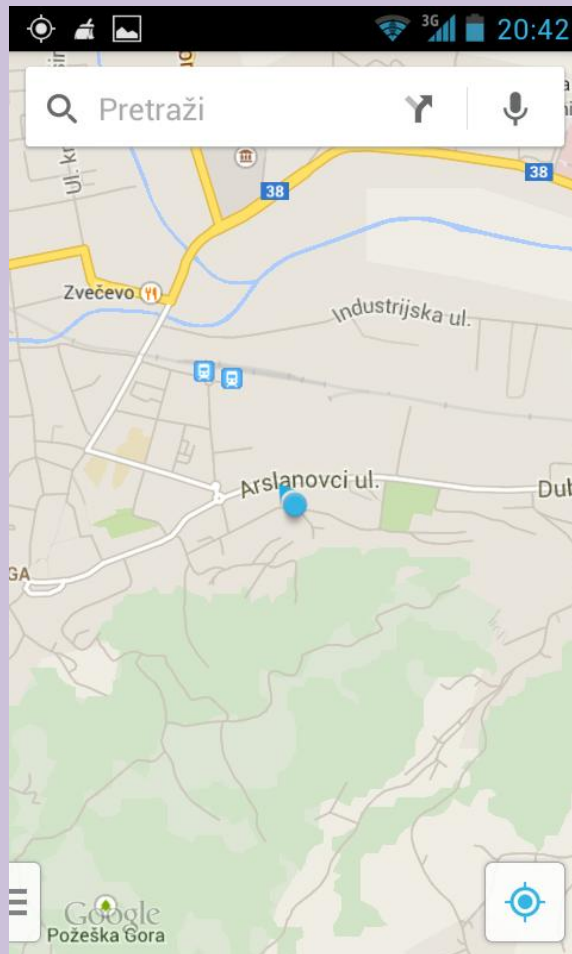


# Google earth

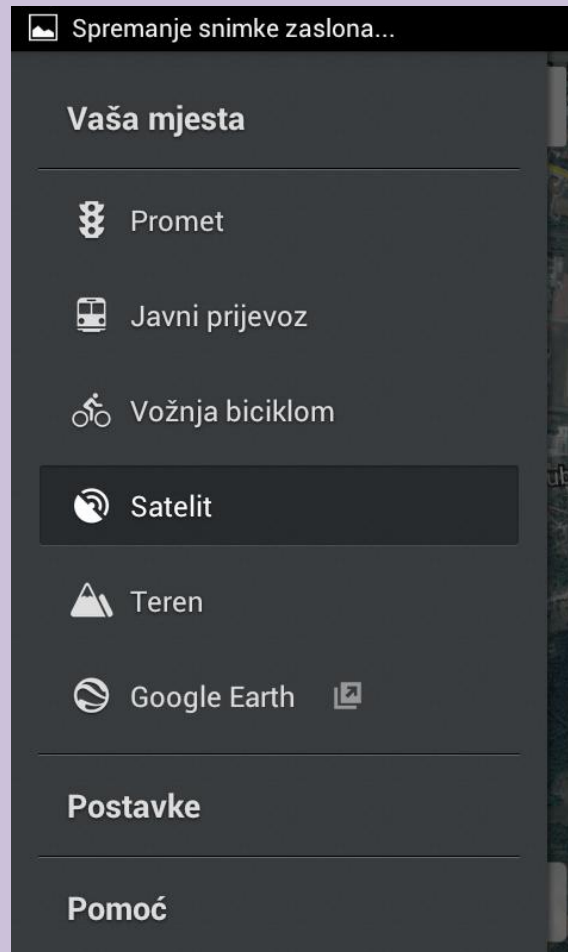
- A gdje je Google Maps ?



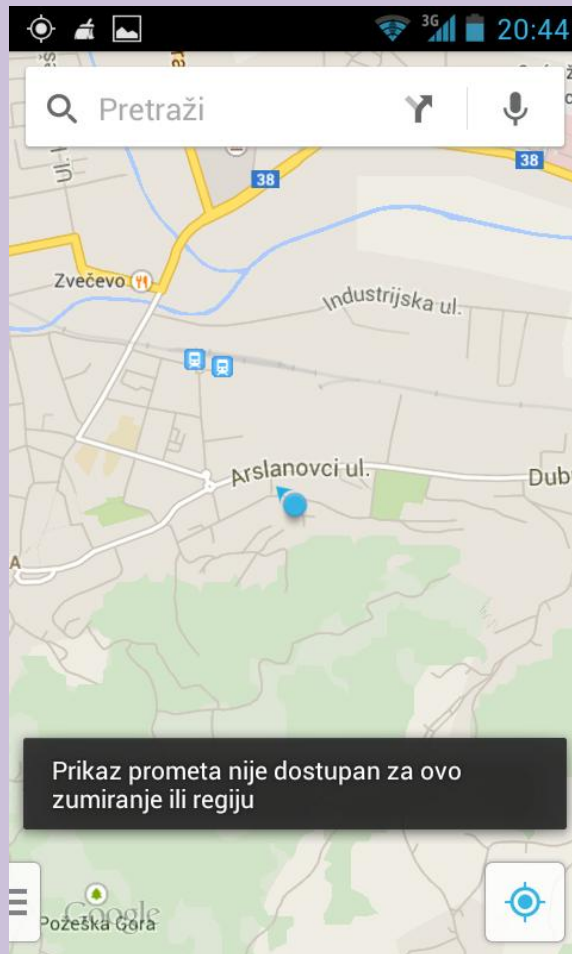
# Karte



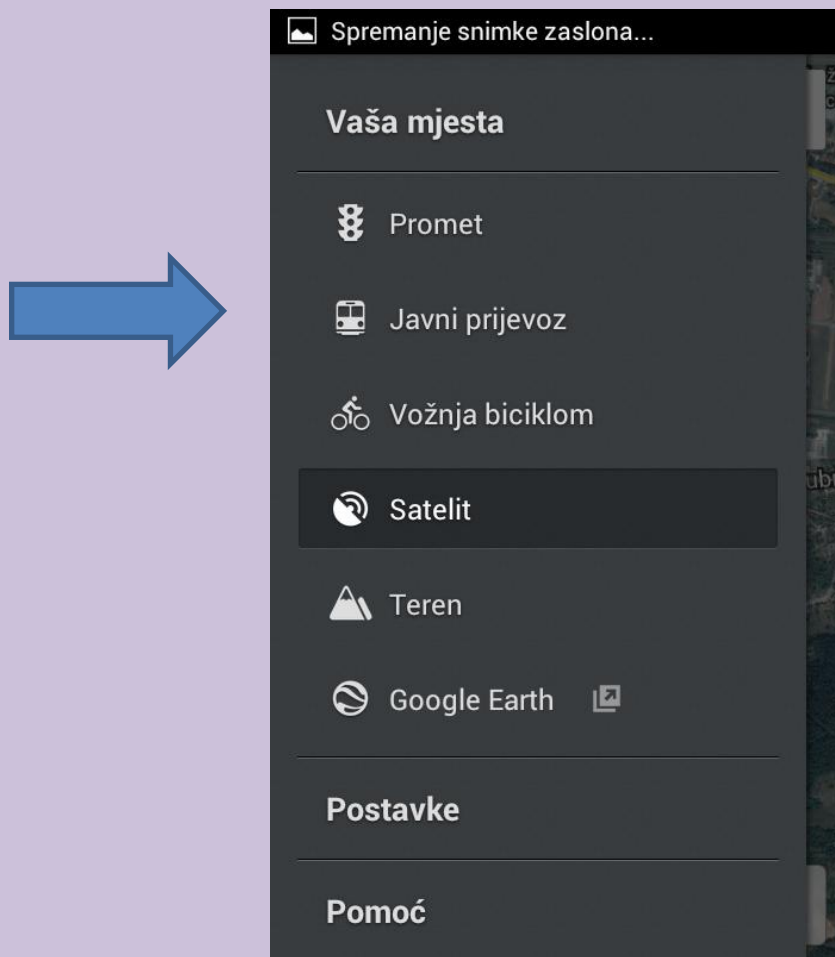
# Promet



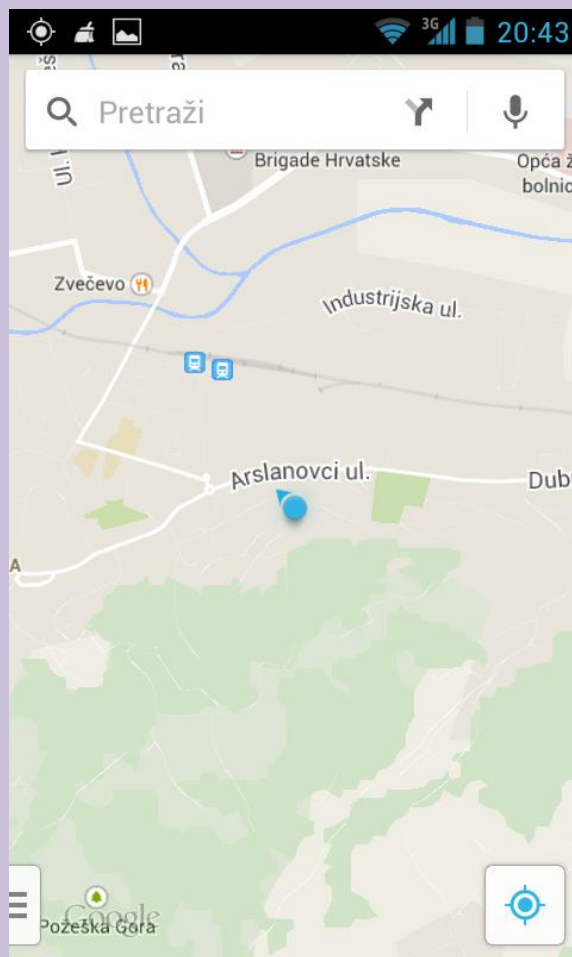
# Promet



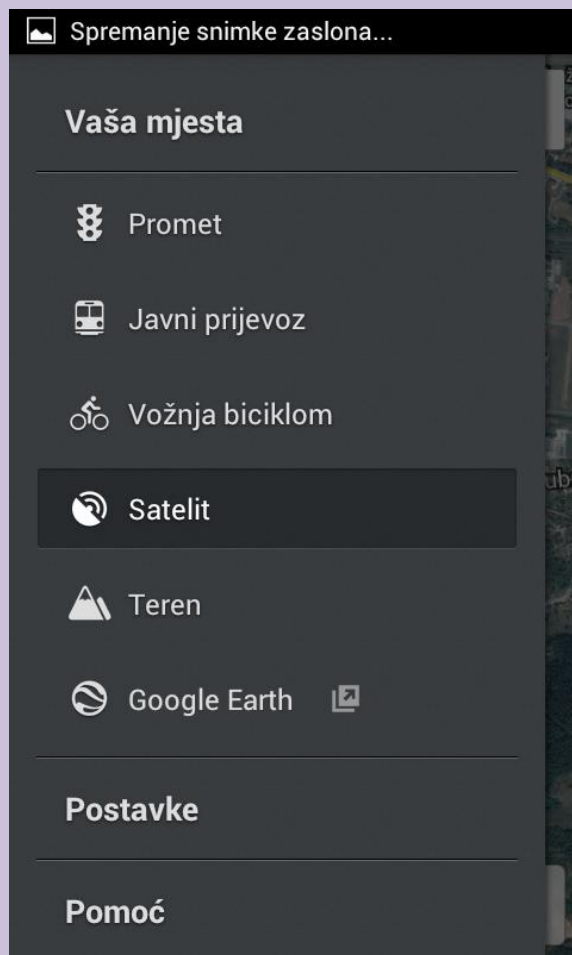
# Javni prijevoz



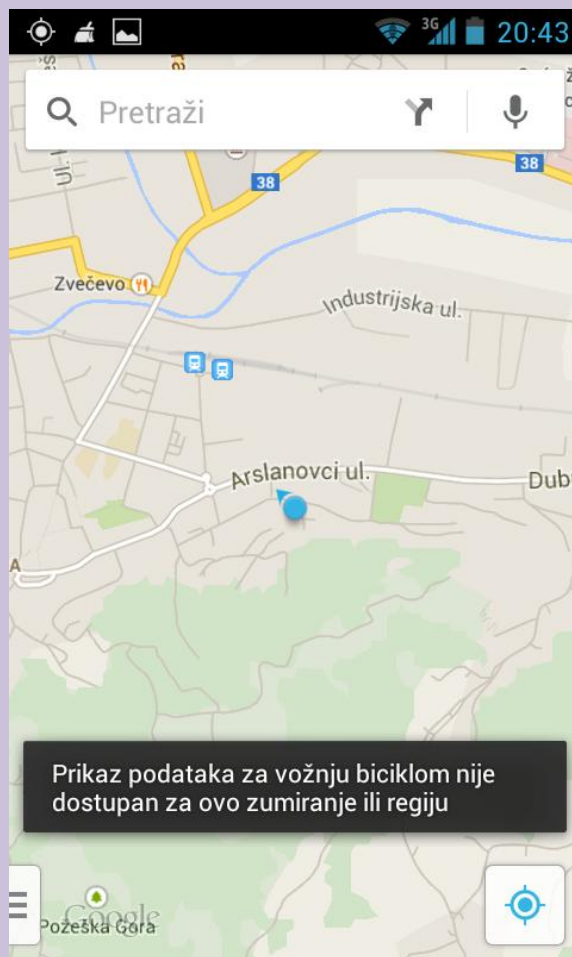
# Javni prijevoz



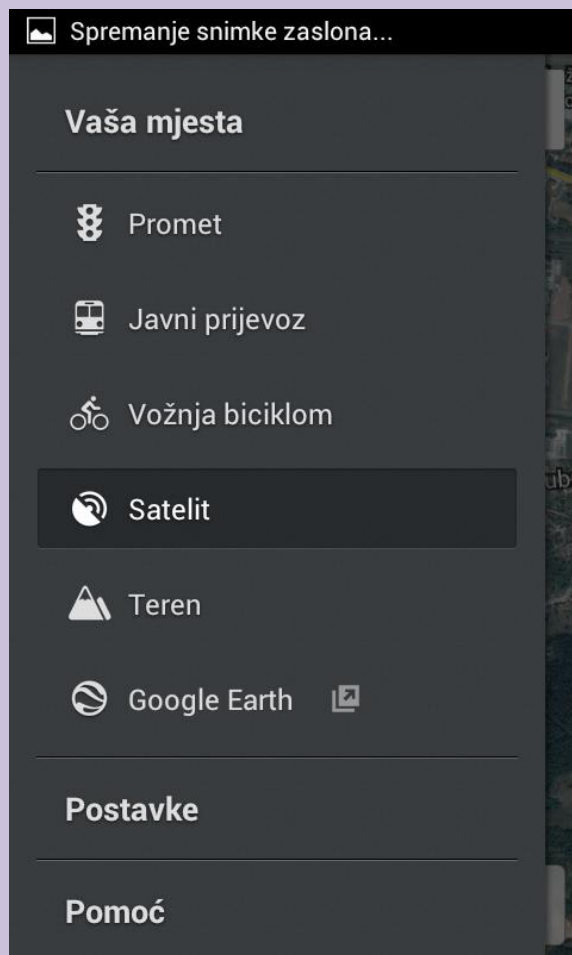
# Vožnja biciklom



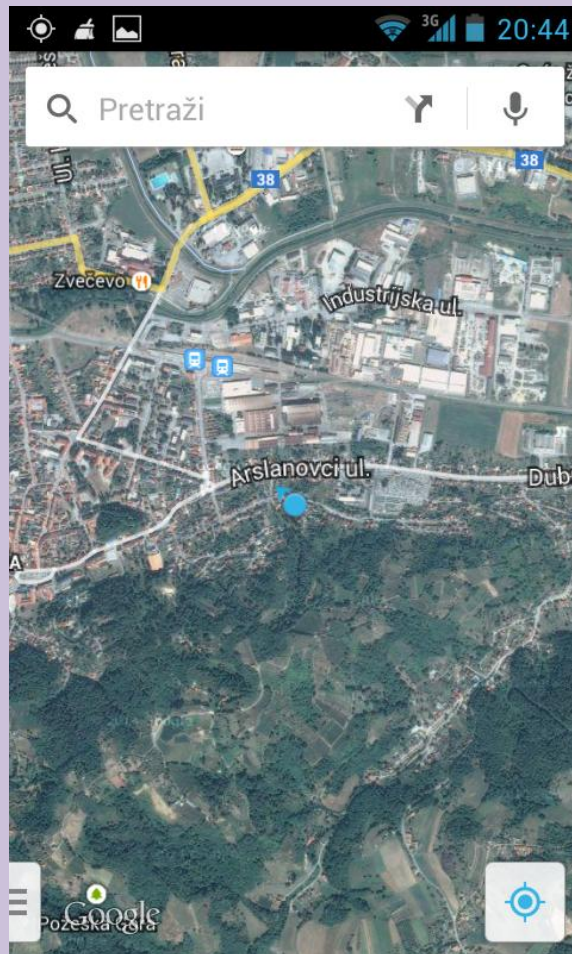
# Vožnja biciklom



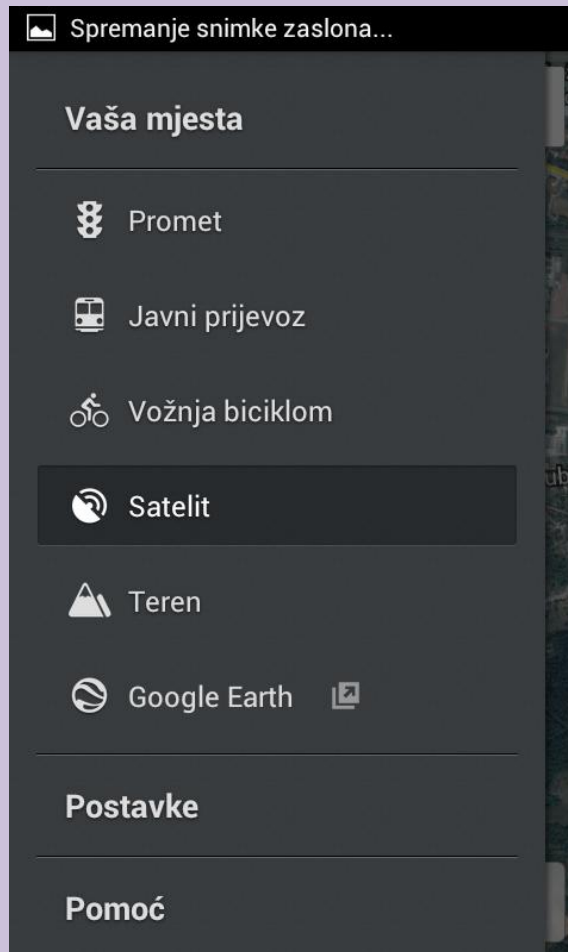
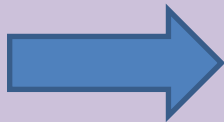
# Satelit



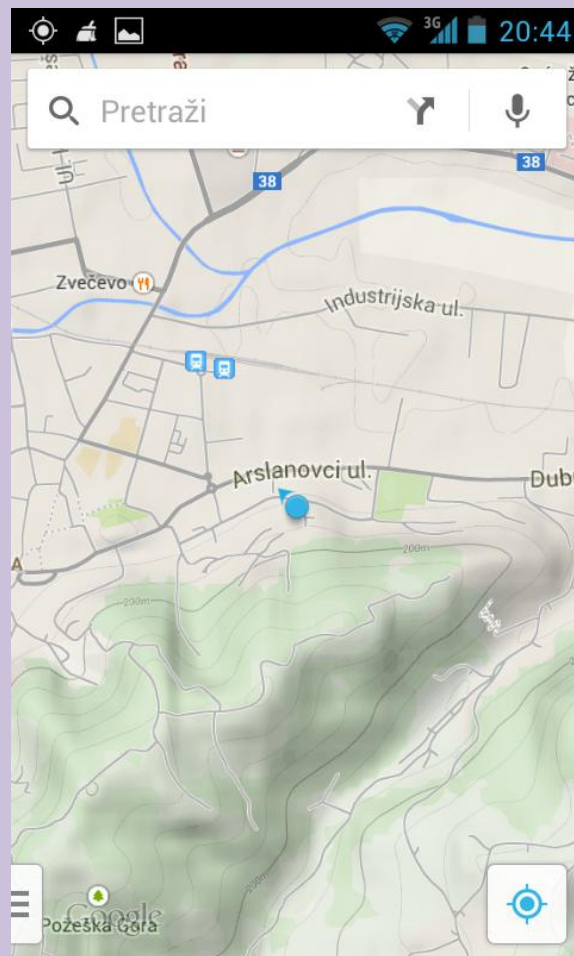
# Satelit



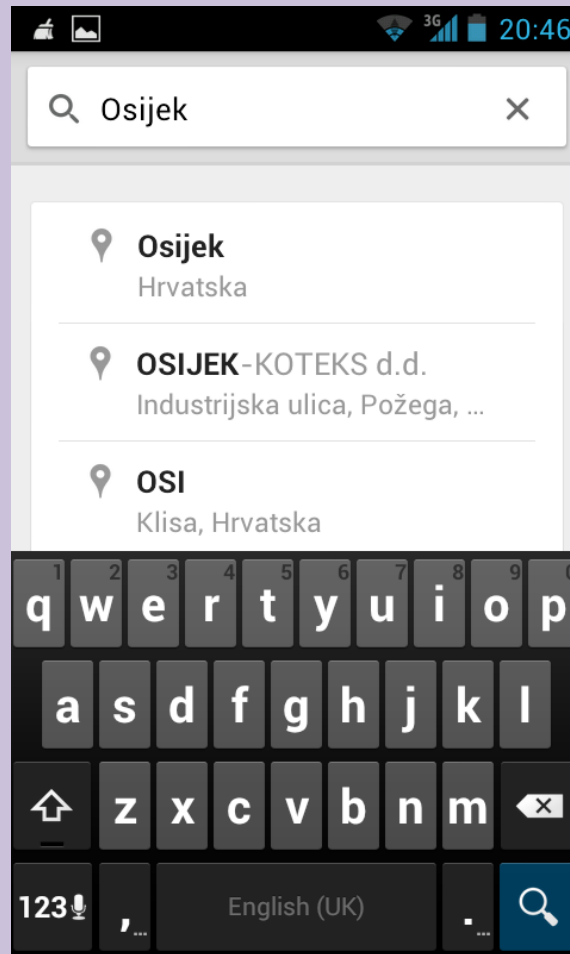
# Teren



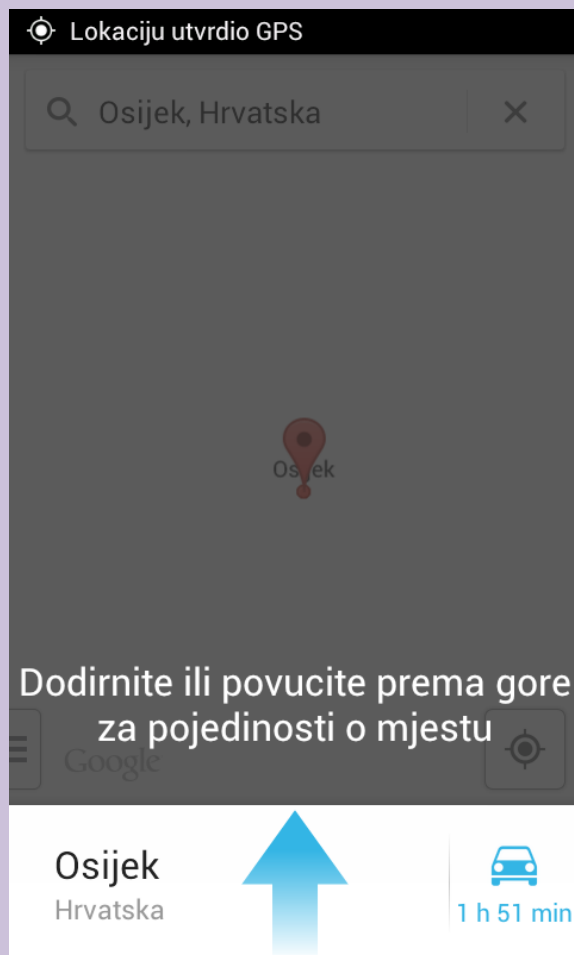
# Teren



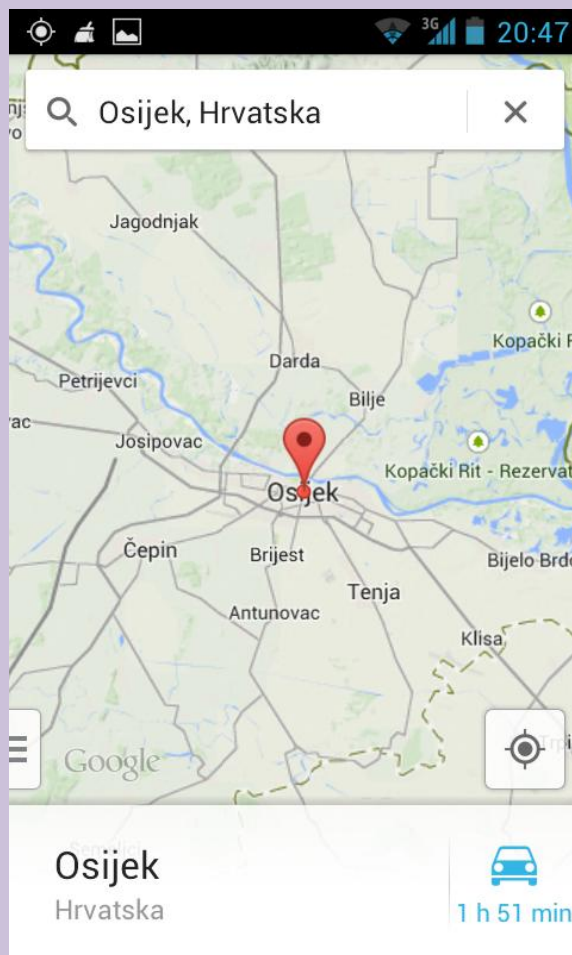
# Traženje



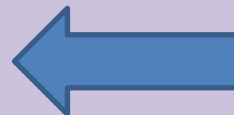
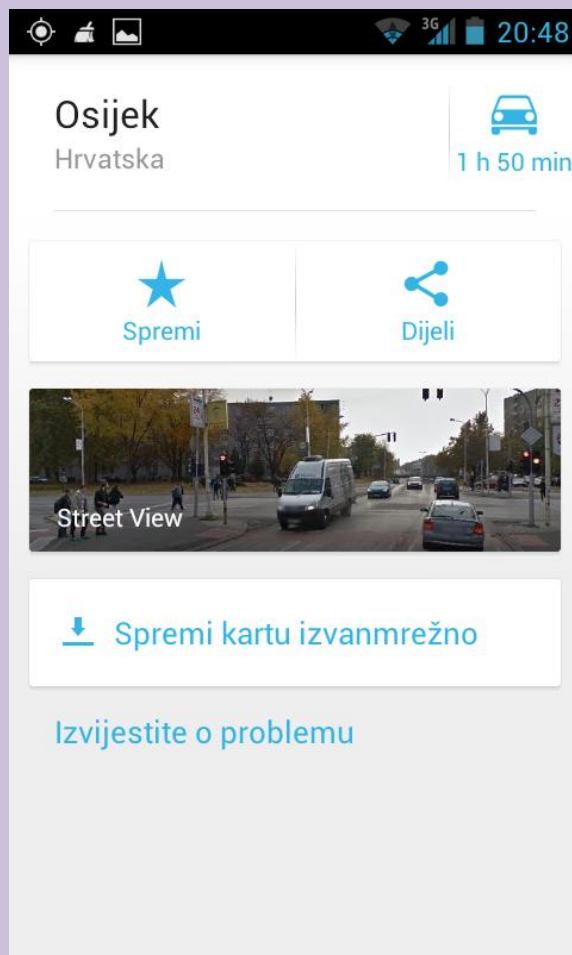
# Traženje...



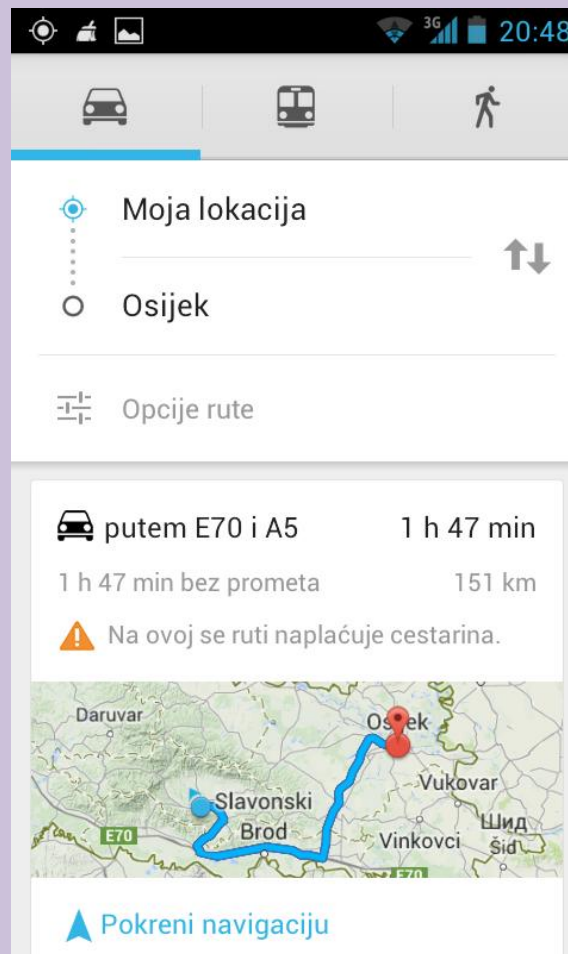
# Rezultat



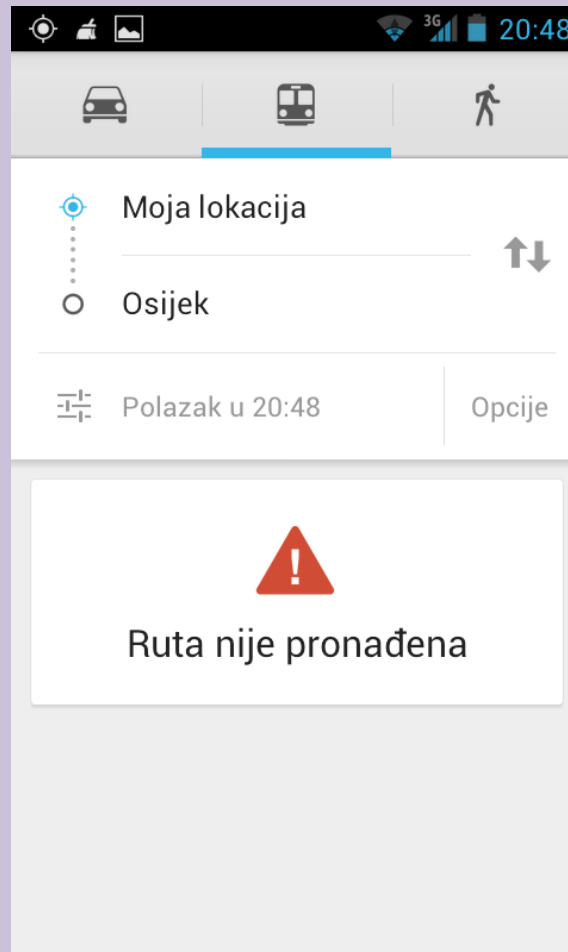
# Detalji



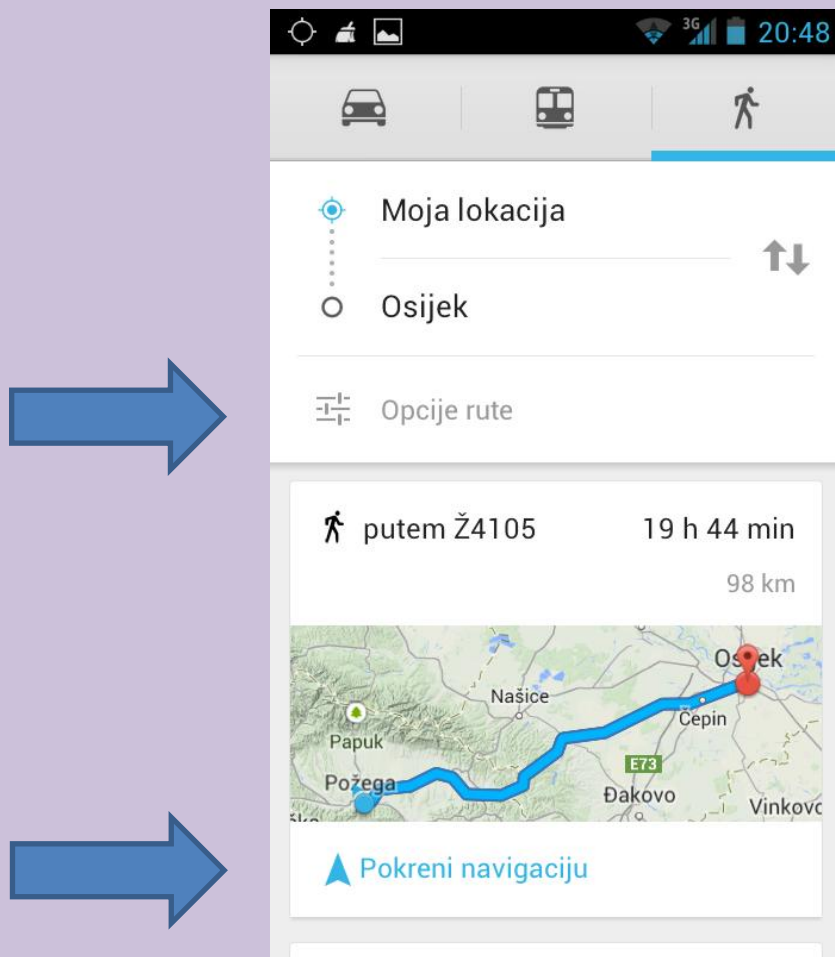
# Navigacija !



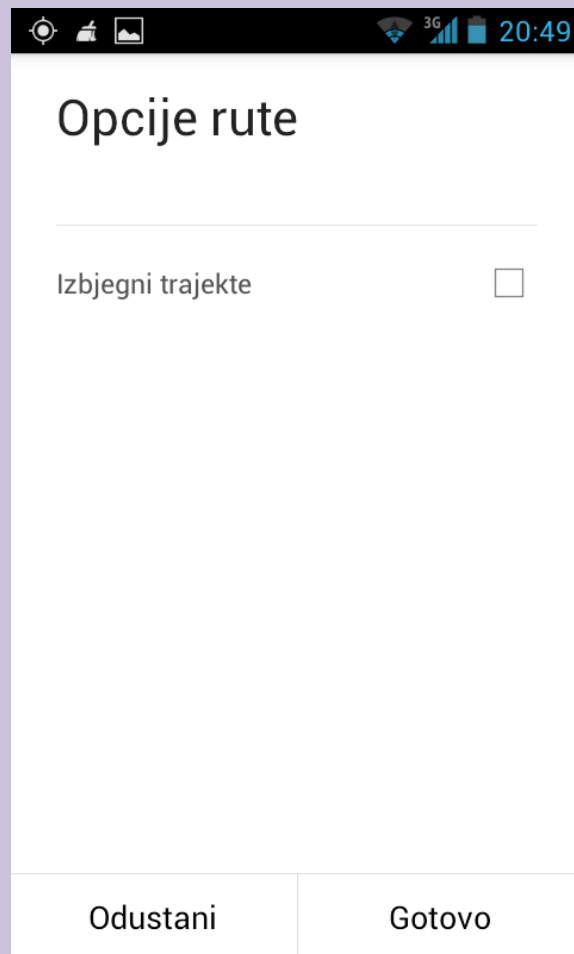
# Željeznica ?



# Može i kao pješak



# Opcije rute



The screenshot shows a mobile application interface with a black status bar at the top containing icons for location, navigation, and battery, along with the time 20:49. The main content area is white and titled 'Opcije rute'. Below the title is a horizontal line, followed by the text 'Izbijegni trajekte' and an unchecked checkbox. At the bottom, there are two buttons: 'Odustani' and 'Gotovo'.

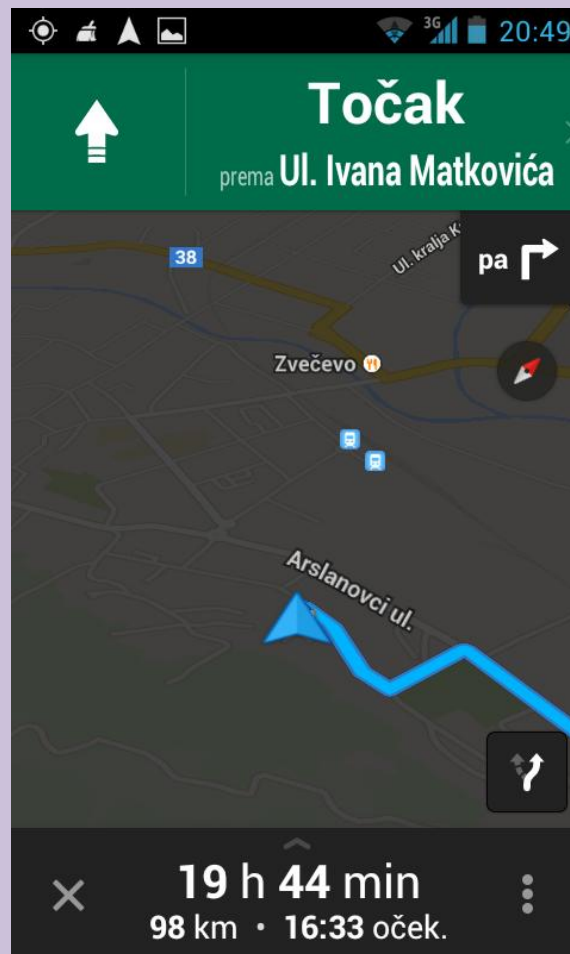
Opcije rute

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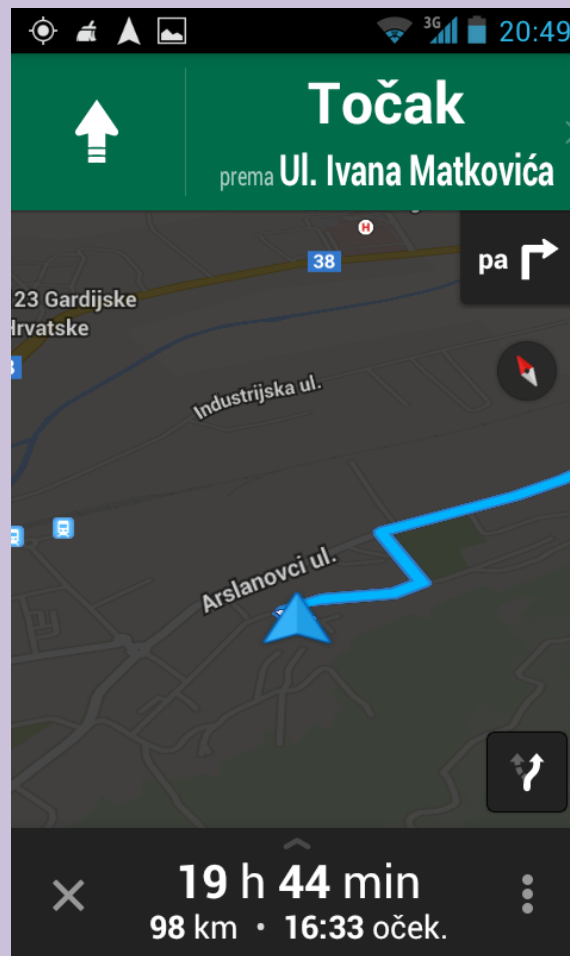
Izbijegni trajekte ☐

Odustani Gotovo

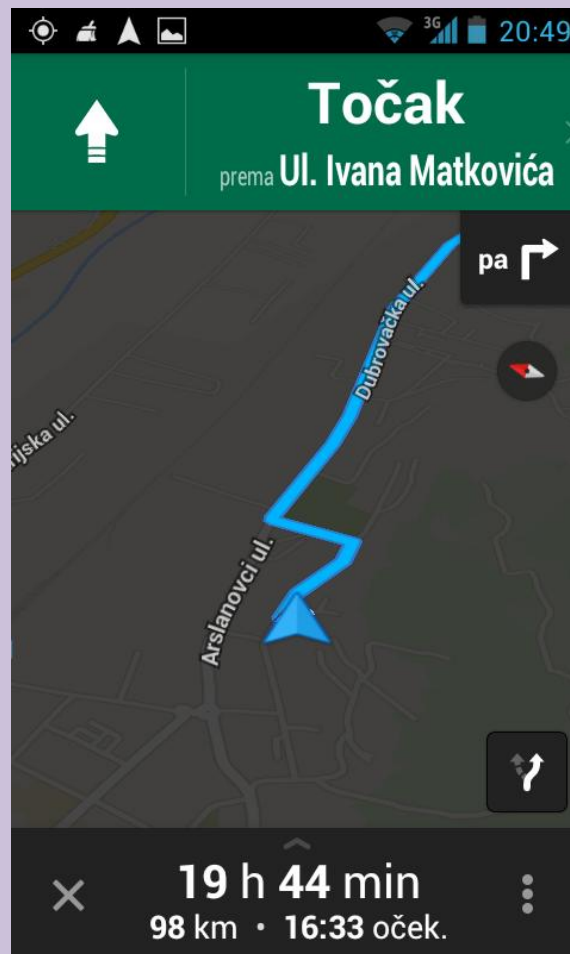
# Pokretanje navigacije



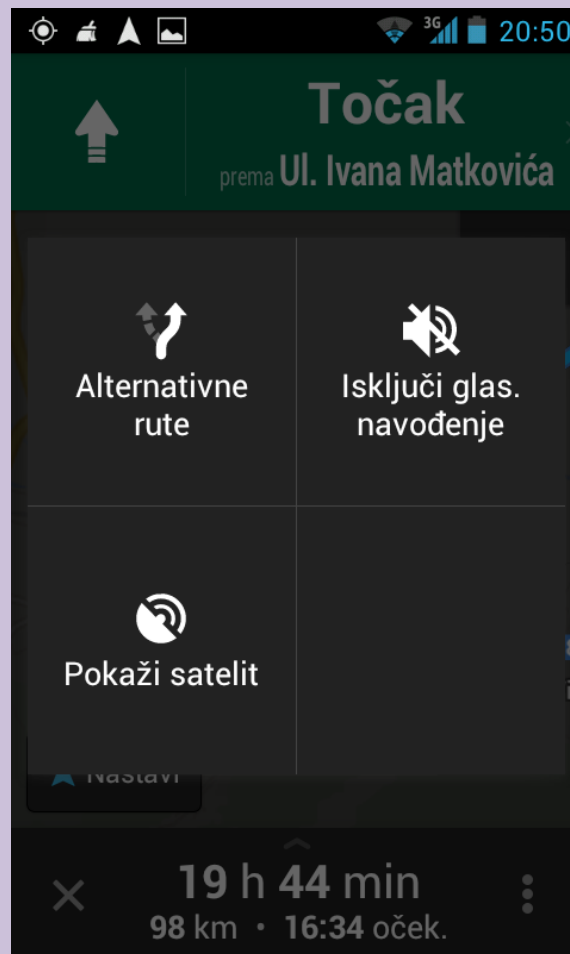
# Pokretanje navigacije

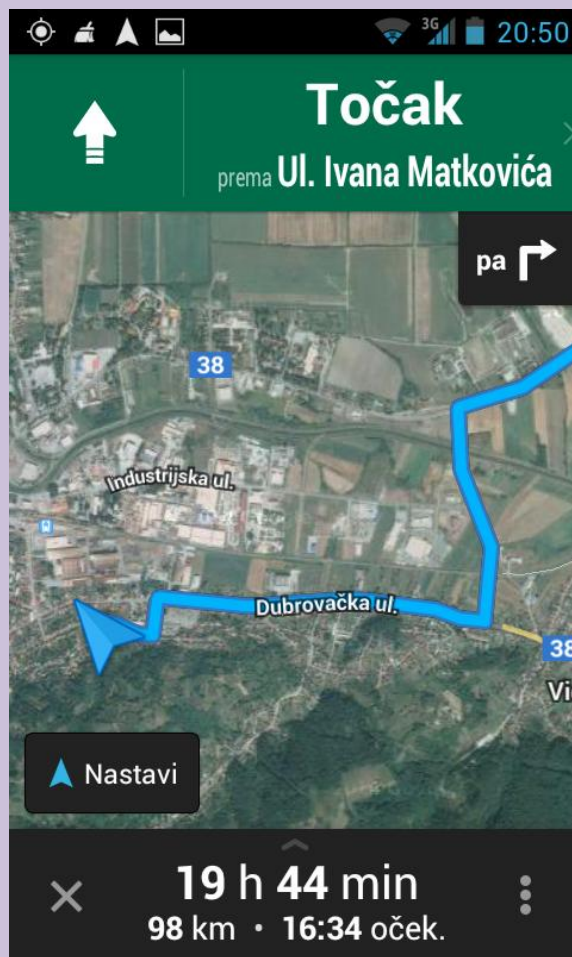


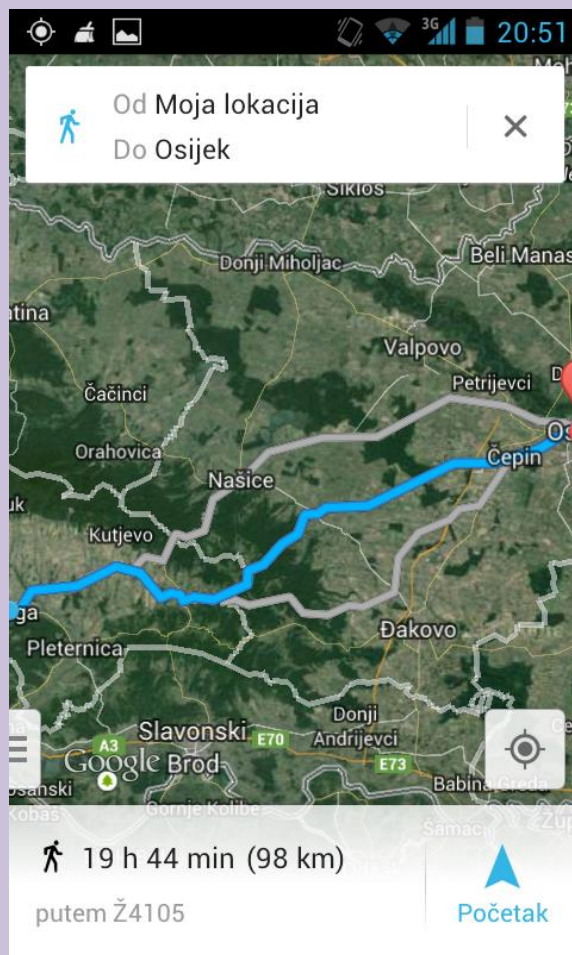
# Pokretanje navigacije...zakretanje



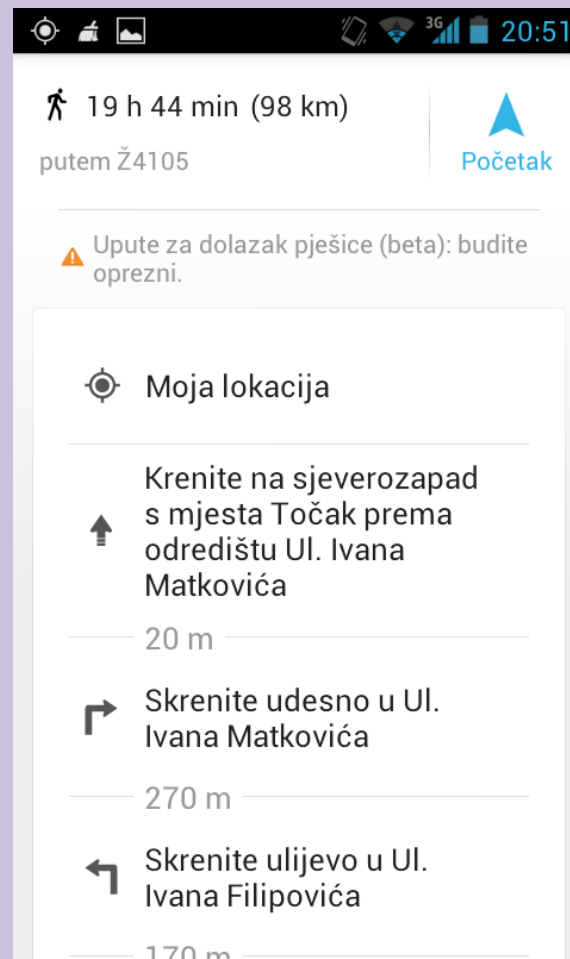
# Mogućnosti



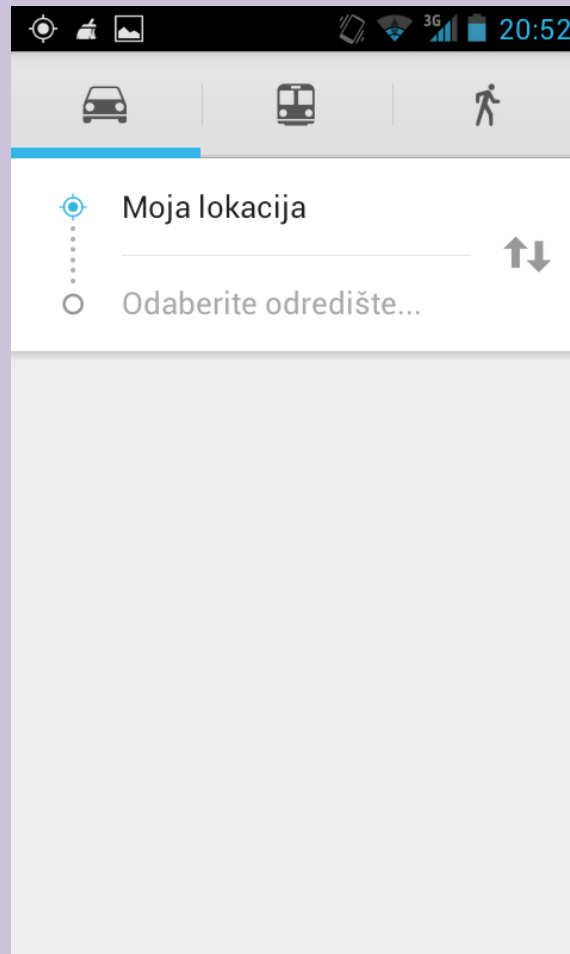




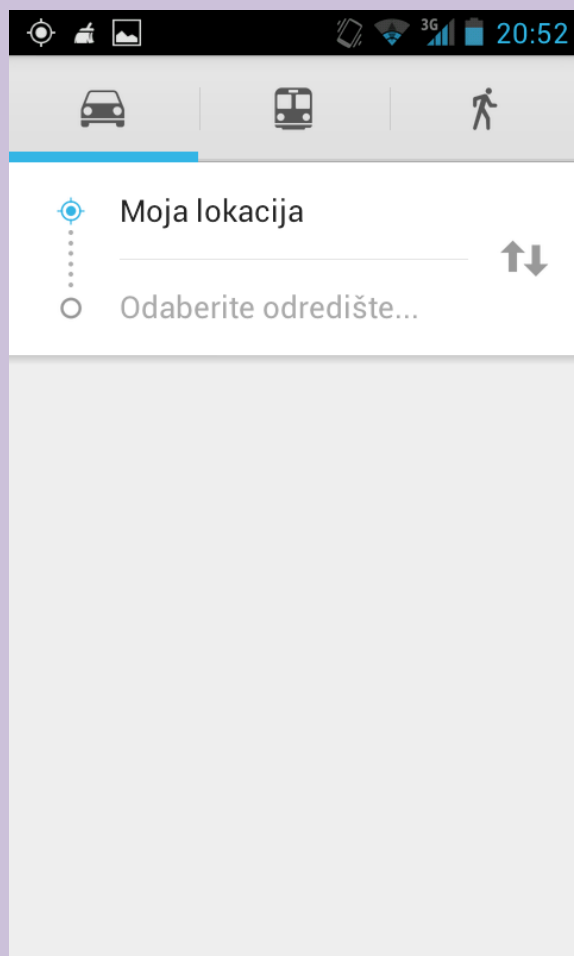
# Detalji navigacije



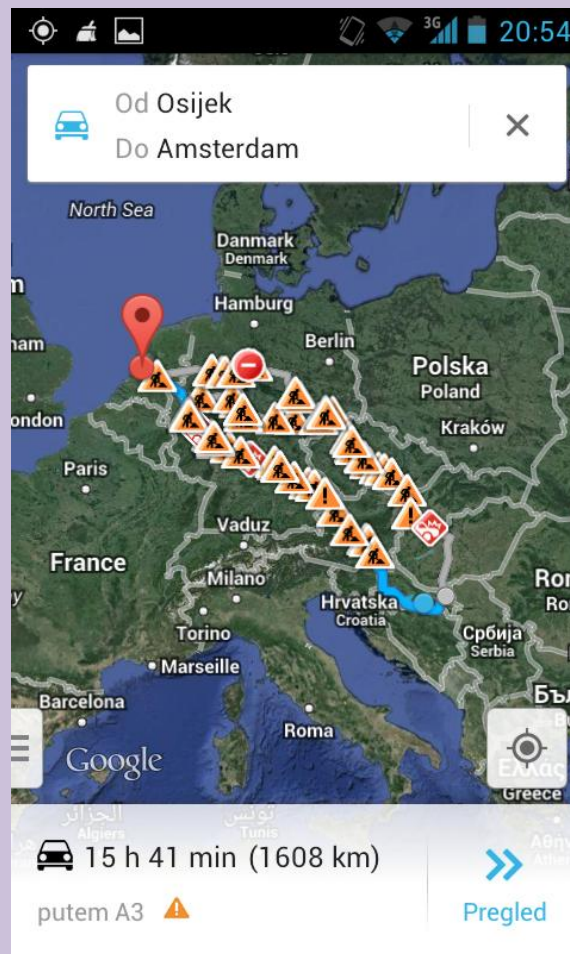
# Navigacija Od-do ?





# Od Osijeka...do Amsterdama!





# Dvije alternative





# Upute...


20:54


 15 h 41 min (1608 km)  
putem A3


  
[Pregled](#)

 Na ovoj se ruti naplaćuje cestarina.  
Ova ruta prolazi kroz mnoge zemlje.

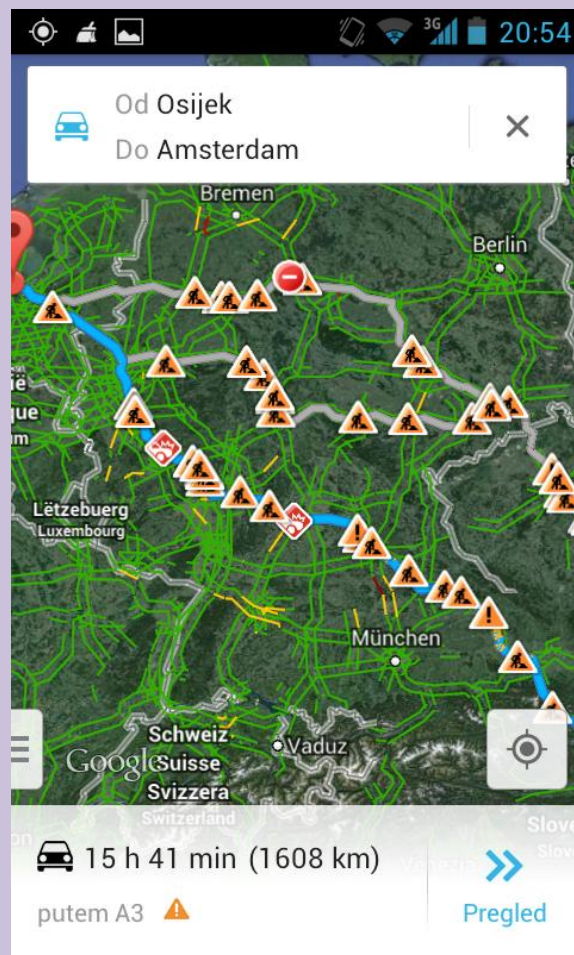
 **Osijek**  
Hrvatska

 Krenite na jug od Ul.  
kneza Trpimira prema  
Vukovarska ul.  
500 m

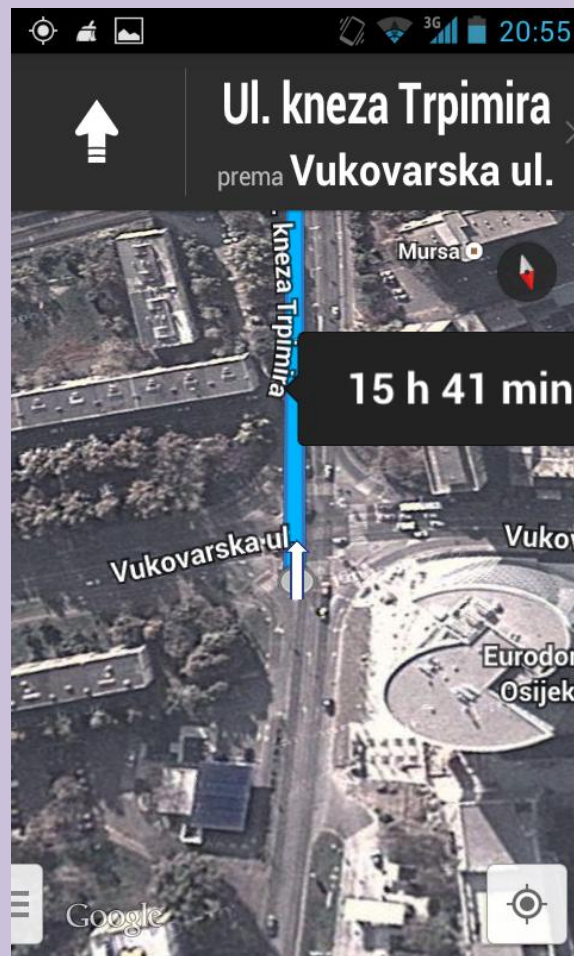
 Skrenite udesno u  
Drinska ul.  
1,3 km

 Skrenite udesno u  
Vinkovačka cesta  
950 m

# Trenutno stanje na cestama



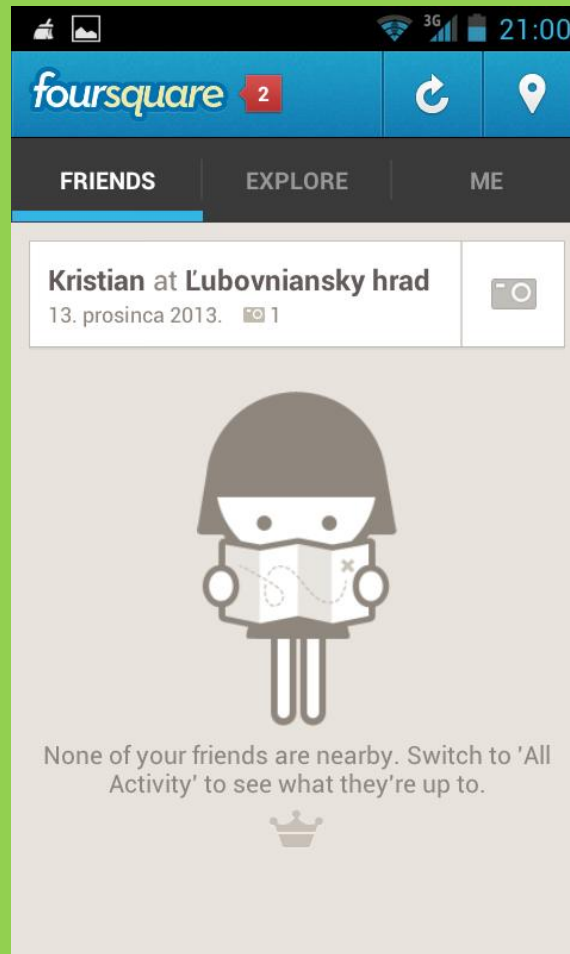
# Krećemo...



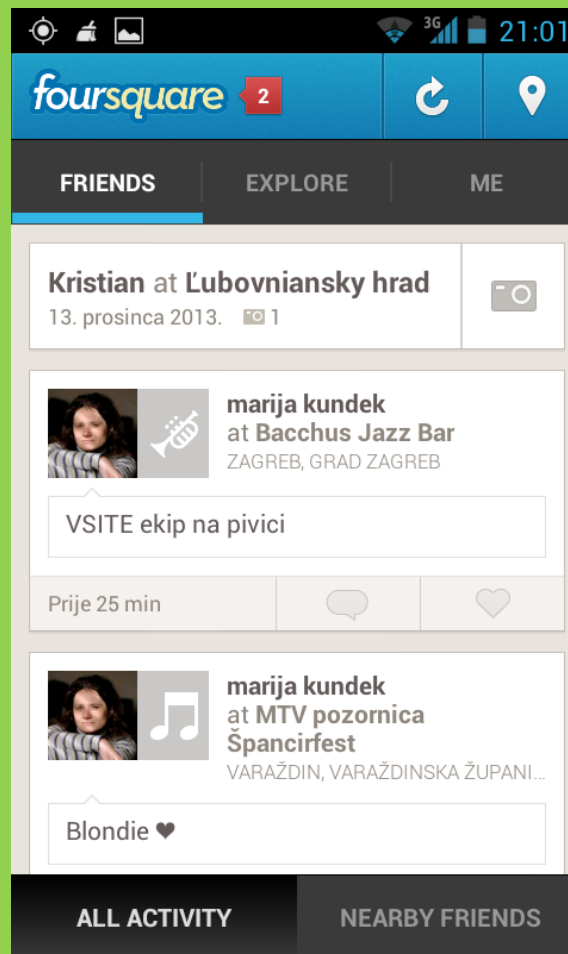
# Foursquare



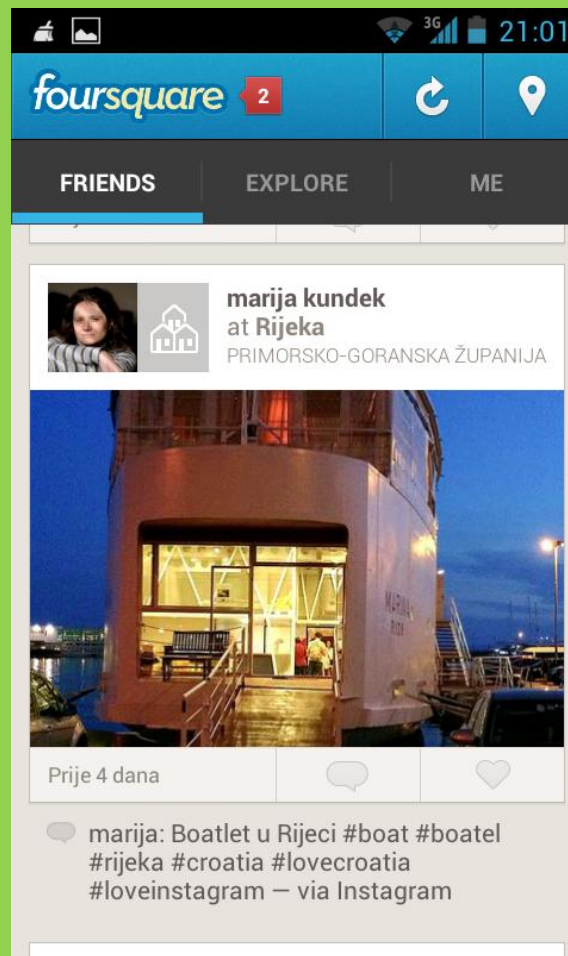
# Foursquare !



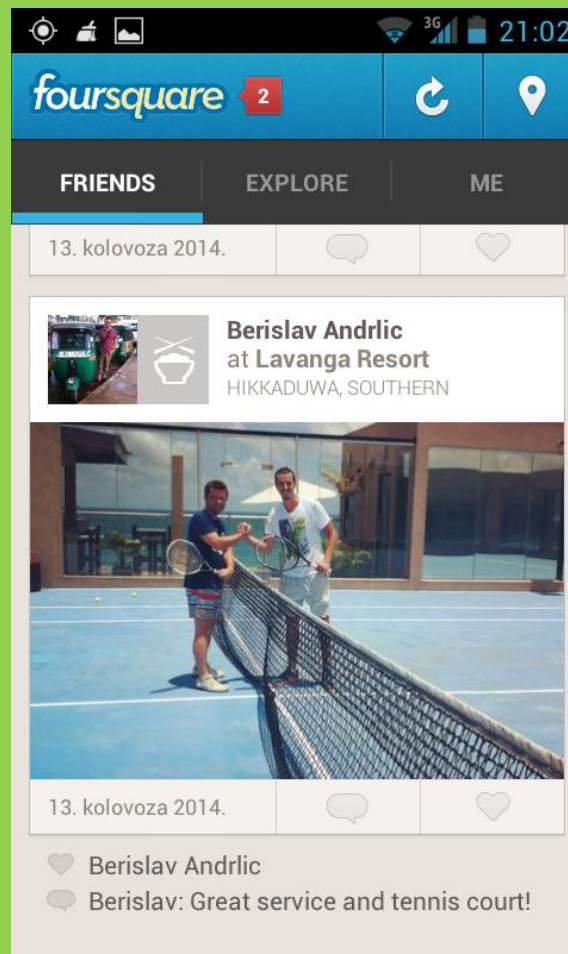
# Prijatelji...



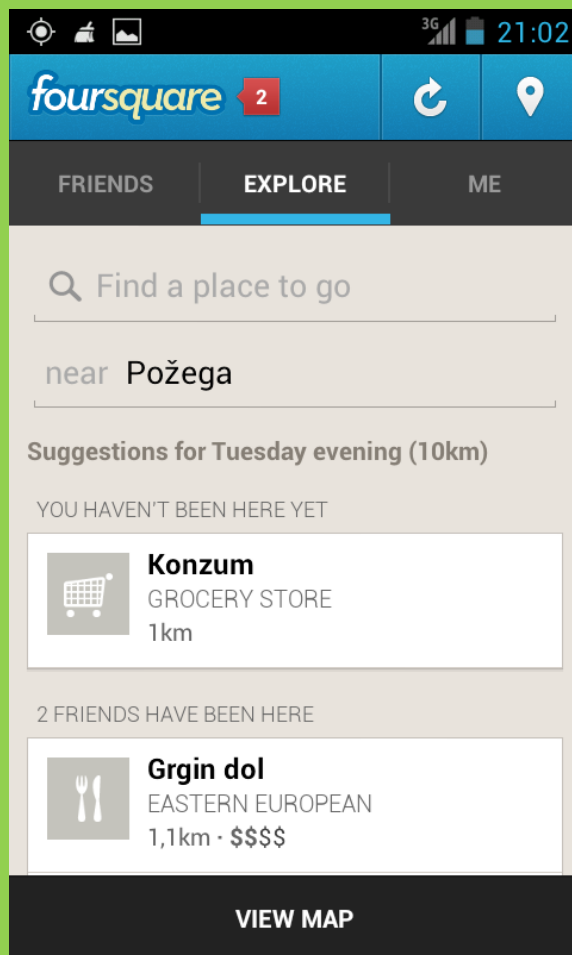
# ...stari...

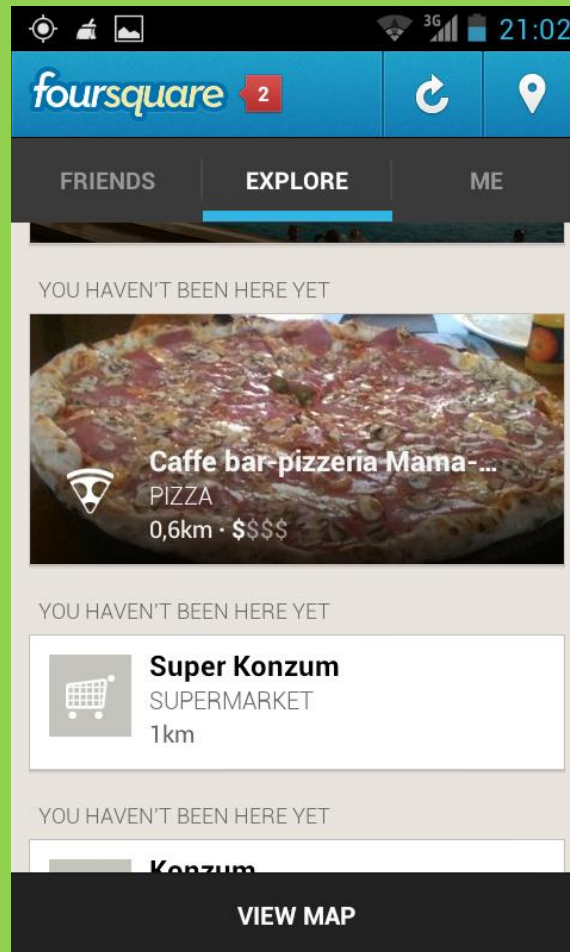


# ...gdje ste ?

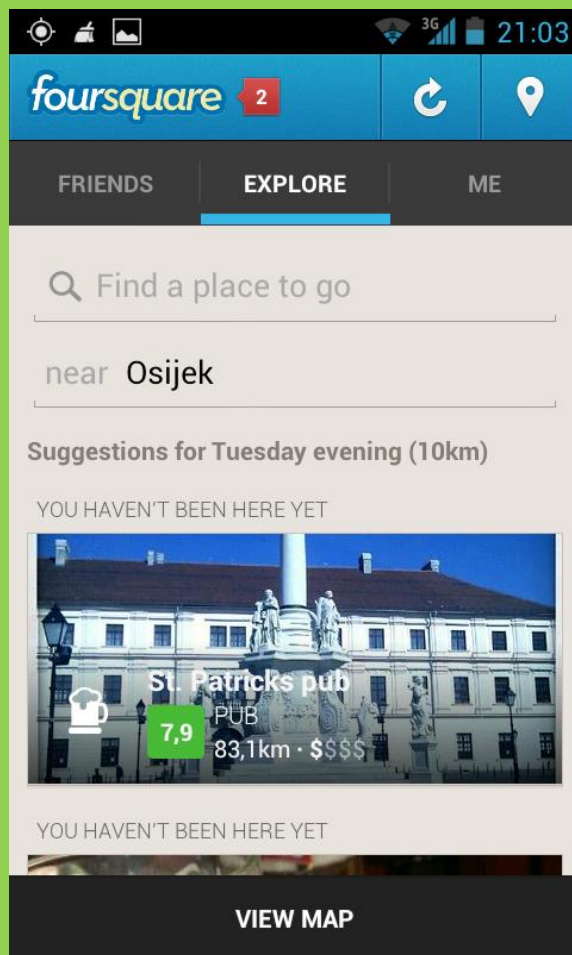


# A što je oko mene ?

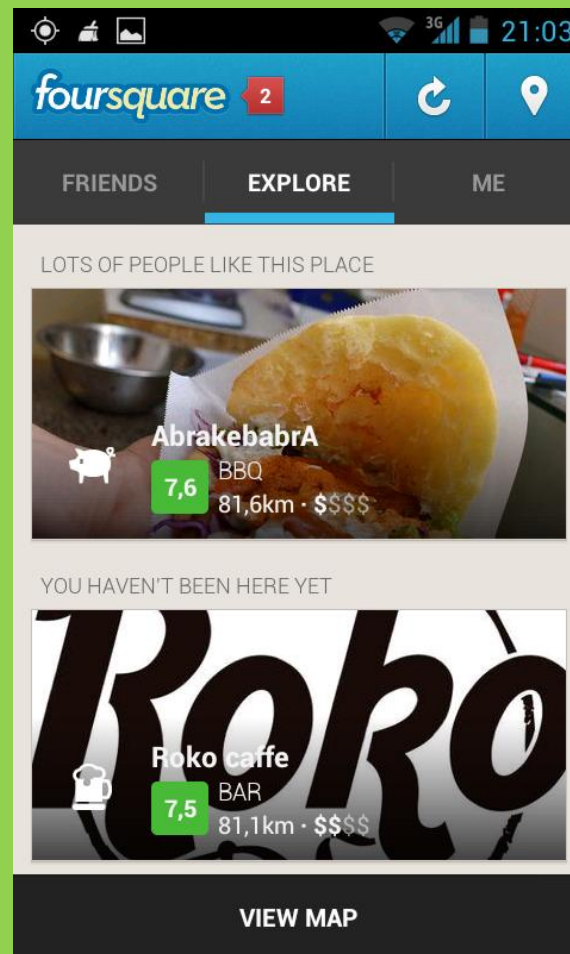




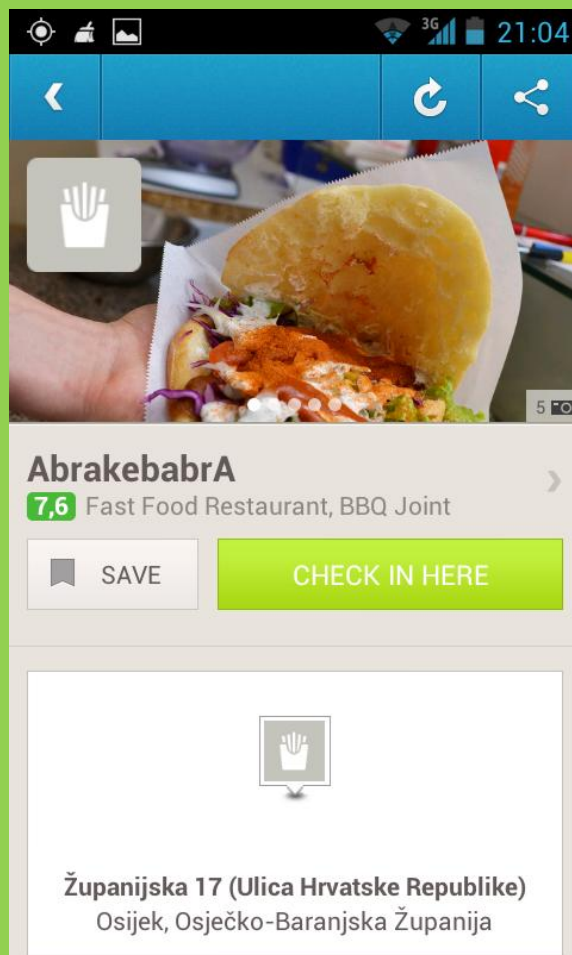
# A oko Osijeka ?



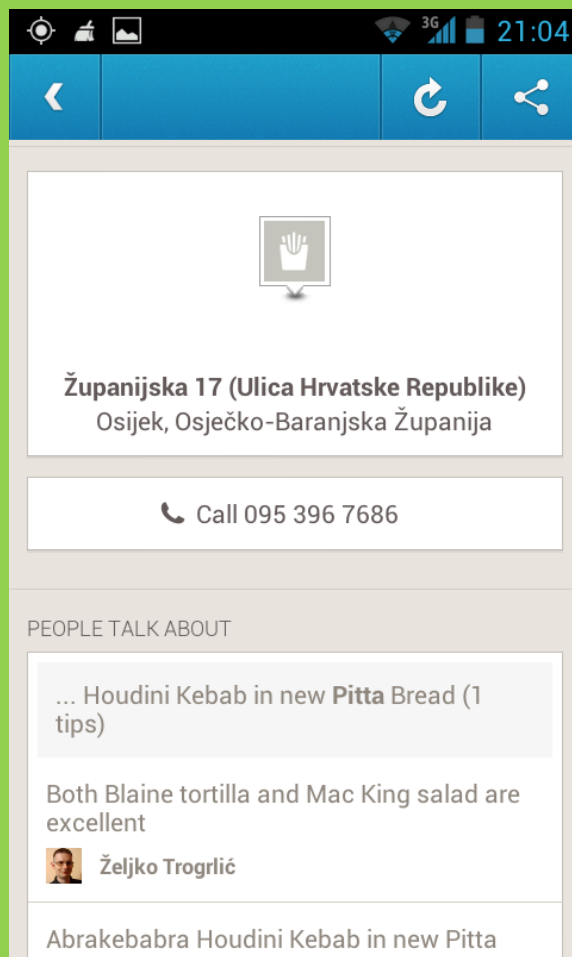
# ...hrana, kafići...

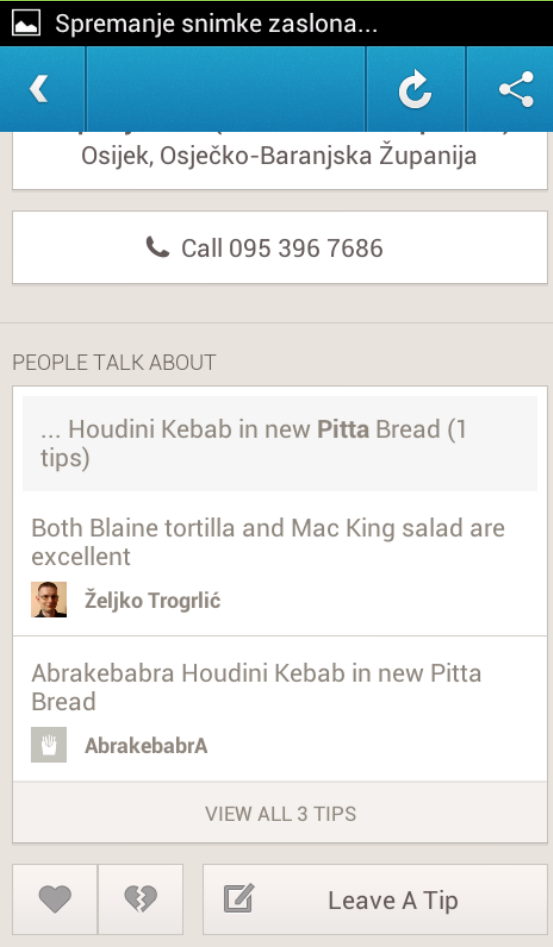


# Da li je ovaj dobar ?

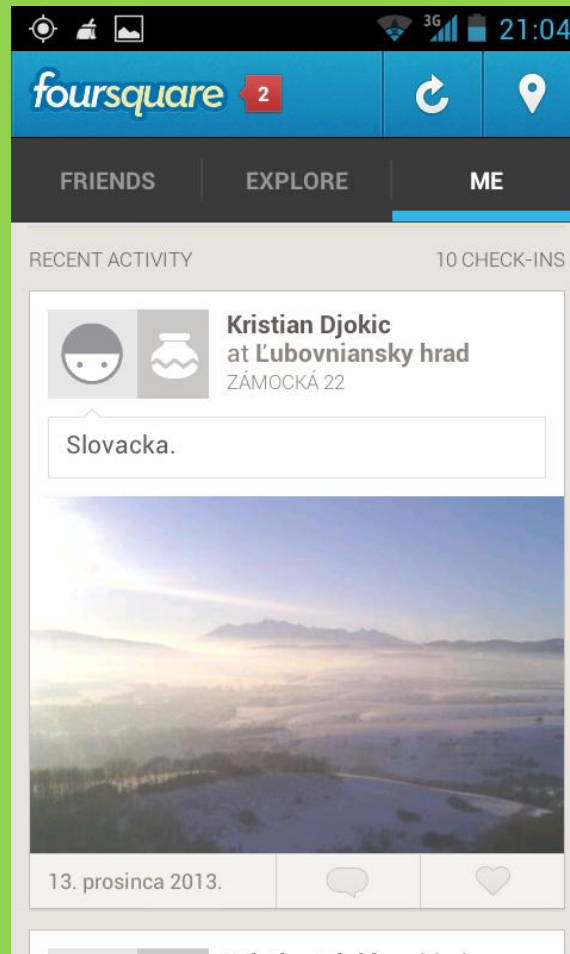


# Iz iskustva drugih ...





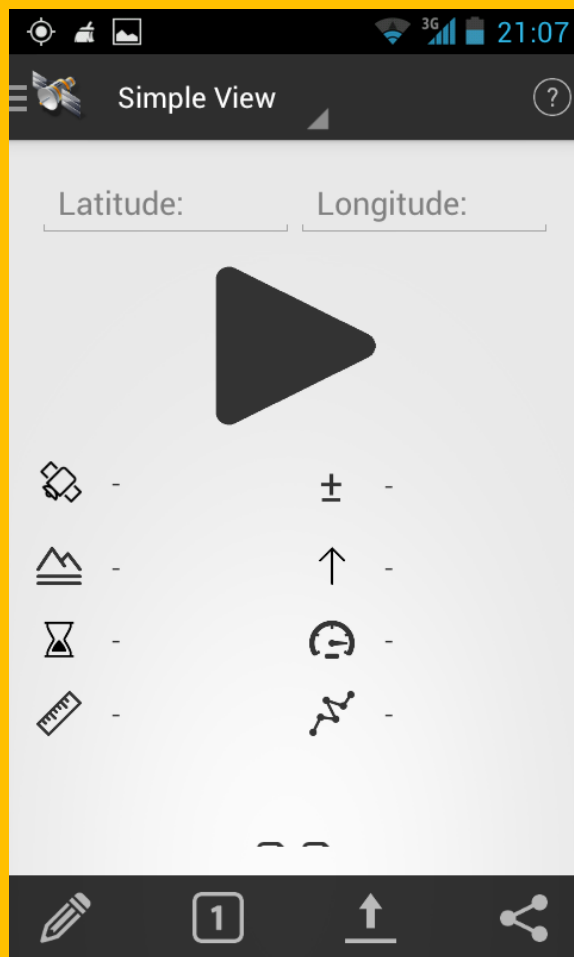
# Moja mjesta



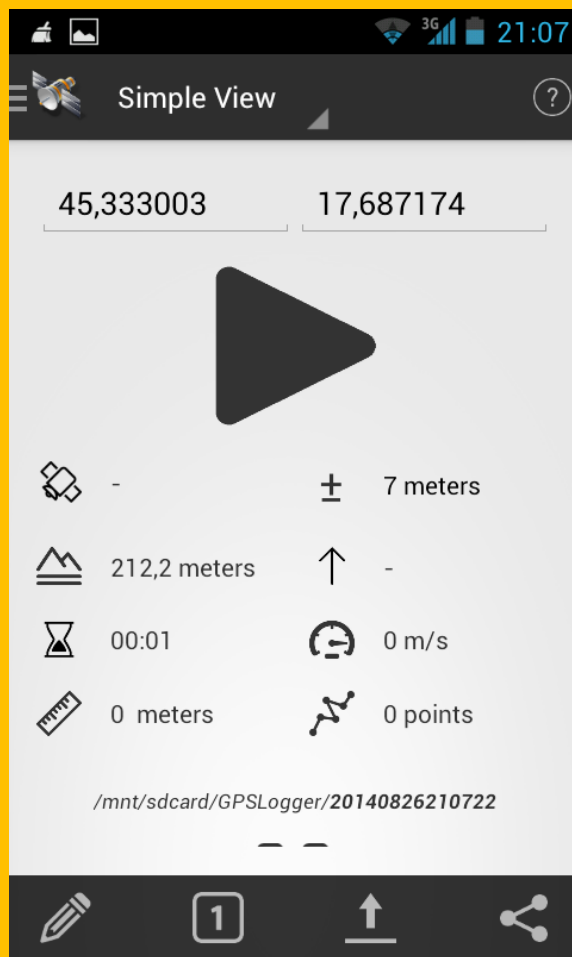
# GPSLogger



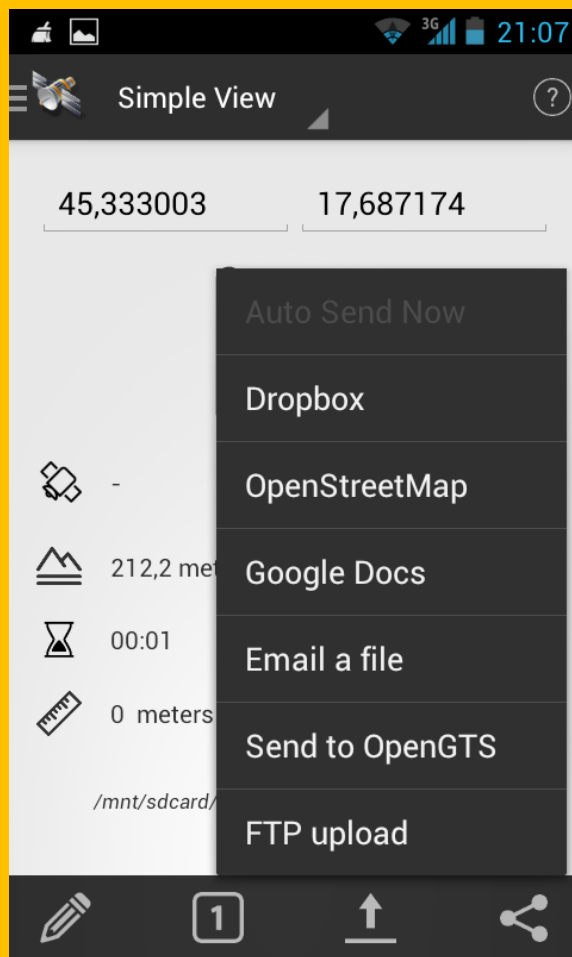
# Početni izgled



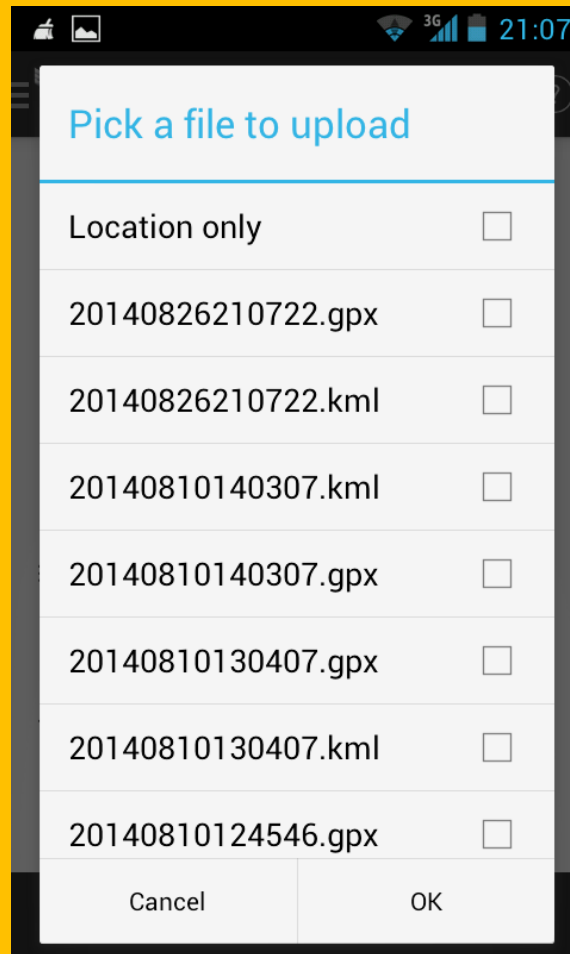
# Označavanje točke



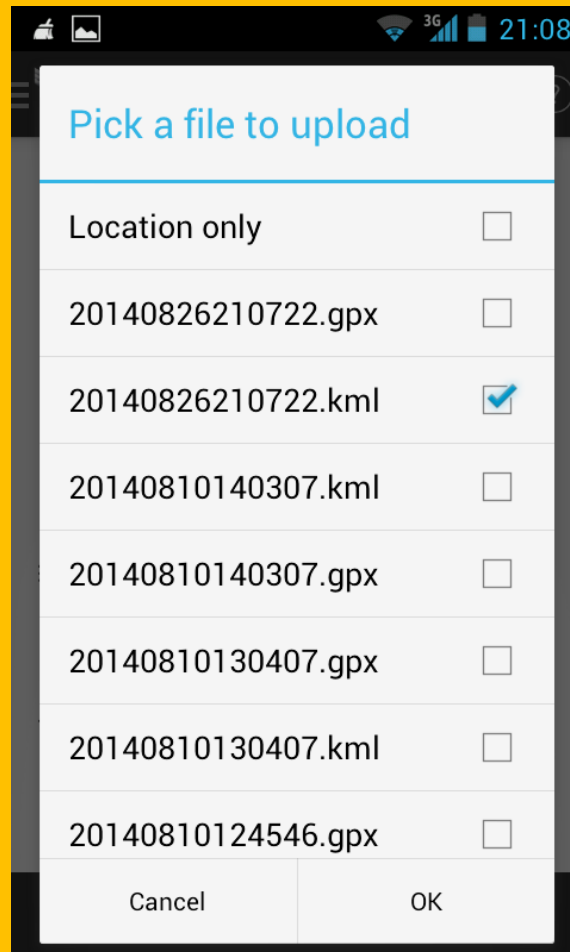
# Slanje točke dalje



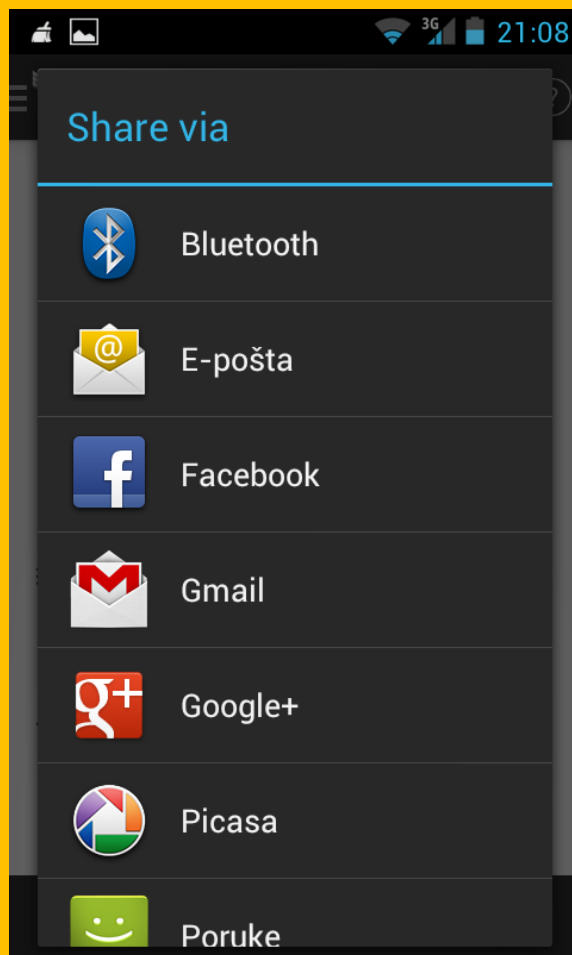
# Izbor datoteke



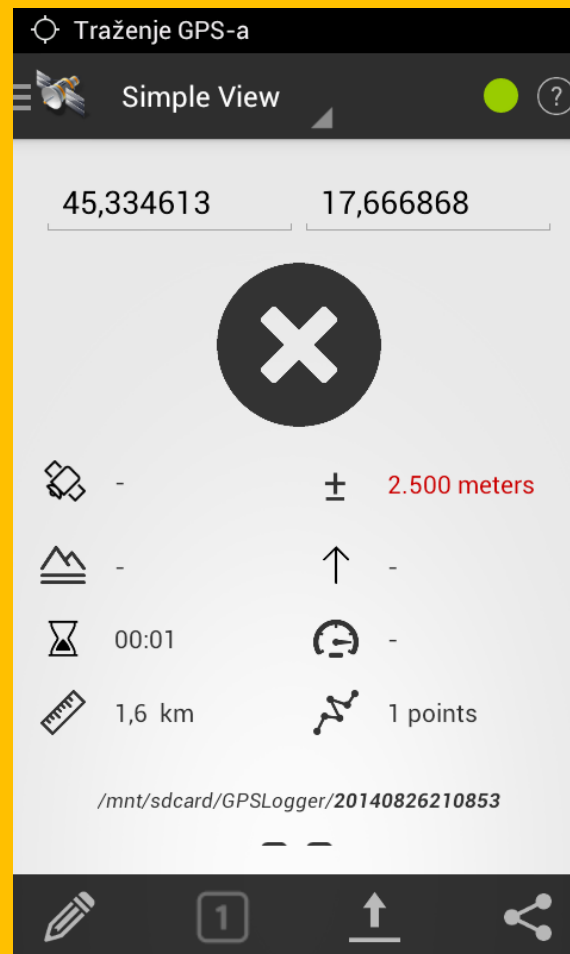
# Kad je izaberemo...



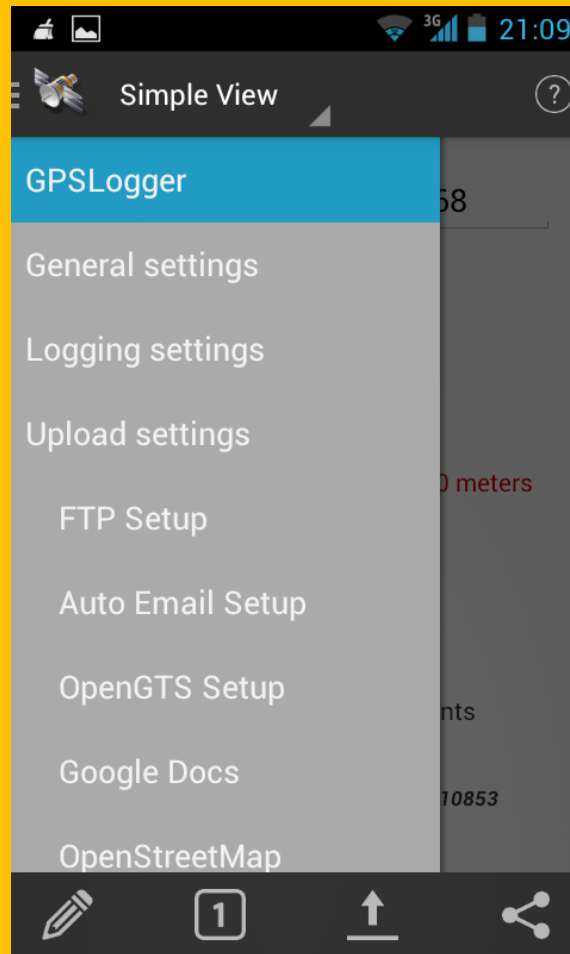
...bিরamo gdje ćemo s njom.



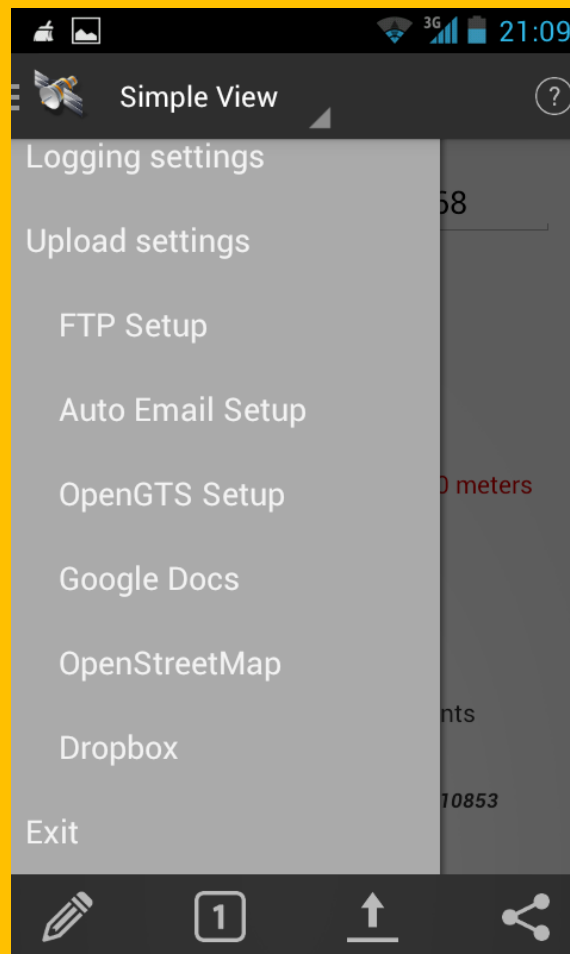
# Pokretanje „logiranja“



# Postavke



# Još postavki



# A što sa KML datotekama ?



# A gdje su KML datoteke ?



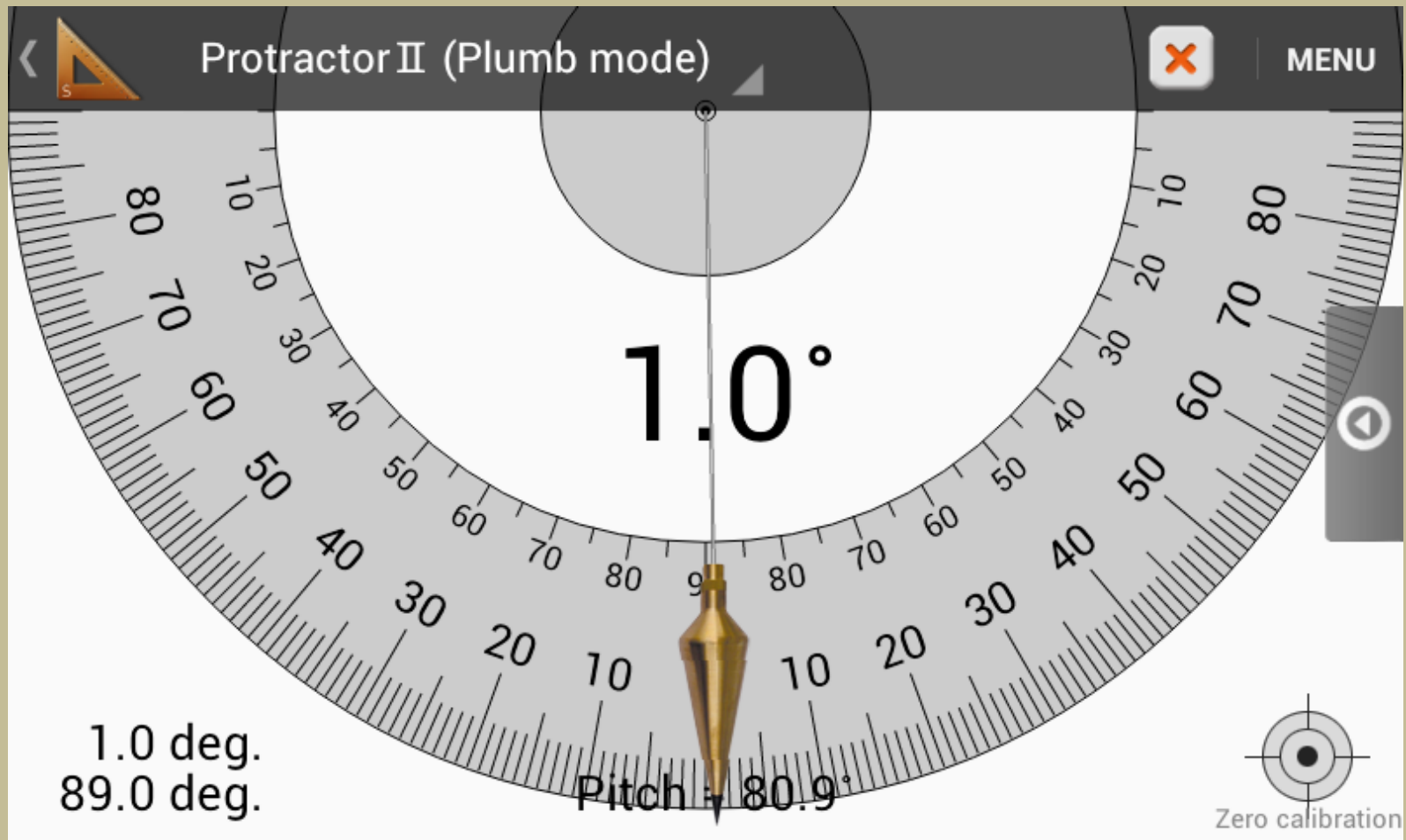
# Kopiranje/ljepljenje i USB kabljić

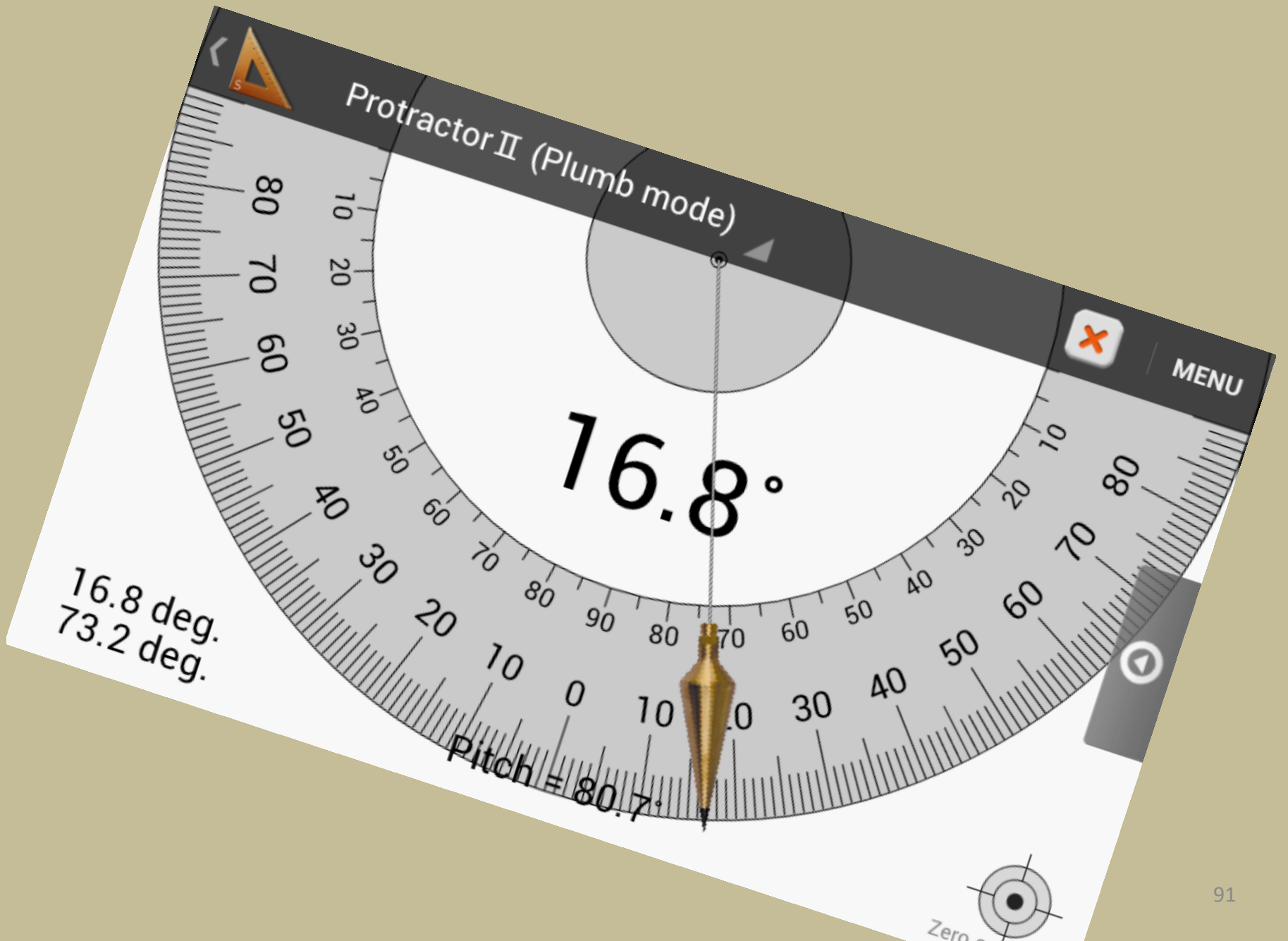


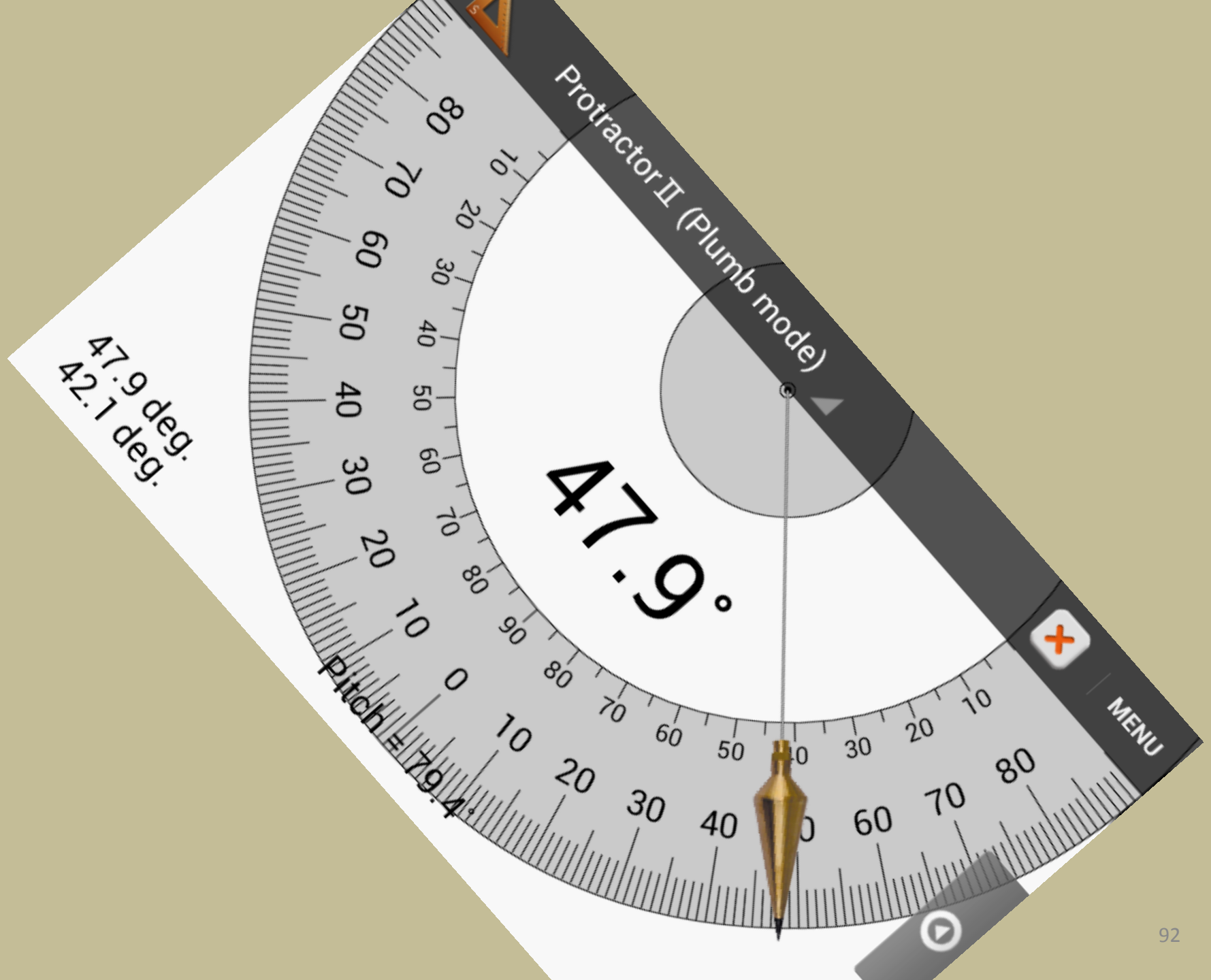
# Smart Tools



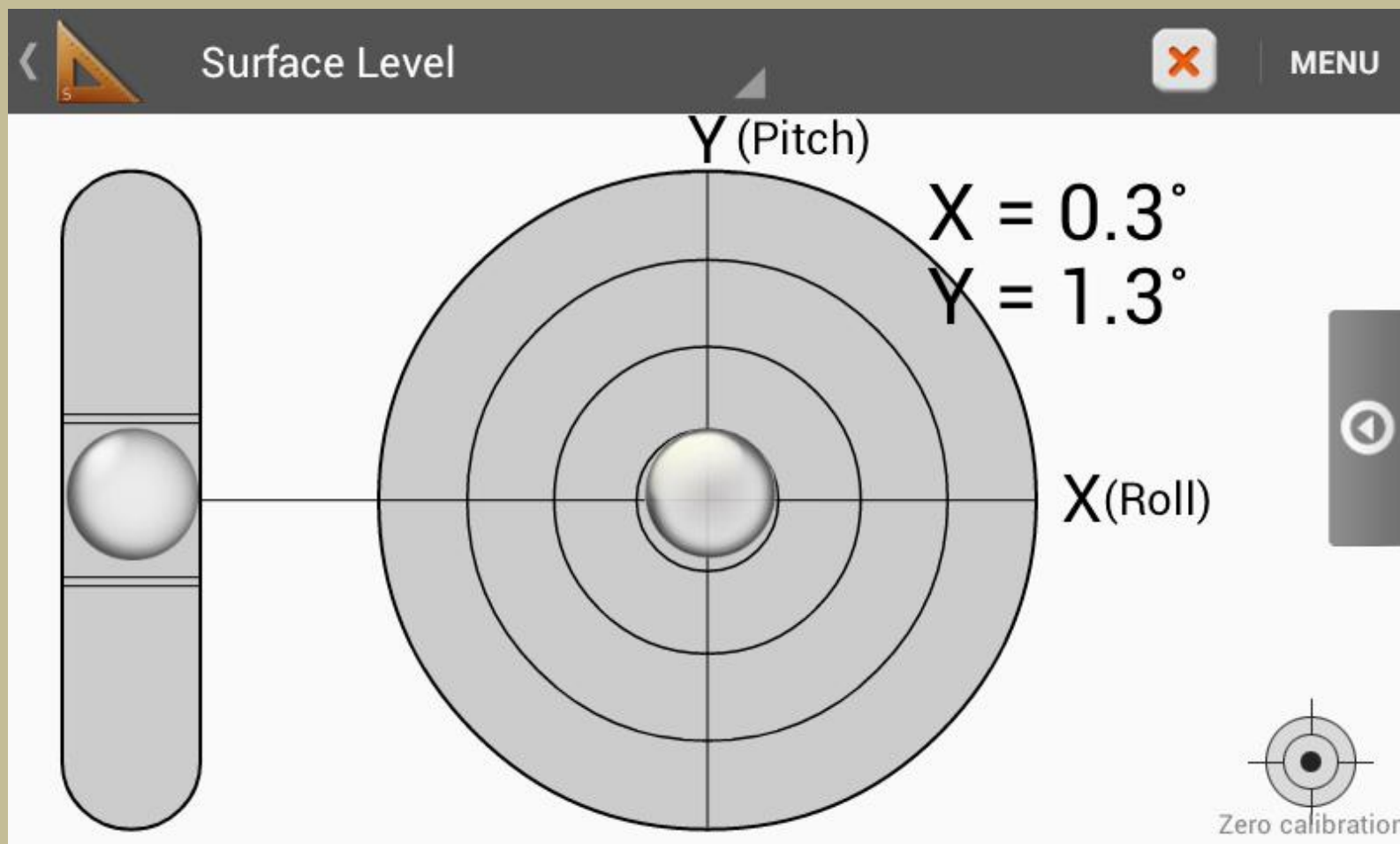
# Nagib ?

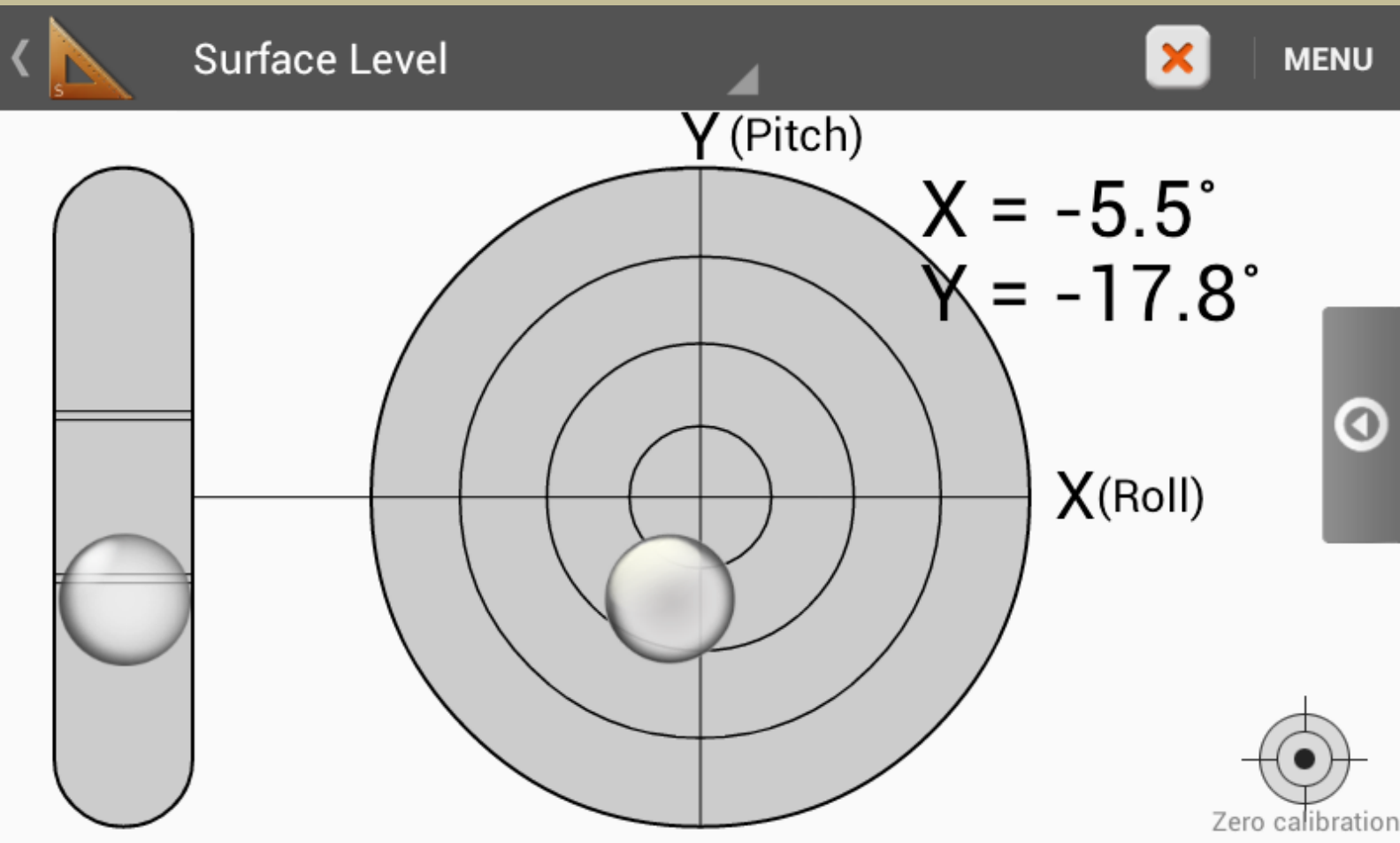


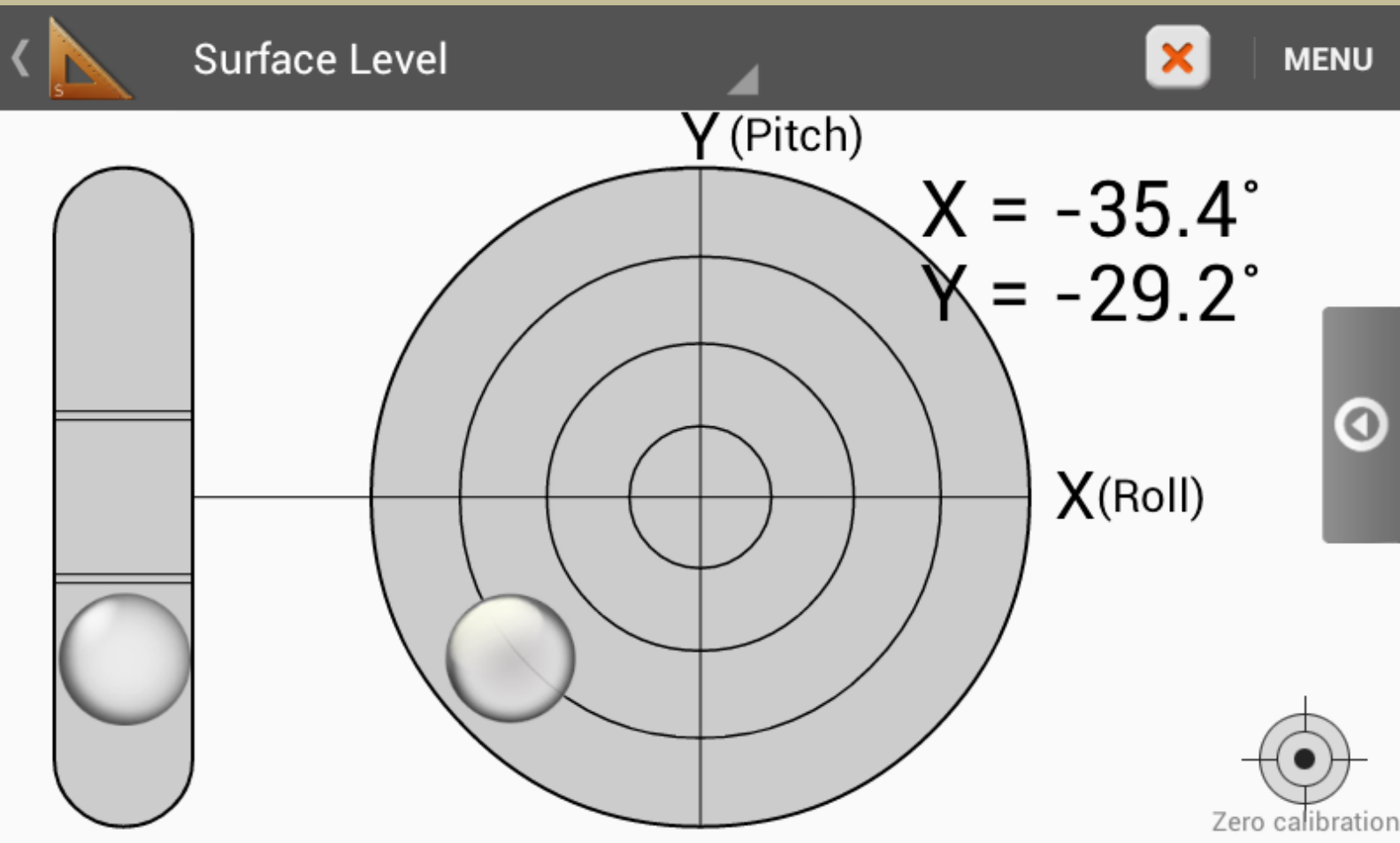




# Drugačiji prikaz nagiba







# Kompas, brzina, geografska dužina i širina





# Što je geocaching ?

# Kako izgledaju geocache-vi ?



# Što ima na stranici [www.geocaching.com](http://www.geocaching.com) ?

The screenshot shows the Firefox browser window with the address bar displaying [www.geocaching.com](http://www.geocaching.com). The page has a green header with the **GEOCACHING** logo on the left and a welcome message on the right: "Welcome, Visitor!" with a "Login with Facebook" button and links for "Sign In" and "Create Account". Below the header is a navigation bar with links: Learn, Join, Play, Community, Shop, Partnering, Videos, Follow Us, and a language selector set to English.

The main content area features a large banner image of a mountain landscape with a yellow dashed line leading to a geocache icon. Text on the banner reads: "Geocaching is the real-world treasure hunt that's happening right now, all around you. There are 2,350,227 active geocaches and over 6 million geocachers worldwide. [Learn more about geocaching and how you can join the adventure.](#)"

To the right of the banner is a sidebar titled "How to Go Geocaching:" with three numbered steps:

- 1** Search for Nearby Geocaches  
postal code, country, etc. [Search Icon]  
[Find my location](#)
- 2** Navigate to the geocache with the [Geocaching app](#) or a GPS.  
[See examples of what geocaches look like.](#)
- 3** Sign the logbook and log your find online.

The footer contains four promotional tiles:

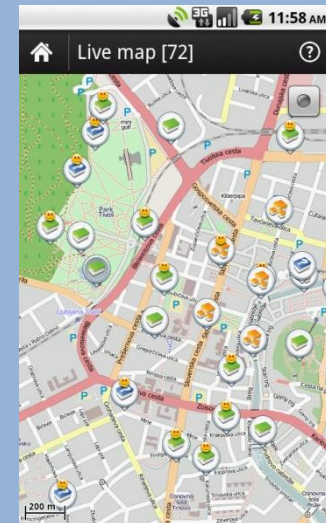
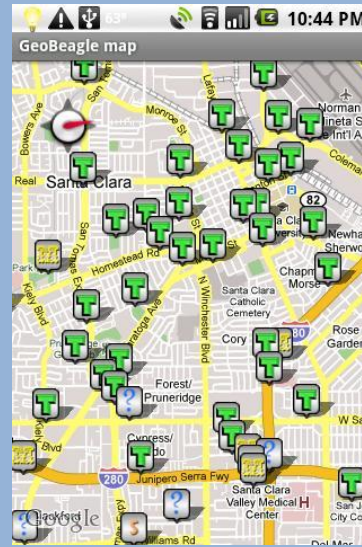
- Upgrade to Geocaching Premium
- Download the Official Geocaching App
- Shop Geocaching Supplies
- GeoTours: Explore New Destinations

The Windows taskbar at the bottom shows various application icons and the system clock indicating 14:11 on 2.4.2014.

# Oprema ?



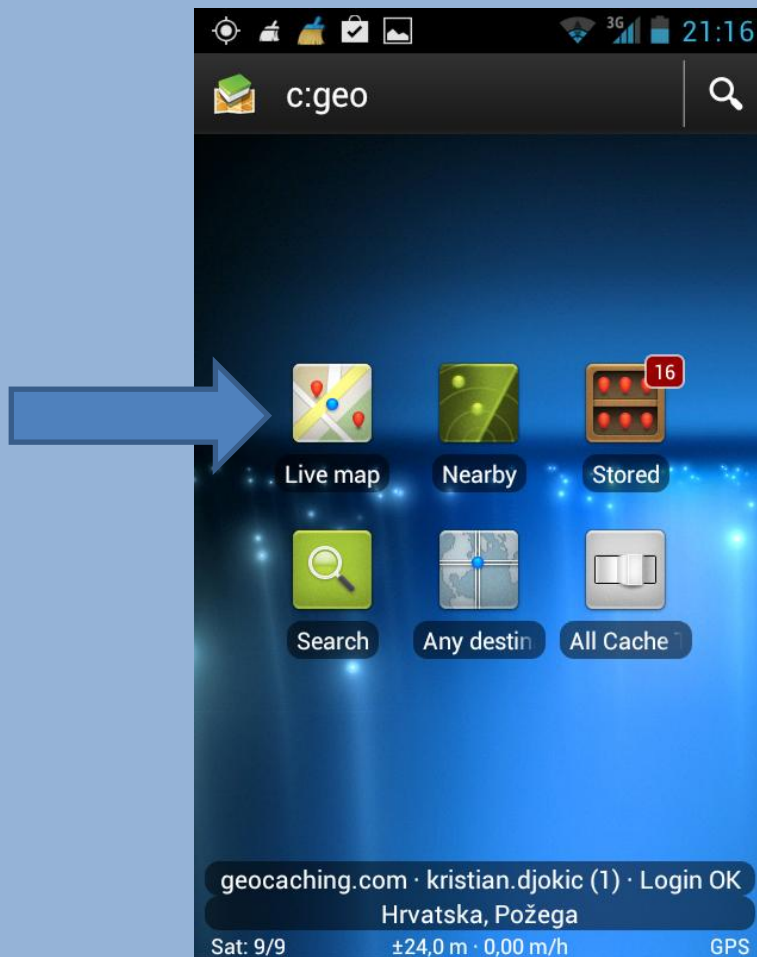
# Pametni telefoni (iOS & Android)



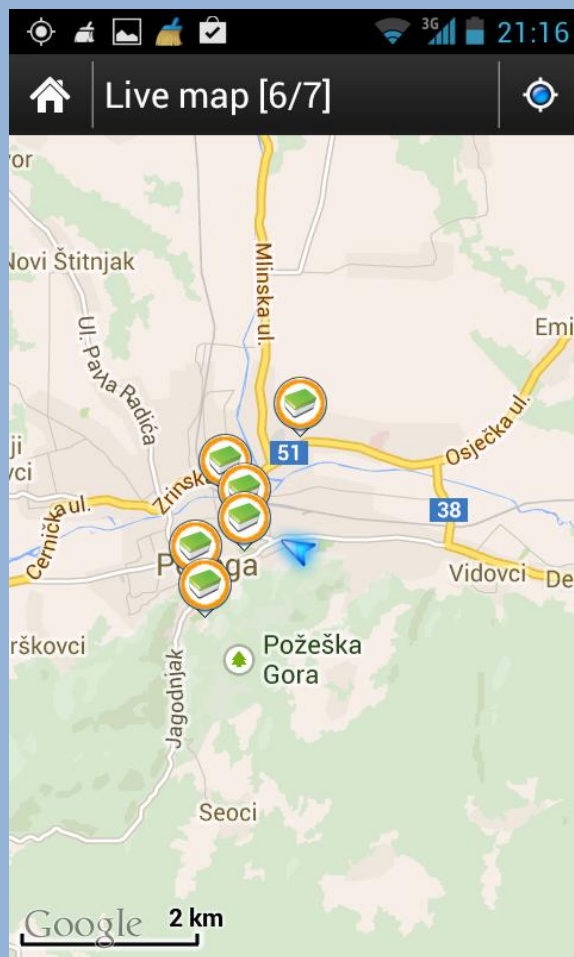
# Aktivnost u zajednici ?



# c:geo

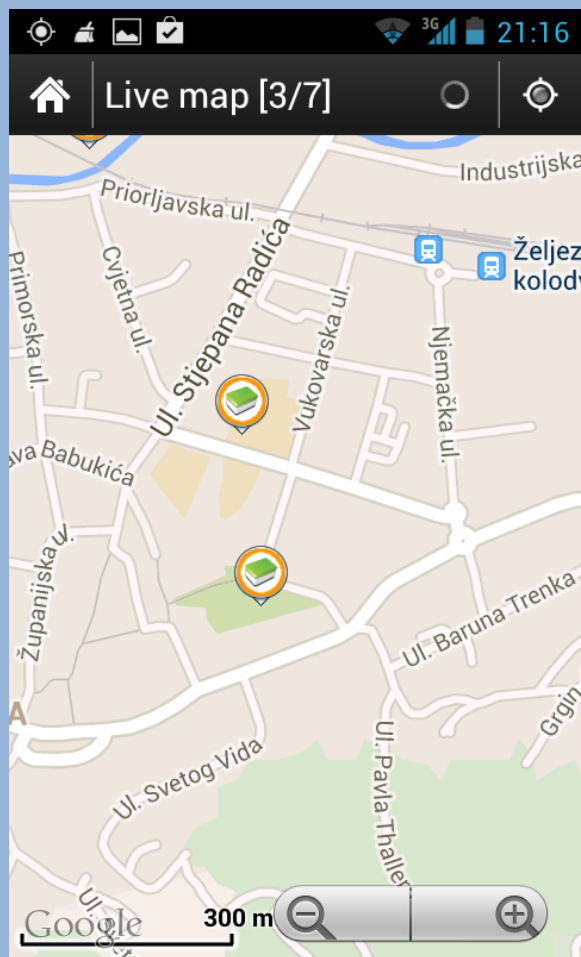


# Oko moje trenutne lokacije

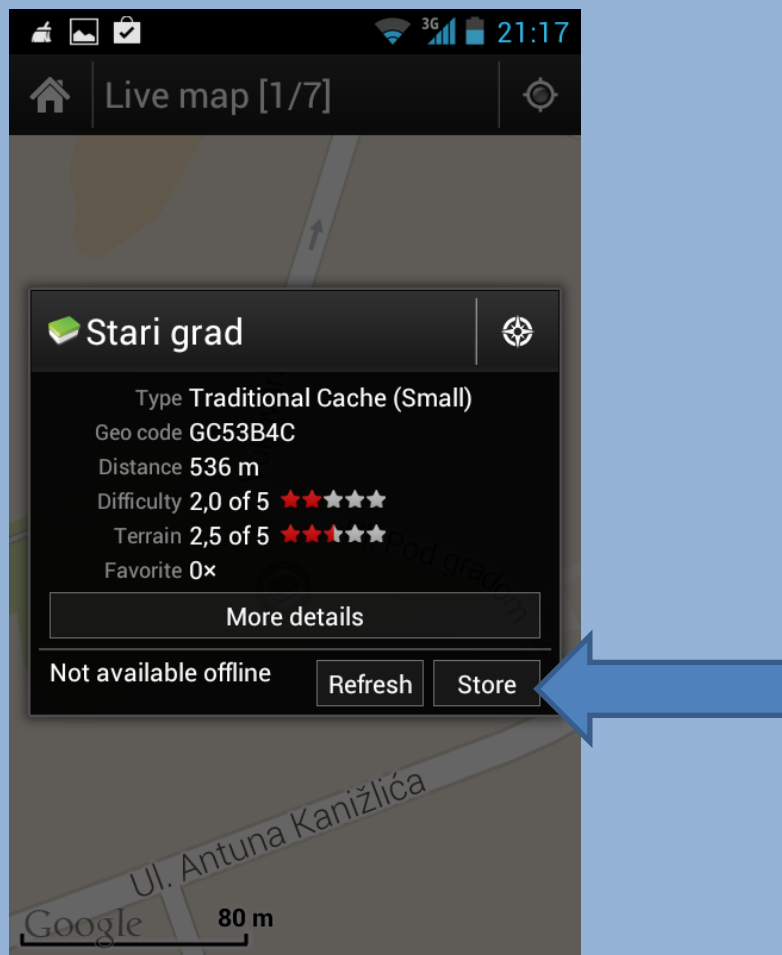


# Zoomiranje

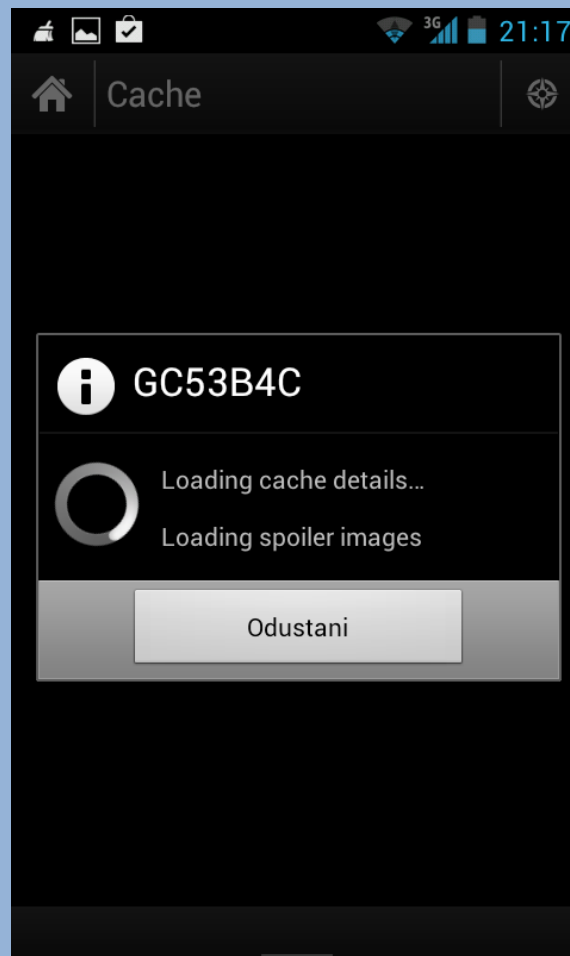





# Klik na cache na karti





# Povlačenje podataka...











# Detalji, pohranjeni na telefonu

 Lokaciju utvrdio GPS

 **Stari grad (GC53B4C)** 

Name **Stari grad**  
Type **Traditional Cache**  
Size **Small**  
Geo code **GC53B4C**  
Distance **536 m**  
Difficulty **2,0 of 5** ★★☆☆☆  
Terrain **2,5 of 5** ★★☆☆☆  
Owner **hrvoje.mikolcevic**  
Hidden **24. travnja 2014.**  
Location **Croatia**  
Coordinates **N 45° 19,967 · E 017° 40,820**

Stored in device  
a few minutes ago

List: Stored

This cache is not on your  
watchlist.

Refresh Drop

Move

Add to Watchlist

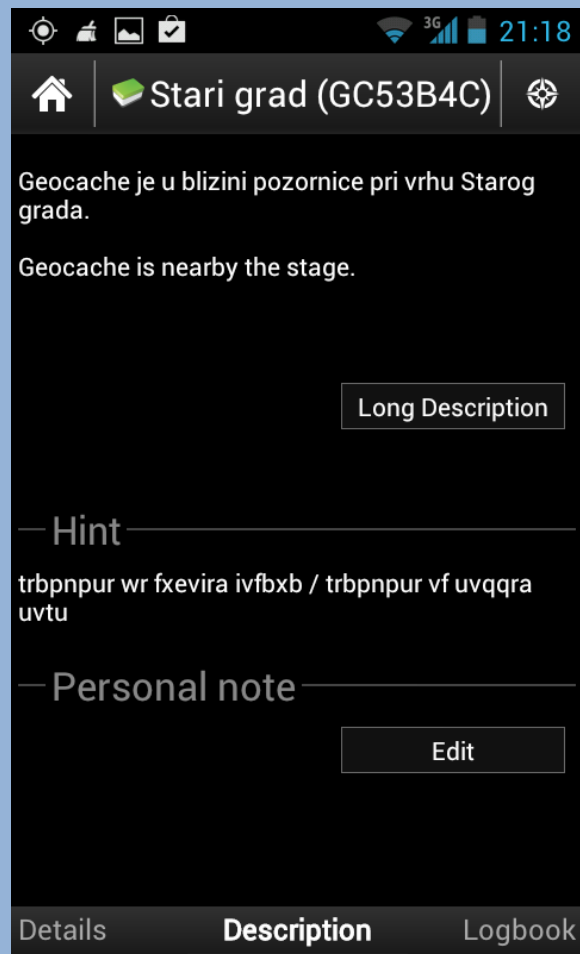
0 Waypoints

**Details**

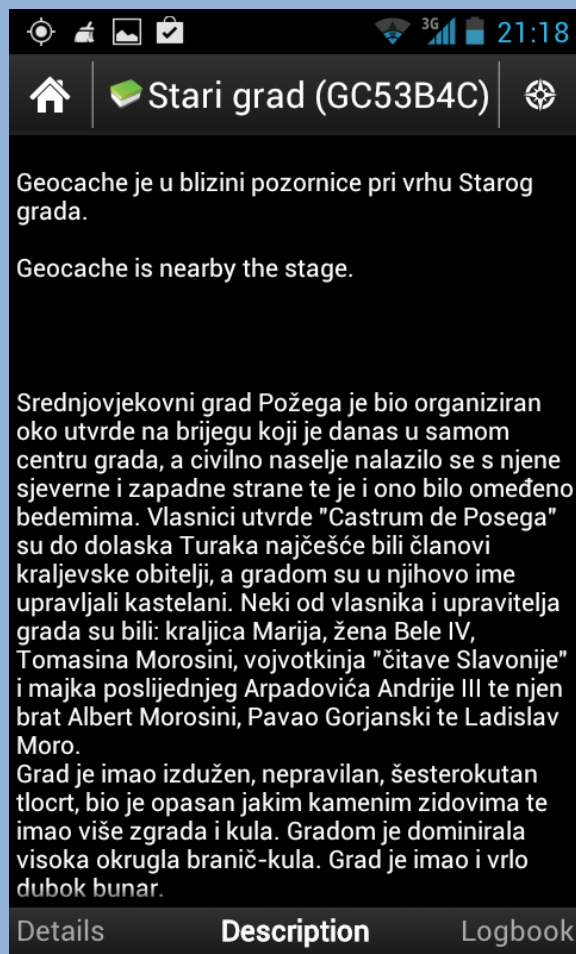
Description



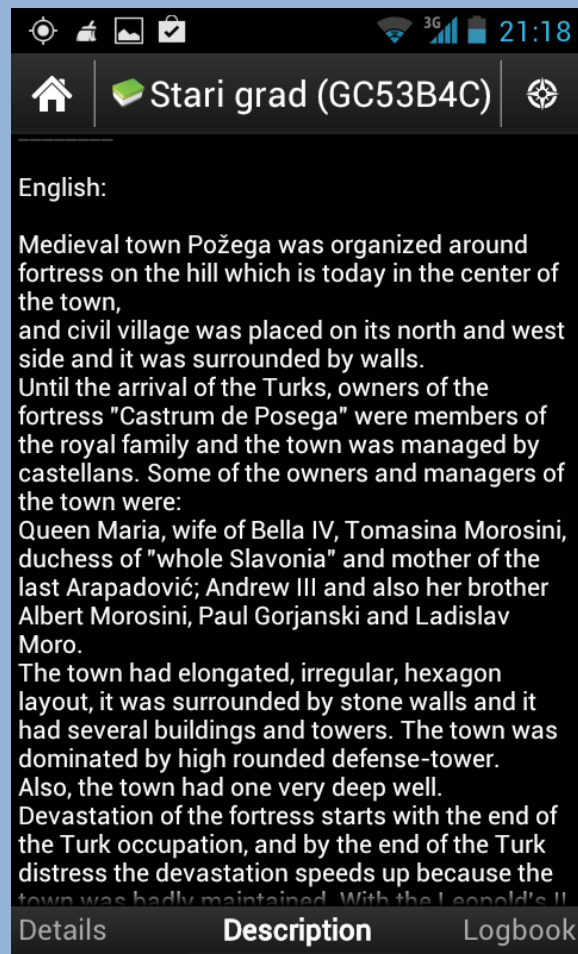
# Opis



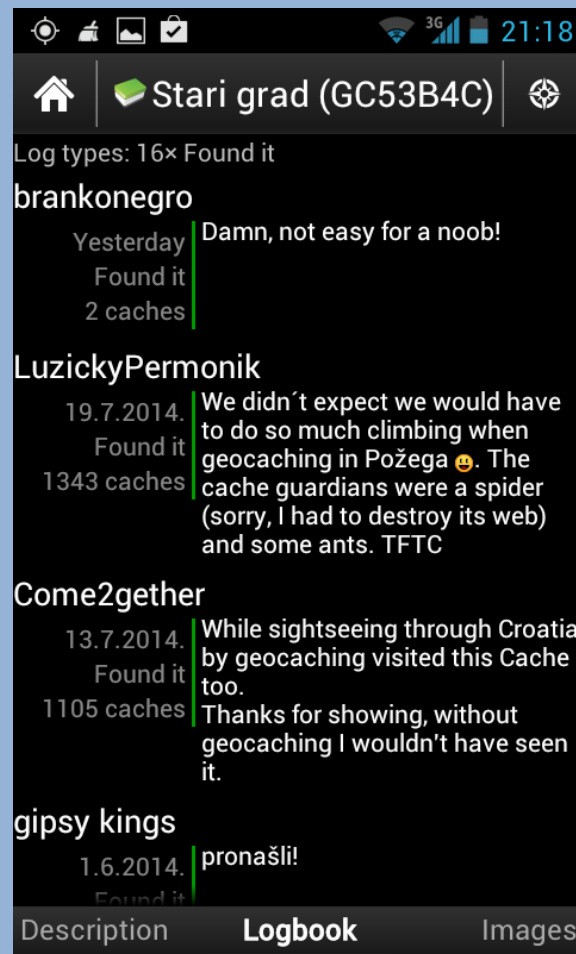
# Detaljni opis



# Detaljni opis na engleskom



# Iskustva istraživača



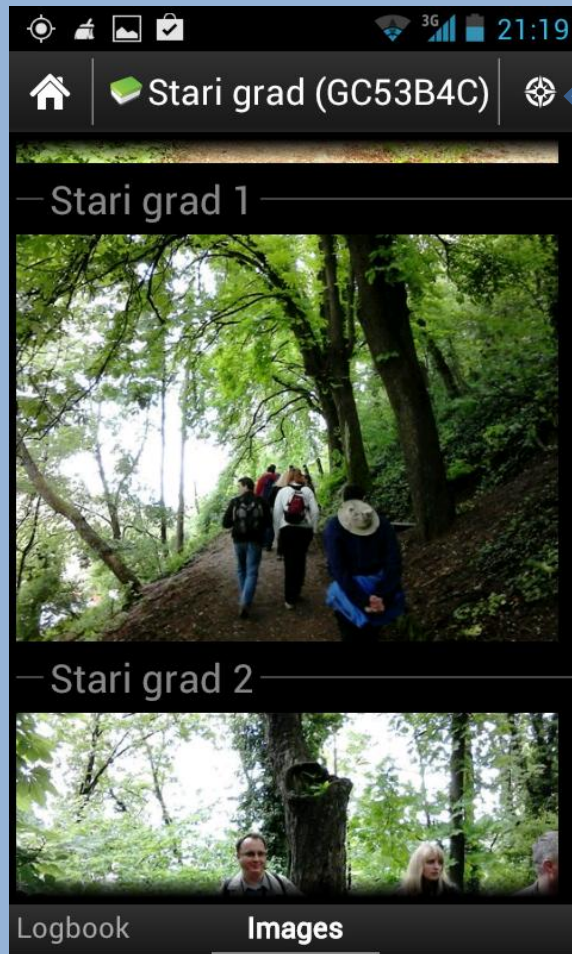
# Još iskustava



# Slike



# Slike...



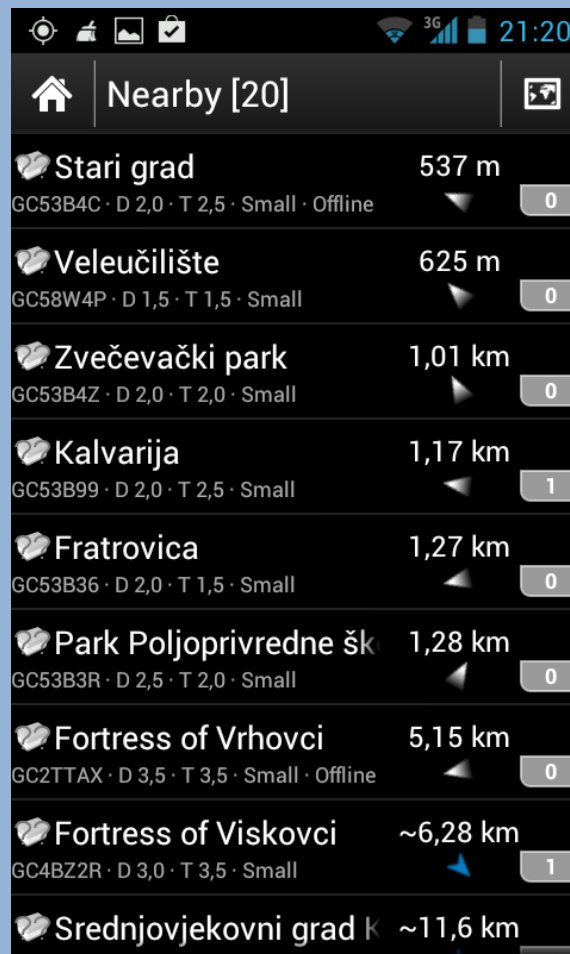
# Koliko je to daleko i u kom smjeru ?



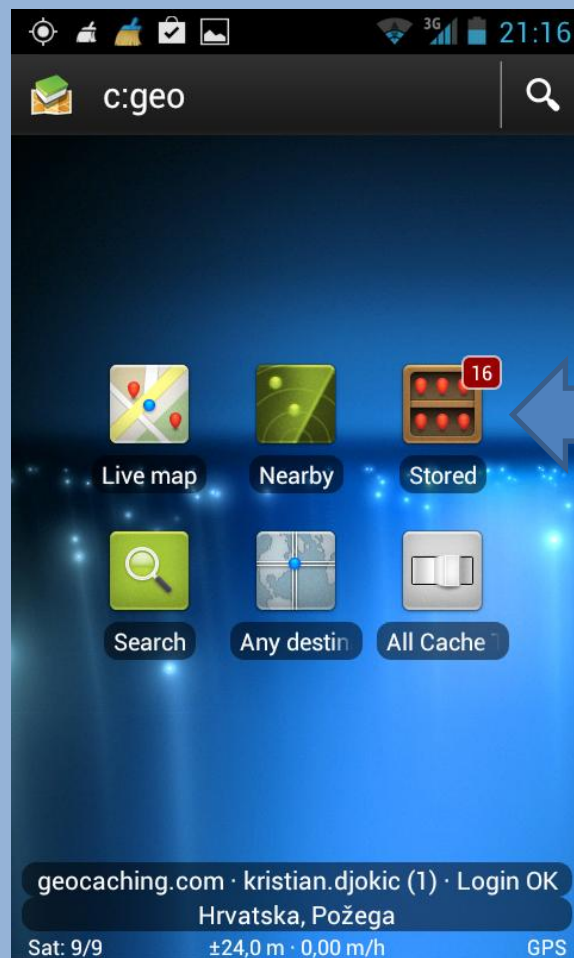
# c:geo



# U blizini !



# c:geo



# Pohranjeni na telefonu



# c:geo



# Traženje...ovako...

The screenshot shows a mobile application interface with a dark theme. At the top, there is a status bar with icons for signal, Wi-Fi, and battery, and the time 21:20. Below the status bar is a navigation bar with a home icon and the word "Search". The main content area is divided into three sections, each with a title and a search input field and a search button.

— Coordinates —

Latitude

Longitude

Search by coordinates

— Address —

Address

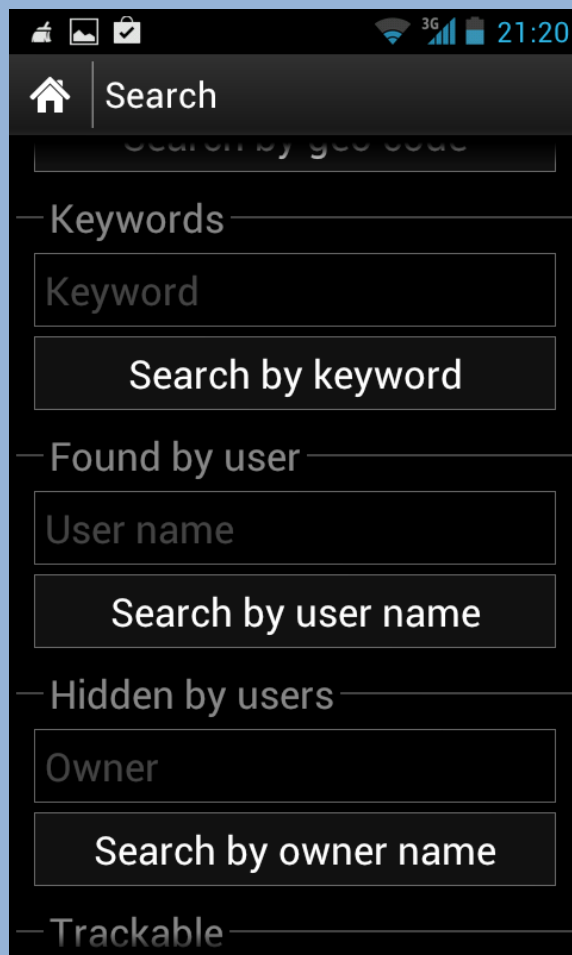
Search by address

— Geo code —

GC

Search by geo code

# Traženje...onako...

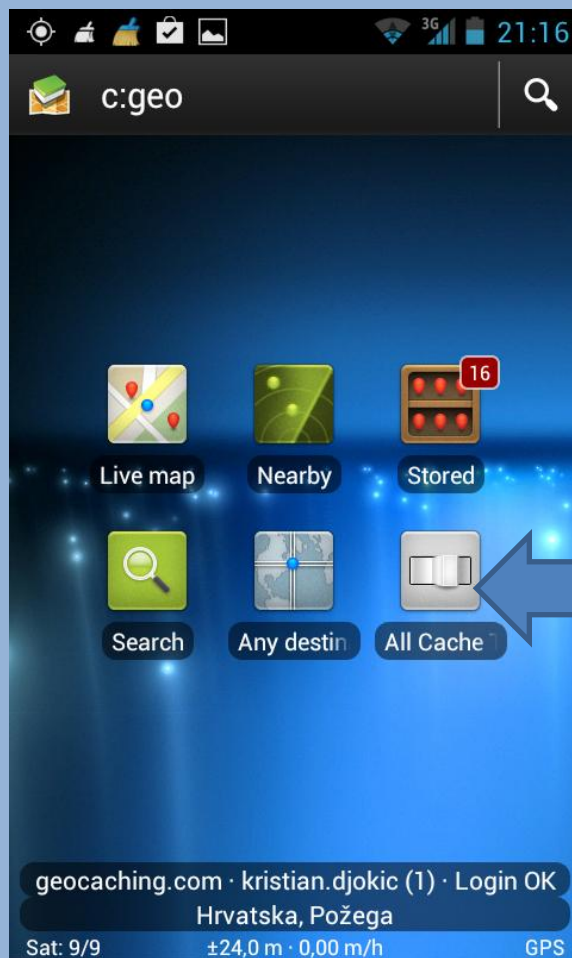


The screenshot shows a mobile application interface with a dark theme. At the top, there is a status bar with icons for signal, Wi-Fi, and battery, along with the time 21:20. Below the status bar is a navigation bar with a home icon and the word "Search". Underneath the navigation bar is a search bar with the placeholder text "Search by geo code". Below the search bar are three sections, each with a title and a text input field, followed by a button:

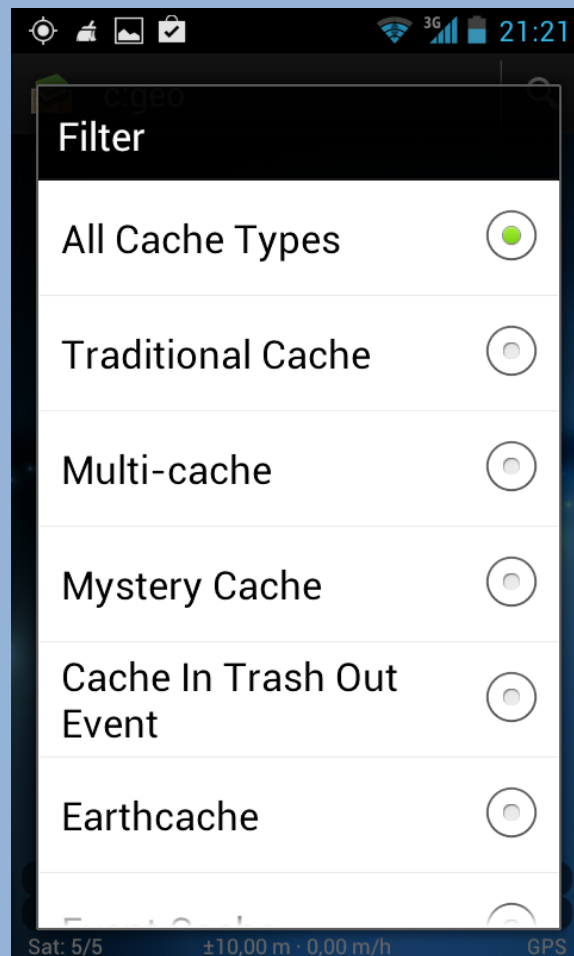
- Keywords**: A text input field with the placeholder "Keyword" and a button labeled "Search by keyword".
- Found by user**: A text input field with the placeholder "User name" and a button labeled "Search by user name".
- Hidden by users**: A text input field with the placeholder "Owner" and a button labeled "Search by owner name".

At the bottom of the screen, there is a section titled "Trackable" which is partially visible.

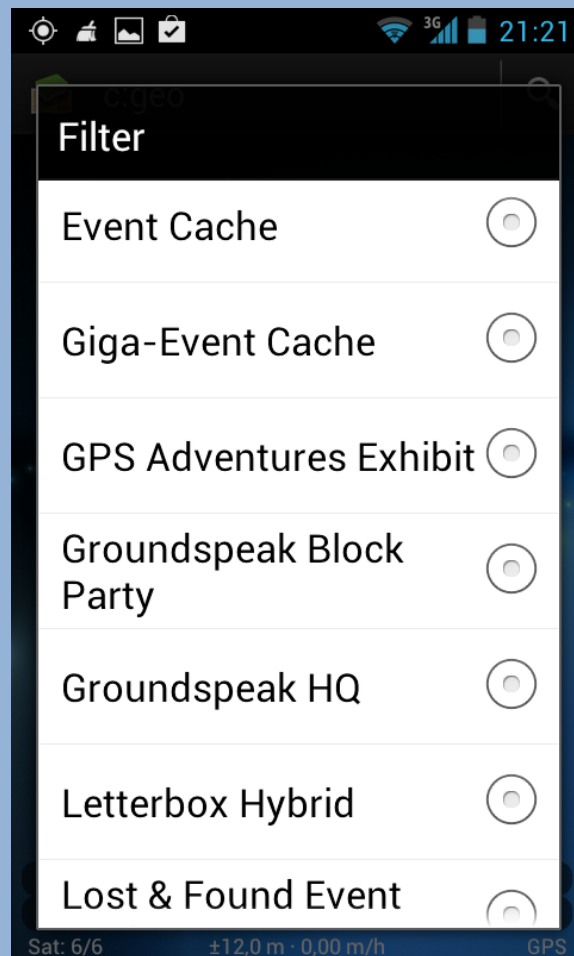
# c:geo



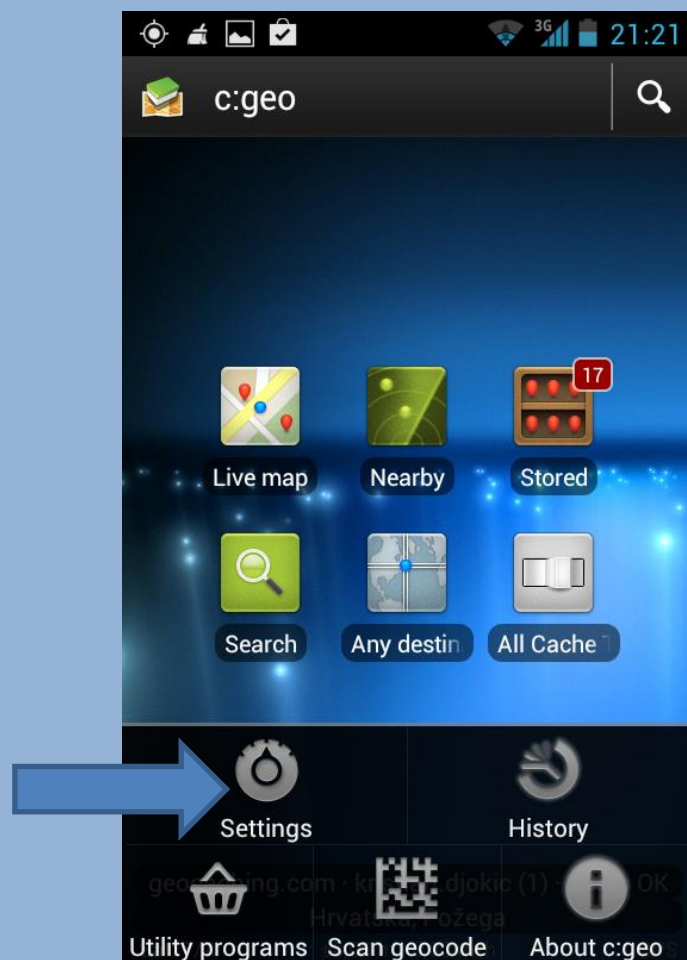
# Filtri



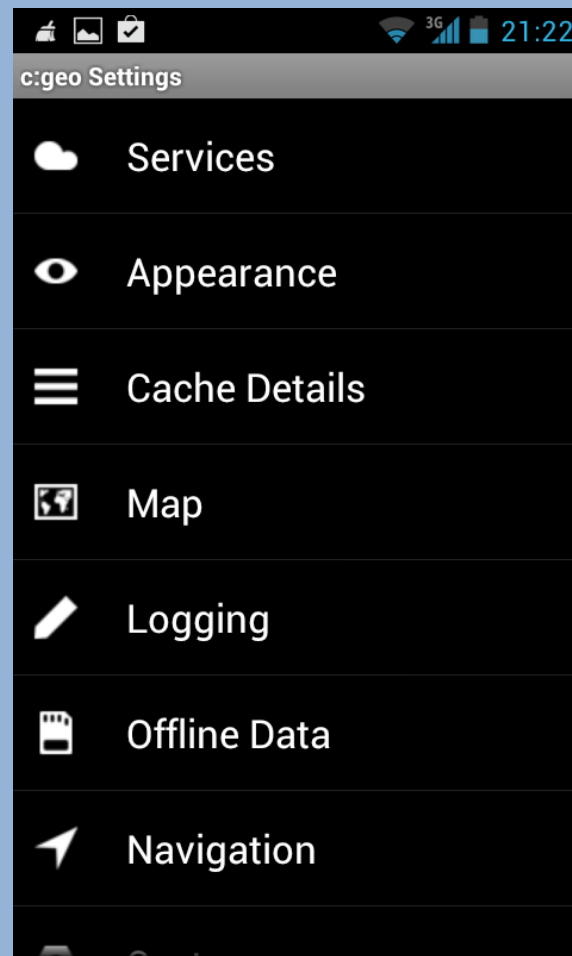
# Filtri



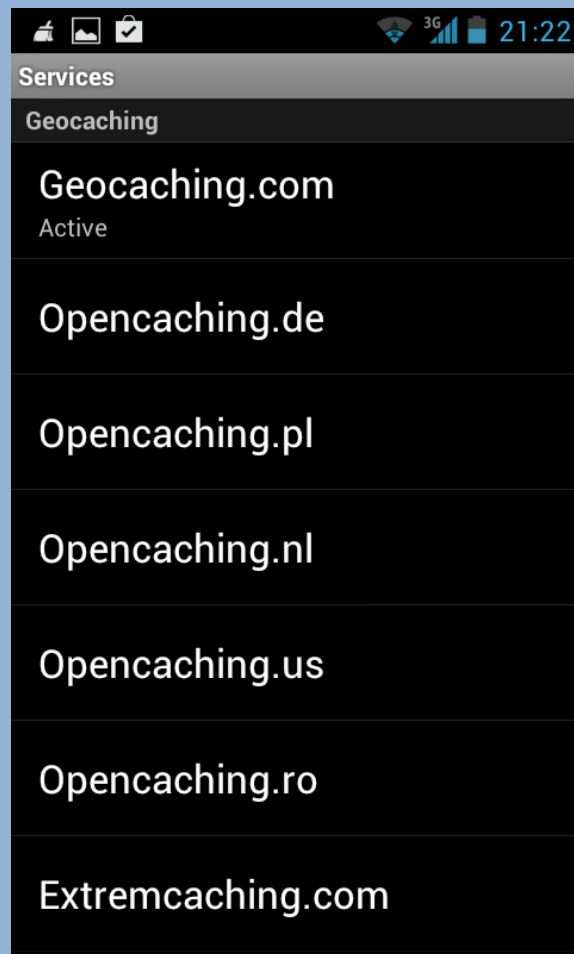
# A odakle podaci o *cashevima* ?



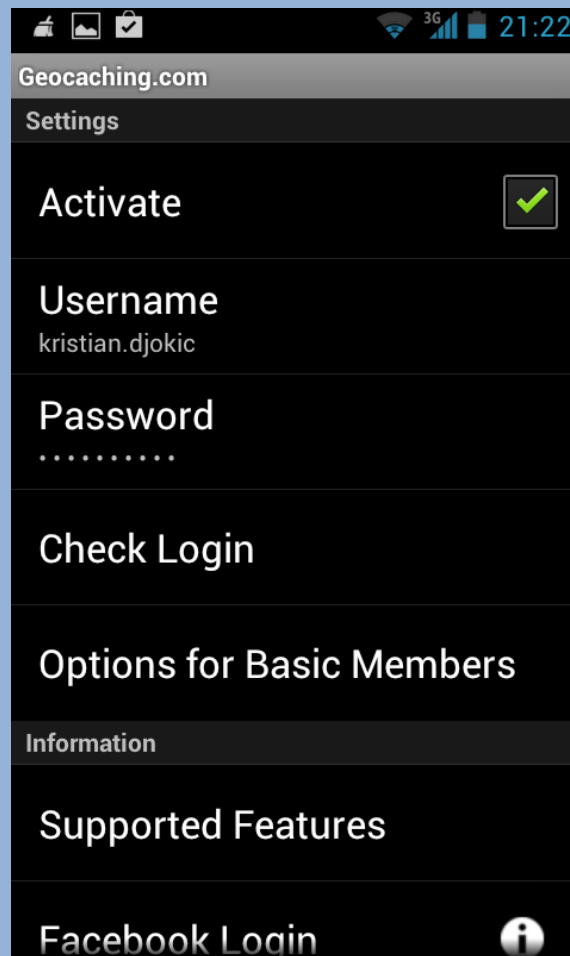
# Settings...services...



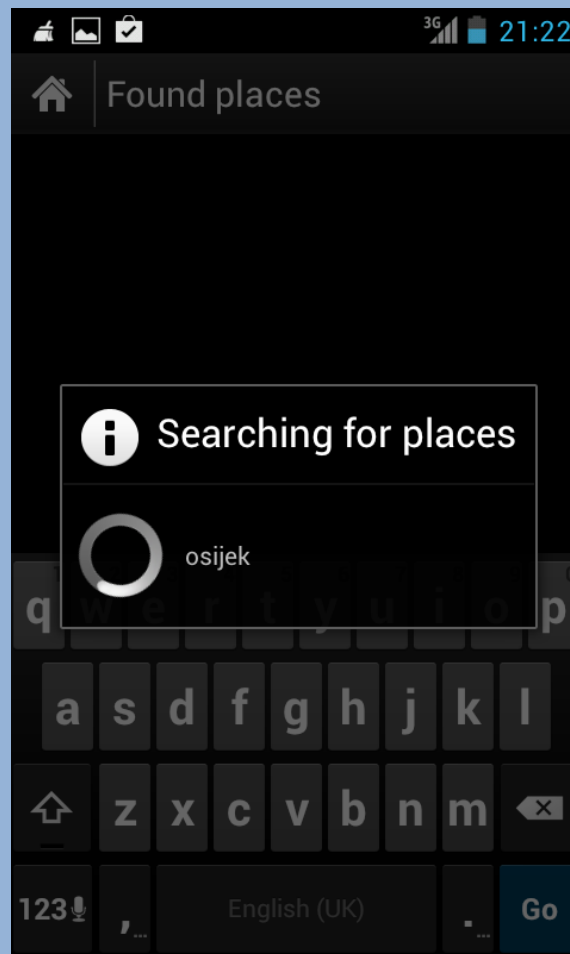
# Geocaching.com



# Username i password



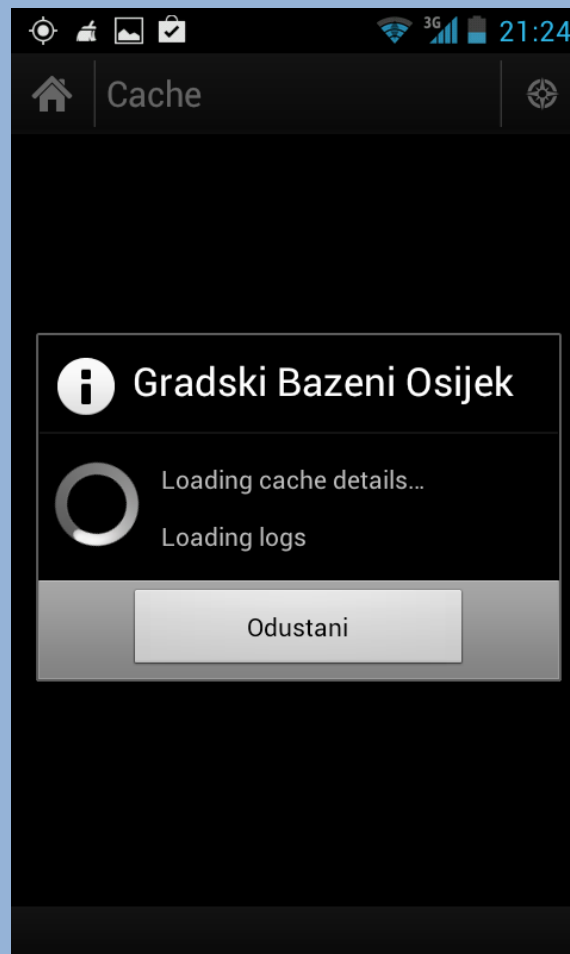
# Pogledajmo Osijek !



# Od centra Osijeka...



# Gradski Bazeni...



# Podaci

The screenshot shows a mobile application interface with a dark theme. At the top, there's a status bar with icons for location, signal, and battery, and the time 21:24. Below the status bar is a navigation bar with a home icon, the title 'Gradski Bazeni Osijek', and a globe icon. The main content area displays the following information:

- Name: Gradski Bazeni Osijek
- Type: Traditional Cache
- Size: Micro
- Geo code: GC5BA6P
- Distance: 82,4 km
- Difficulty: 5,0 of 5 (5 red stars)
- Terrain: 2,0 of 5 (2 red stars, 3 grey stars)
- Owner: ExistingUser
- Hidden: 21. kolovoza 2014.
- Location: Croatia
- Coordinates: N 45° 32,936 · E 018° 41,655

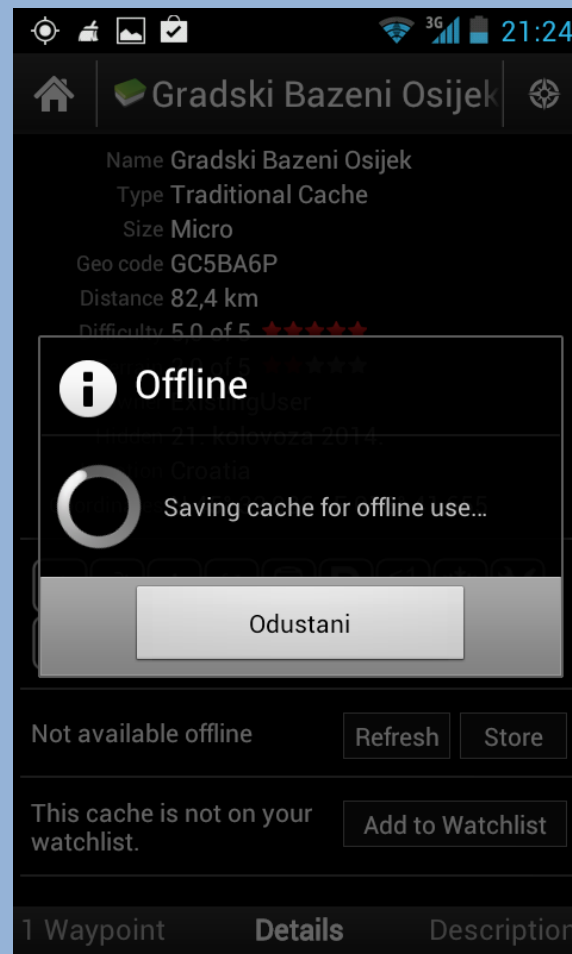
Below the text is a grid of 14 icons representing various features: a car, a motorcycle, a bicycle, a bus, a parking 'P' sign, a distance '<1 km', a snowflake, a wrench, a 24/7 icon, a swimmer, a clock, a stroller, a dog, and a cat.

At the bottom of the main content area, there's a section with the text 'Not available offline' and two buttons: 'Refresh' and 'Store'. Below this, there's another section with the text 'This cache is not on your watchlist.' and a button: 'Add to Watchlist'.

The bottom of the screen features a navigation bar with three tabs: '1 Waypoint', 'Details' (which is highlighted), and 'Description'.

A large blue arrow points from the right side of the screen towards the 'Store' button.

# Povlačenje podataka sa servera na telefon



# Gotovo!

The screenshot shows a mobile application interface for a geocaching location. At the top, there's a status bar with a camera icon and the text "Spremanje snimke zaslona...". Below this is a navigation bar with a home icon, the text "Gradski Bazeni Osijek", and a globe icon. The main content area displays details about the location: Name "Gradski Bazeni Osijek", Type "Traditional Cache", Size "Micro", Geo code "GC5BA6P", Distance "82,4 km", Difficulty "5,0 of 5" (5 red stars), Terrain "2,0 of 5" (2 red stars, 3 grey stars), Owner "ExistingUser", Hidden "21. kolovoza 2014.", Location "Croatia", and Coordinates "N 45° 32,936 · E 018° 41,655". Below the text is a grid of 14 icons representing various features: a car, a motorcycle, a bicycle, a bus, a parking 'P' sign, a distance icon "<1 km", a snowflake, a wrench, a 24/7 icon, a swimming pool, a clock, a stroller, a dog, and a cat. At the bottom, there are three sections: "Stored in device a few minutes ago" with "Refresh" and "Drop" buttons, "List: Stored" with a "Move" button, and "This cache is not on your watchlist" with an "Add to Watchlist" button. A blue arrow points to the "Drop" button. The bottom navigation bar has three tabs: "1 Waypoint", "Details" (which is selected), and "Description".

Spremanje snimke zaslona...

**Gradski Bazeni Osijek**

Name **Gradski Bazeni Osijek**  
Type **Traditional Cache**  
Size **Micro**  
Geo code **GC5BA6P**  
Distance **82,4 km**  
Difficulty **5,0 of 5** ★★★★★  
Terrain **2,0 of 5** ★★☆☆☆  
Owner **ExistingUser**  
Hidden **21. kolovoza 2014.**  
Location **Croatia**  
Coordinates **N 45° 32,936 · E 018° 41,655**

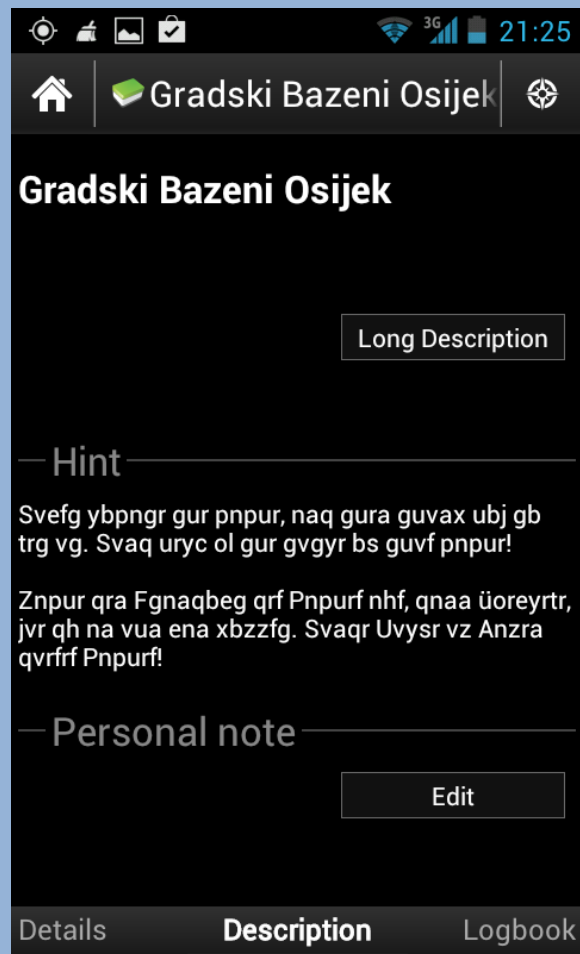
Stored in device a few minutes ago **Refresh** **Drop**

List: Stored **Move**

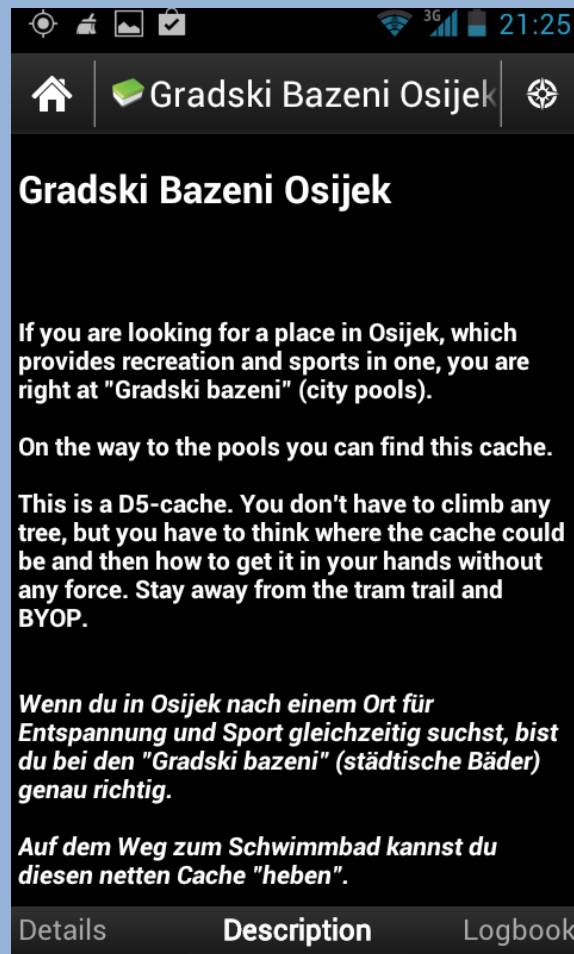
This cache is not on your watchlist **Add to Watchlist**

1 Waypoint **Details** Description

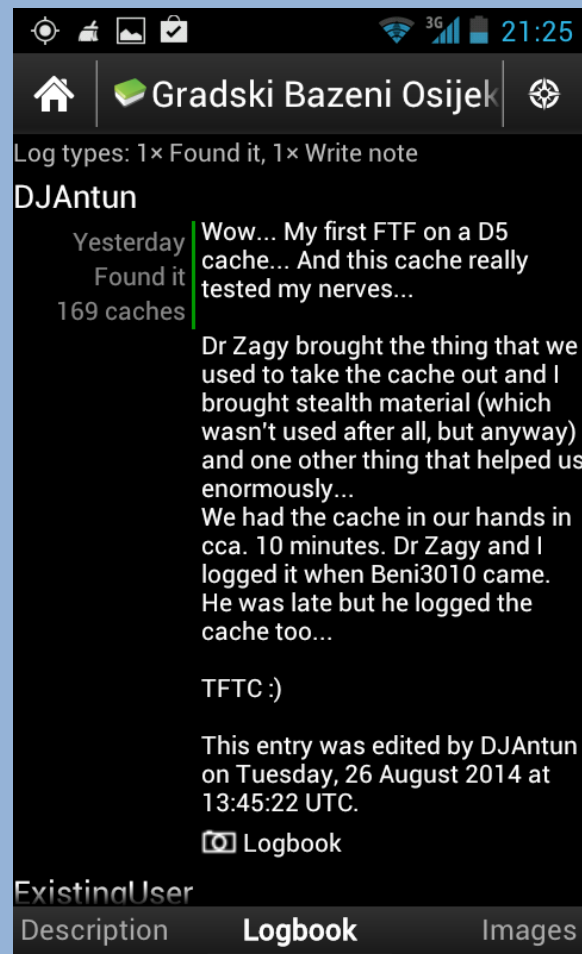
# Opis



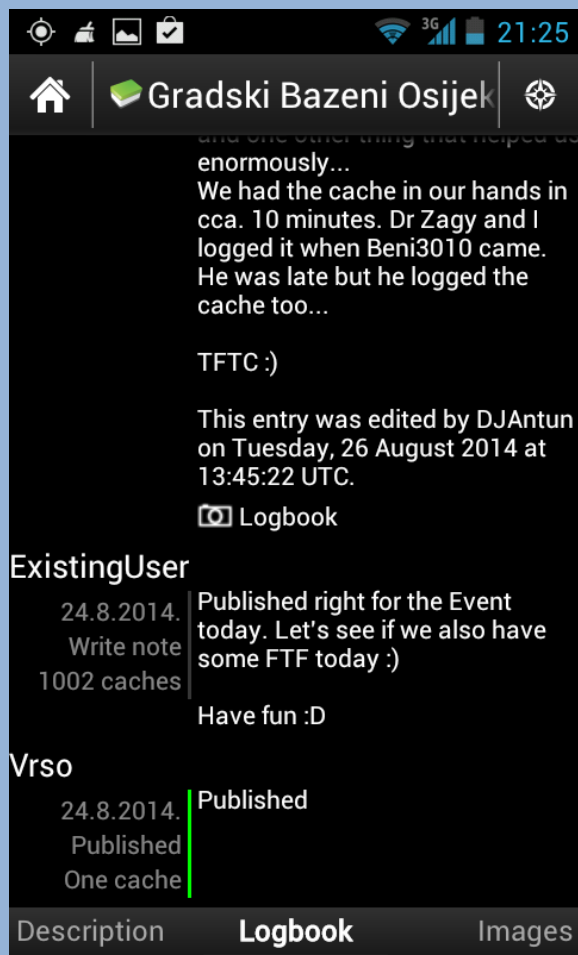
# Detaljan opis



# Iskustva



# Još iskustava



# Slika



# Koliko ima do toga ?



# Napravimo korisničke račune



The screenshot shows the Geocaching website homepage. The browser's address bar displays <https://www.geocaching.com>. The page features a green header with the Geocaching logo, a "7 SOUVENIRS OF AUGUST" banner, and a "Welcome, Visitor!" message with links to "Sign In" and "Create Account". A navigation menu includes links for Learn, Join, Play, Community, Shop, Partnering, Videos, and Follow Us, along with a language selector set to English.

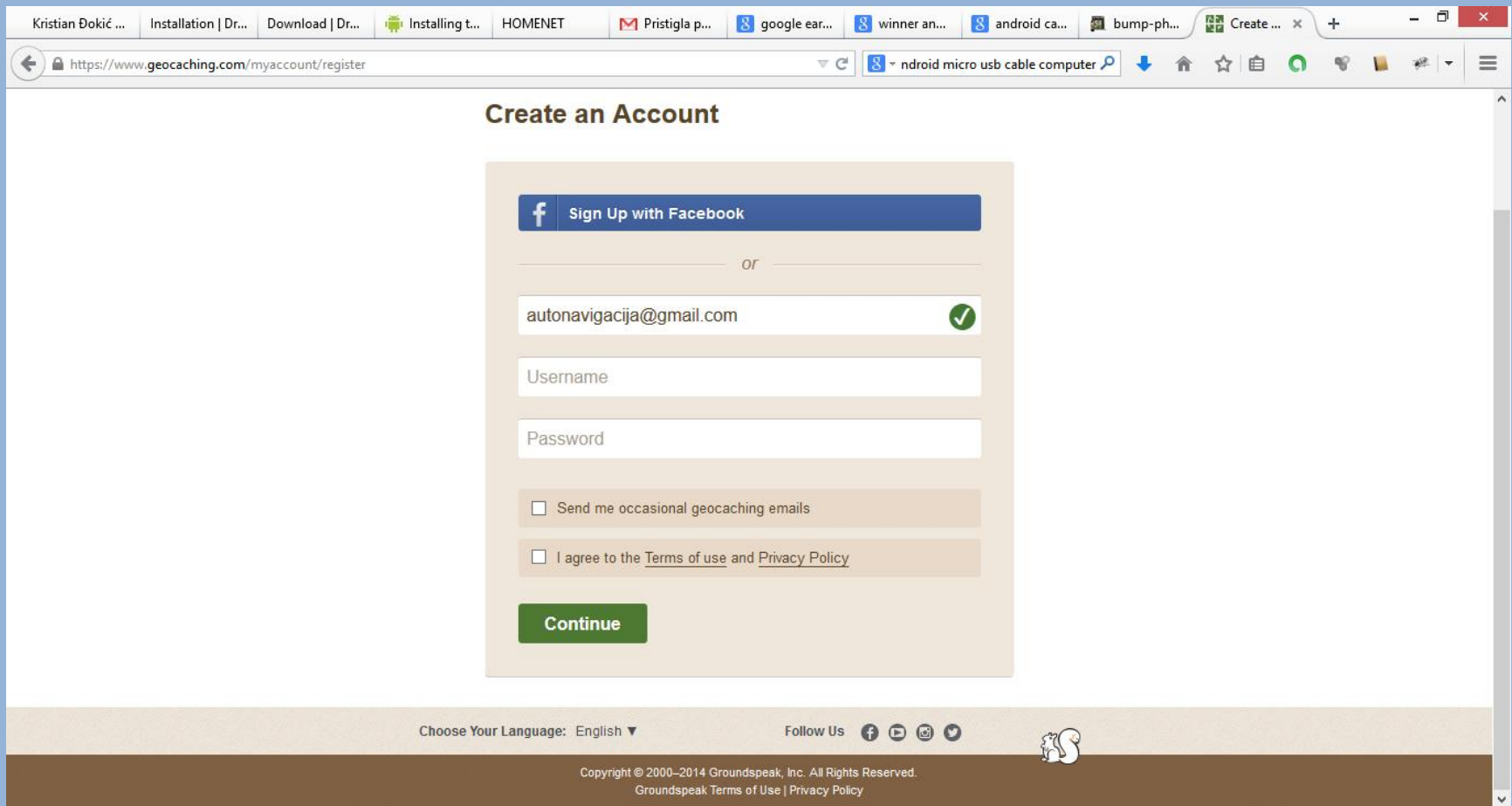
The main content area is divided into two sections. On the left, a large image of a mountain landscape with a yellow dashed path and a small tree icon is accompanied by the text: "Geocaching is the real-world treasure hunt that's happening right now, all around you. There are 2,478,914 active geocaches and over 6 million geocachers worldwide. [Learn more about geocaching and how you can join the adventure.](#)"

On the right, a "How to Go Geocaching:" section provides a three-step guide:

- 1** Search for Nearby Geocaches  
postal code, country, etc.   
[Find my location](#)
- 2** Navigate to the geocache with the [Geocaching app](#) or a GPS.  
[See examples of what geocaches look like.](#)
- 3** Sign the logbook and log your find online.

The footer contains four links: "Upgrade to Geocaching", "Download the Official", "Shop Geocaching", and "GeoTours: Explore New".

# Upišite mail, željeno korisničko ime i željenu lozinku




The screenshot shows a web browser window with multiple tabs. The active tab is titled "Create ..." and the address bar shows the URL "https://www.geocaching.com/myaccount/register". The page content is titled "Create an Account" and features a registration form. The form includes a "Sign Up with Facebook" button, a text input field for email containing "autonavigacija@gmail.com" with a green checkmark, and empty fields for "Username" and "Password". Below these are two checkboxes: "Send me occasional geocaching emails" and "I agree to the Terms of use and Privacy Policy". A green "Continue" button is at the bottom of the form. The footer contains a language selector set to "English", social media links, a squirrel logo, and copyright information for Groundspeak, Inc. (2000-2014).

Kristian Đokić ... Installation | Dr... Download | Dr... Installing t... HOMENET Pristigla p... google ear... winner an... android ca... bump-ph... Create ... x + -

https://www.geocaching.com/myaccount/register

ndroid micro usb cable computer

## Create an Account

 Sign Up with Facebook

or

autonavigacija@gmail.com ✓

Username





Password


☐ Send me occasional geocaching emails

☐ I agree to the [Terms of use](#) and [Privacy Policy](#)

Continue

Choose Your Language: English ▼

Follow Us    



Copyright © 2000–2014 Groundspeak, Inc. All Rights Reserved.  
[Groundspeak Terms of Use](#) | [Privacy Policy](#)

# Sad se možete prijaviti

The screenshot shows the Geocaching website in a web browser. The browser's address bar displays <https://www.geocaching.com>. The website's header features the Geocaching logo and a green banner for "7 SOUVENIRS OF AUGUST". Below the header is a navigation menu with links: Learn, Join, Play, Community, Shop, Partnering, Videos, and Follow Us. The main content area includes a large image of a mountain landscape with a yellow trail and a small tree. Text on the page reads: "Geocaching is the real-world treasure hunt that's happening right now, all around you. There are 2,478,914 active geocaches and over 6 million geocachers worldwide. [Learn more about geocaching and how you can join the adventure.](#)"

On the right side, there is a login panel titled "Welcome, Visitor!". It contains links for "Sign In" and "Create Account". Below these is a "Sign in with Facebook" button. A separator line with "or" follows. Then, there is a "Sign in with Geocaching" section with input fields for "Username" and "Password". Below these fields are checkboxes for "Remember me" and a link for "Forgot Username/Password". A green "Sign In" button is at the bottom of this section. Below the button, there is a link to "the Geocaching app or a GPS." and a link to "See examples of what geocaches look like." A small circular icon with the number "3" is also visible. At the bottom of the page, there is a footer with four icons and text: "Upgrade to Geocaching", "Download the Official", "Shop Geocaching", and "GeoTours: Explore New".

# Pogledajmo te milijune *geocacheva*



The screenshot shows the Geocaching website interface. At the top, there's a yellow banner with a message about account validation. Below that is the green header with the Geocaching logo, a '7 SOUVENIRS OF AUGUST' badge, and a user profile for 'autonavigacija'. The main navigation bar includes links like 'Learn', 'Your Profile', 'Play', 'Community', 'Shop', 'Partnering', 'Videos', and 'Follow Us'. A dropdown menu is open under the 'Play' link, with a large red arrow pointing to the 'View Geocache Map' option. The background features a scenic mountain landscape with a geocache icon. On the right, there's a 'How to Go Geocaching' section with three steps: 1. Search for Nearby Geocaches, 2. Navigate to the geocache with the Geocaching app or a GPS, and 3. Sign the logbook and log your find online.

Kristian Đokić ... Installation | Dr... Download | Dr... Installing t... HOMENET Pristigla p... Neretvans... winner an... android ca... bump-ph... Geocac... x

www.geocaching.com

You need to validate your account. If you have the validation code from the e-mail we sent you, [visit the validation page](#) to enter that code and validate your account. Otherwise you can have a new [validation e-mail](#) sent to you.

**GEOCACHING** 7 SOUVENIRS OF AUGUST Hello, [autonavigacija](#) (Sign Out) Basic Member Upgrade to PREMIUM

Learn ▾ Your Profile ▾ Play ▾ Community ▾ Shop ▾ Partnering ▾ Videos Follow Us ▾ English ▾

Hide & Seek a Cache  
Log a Cache  
View Geocache Map  
Find Trackables  
GeoTours  
Help Center

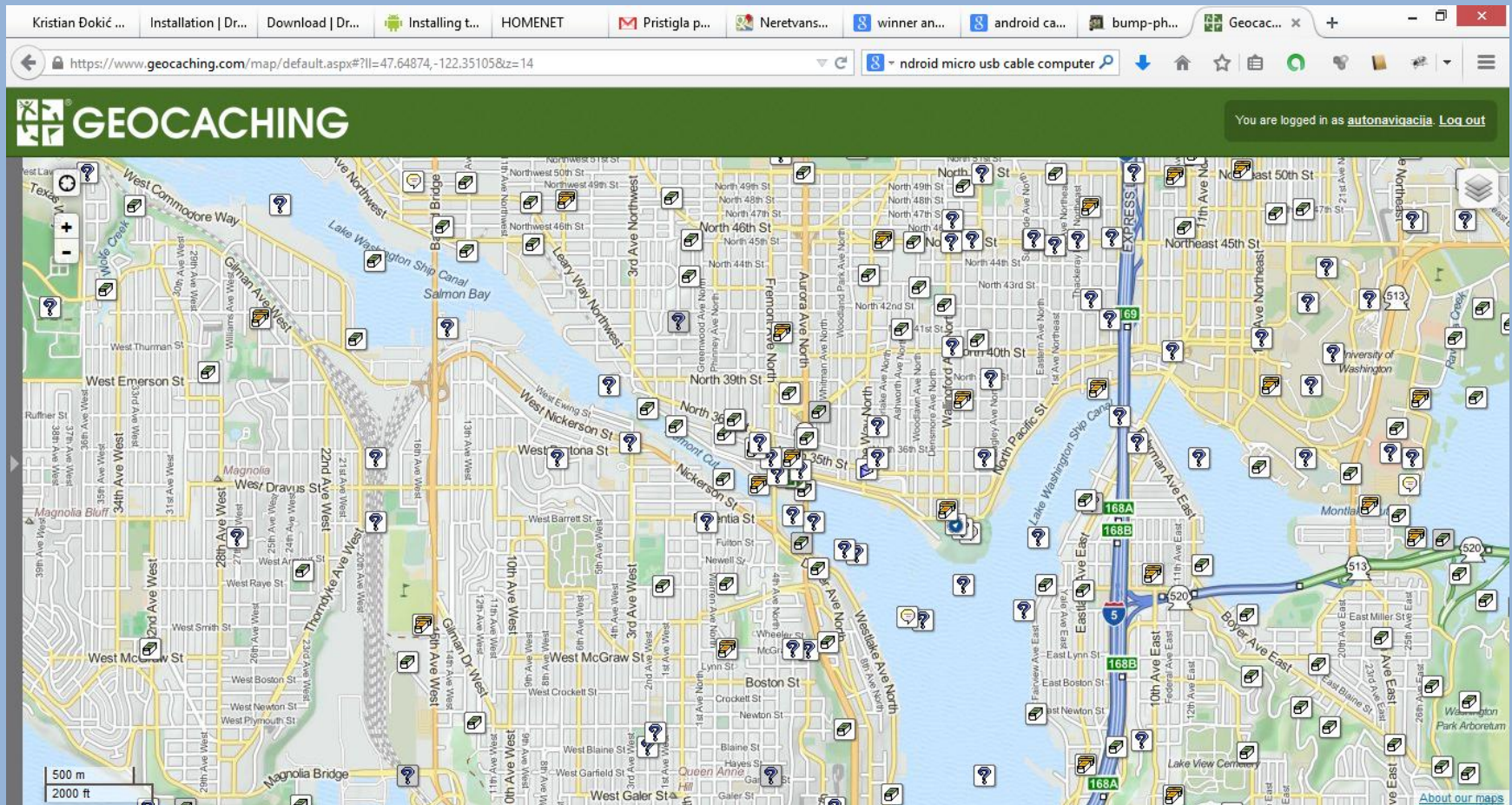
happening right now, all around  
over 6 million geocachers worldwide.  
adventure.

**How to Go Geocaching:**

- 1**  
Search for Nearby Geocaches  
postal code, country, etc.   
[Find my location](#)
- 2**  
Navigate to the geocache with the [Geocaching app](#) or a GPS.  
[See examples of what geocaches look like.](#)
- 3**  
Sign the logbook and log your find online.

www.geocaching.com/map/

# Zoom out s kotačićem pa do Osijeka...



# Nadite geocache u Tvrđi i kliknite na njega

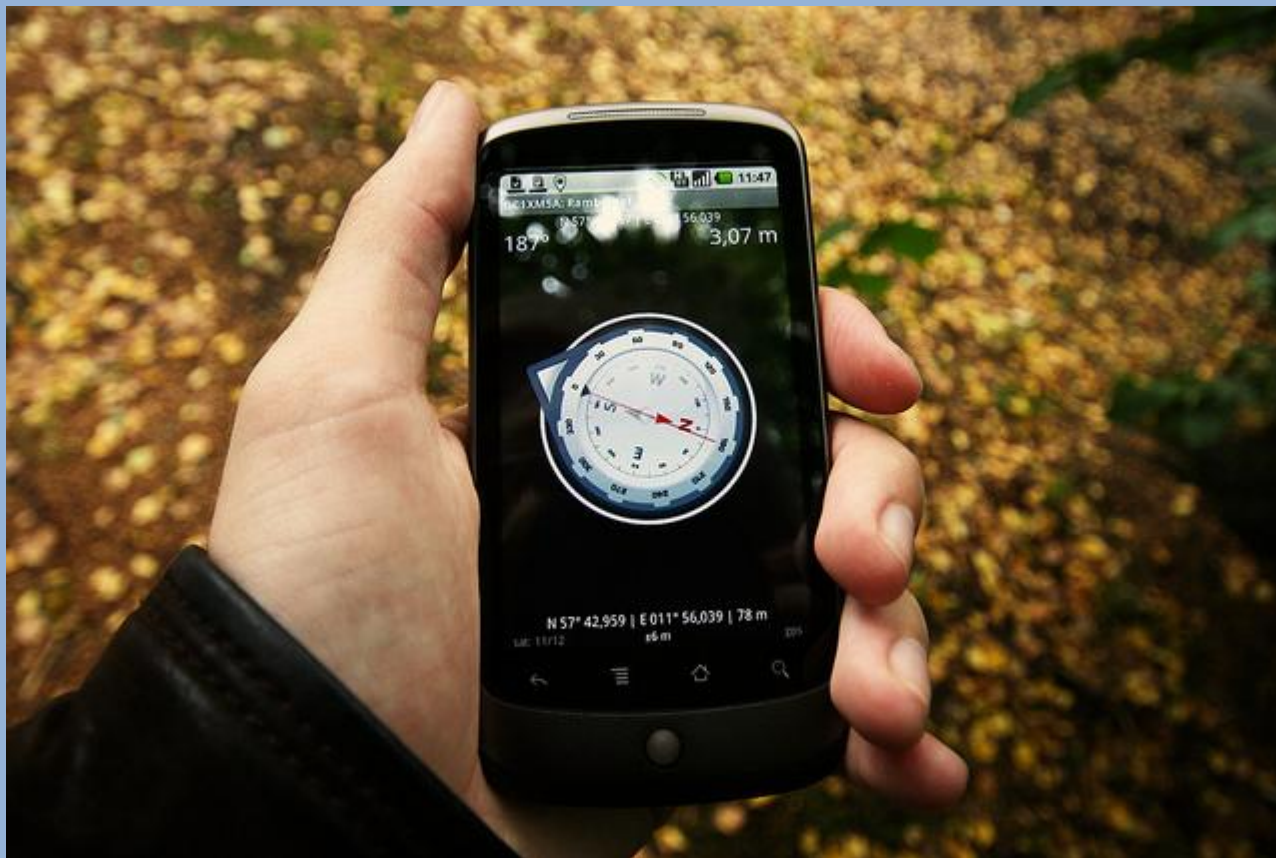
The screenshot shows a web browser window with the Geocaching website. The address bar displays the URL: <https://www.geocaching.com/map/default.aspx?ll=45.55872,18.70079&z=14>. The browser's tab bar shows several open tabs, including "Geocac...". The website header features the "GEOCACHING" logo and a login status: "You are logged in as [autonavijacija](#). [Log out](#)".

The main content is a map of Osijek, Croatia, with the Drava River (Drava) visible. A popup window for a geocache is displayed over the map. The popup contains the following information:

- Geocache Name:** [Dom tehnike in Tvrda](#)
- GC Code:** GC2XA11
- Created by:** [DJAntun](#)
- Date Hidden:** 05/31/2011
- Difficulty:** ★★☆☆☆
- Terrain:** ★★☆☆☆
- Cache Size:**
- Favorite Points:** 1
- Actions:** [Bookmark it](#), [Send to GPS](#), [Log Visit](#)

Below the popup, it says "1 of 1 nearby results" with navigation links "< Prev | Next >". The map shows various streets in Osijek, including Vukovarska, Europska, and others. A scale bar at the bottom left indicates 500 meters and 2000 feet.





Hvala na pažnji !