MOBILE APPLICATION TESTING HERE WEGO MAPS & NAVIGATION APPLYING DIFFERENT TEST TYPES

by Speaker: V. Pfaifer

AGENDA

- HERE MAPS: SPECIFICATION
- APPLIED TEST TYPES
- TESTS & POTENTIAL BUGS
- TESTING ENVIRONMENT



HERE WeGo Maps & Navigation

HERE Apps LLC Карти й навігація

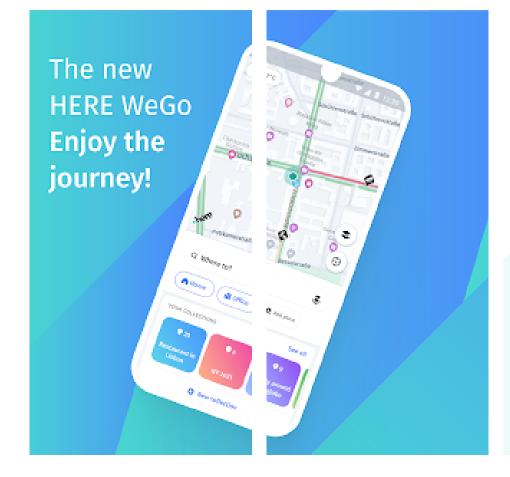
★★★★ 483 266 .

3+

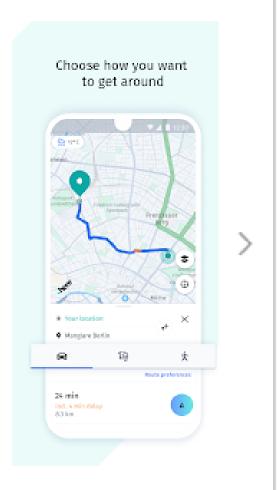
Містить рекламу

Цей додаток доступний для вашого пристрою

Установлено







ABOUT

HERE WeGo is a free navigation app that guides local and global travelers on journeys both familiar and foreign. The app now has a fresh, new design and clearer, easier to use navigation.

APPLIED TEST TYPES

- Smoke testing
- Functional testing
- Validation
- Verification

Non-functional testing:

- UI
- Localization
- Internationalization
- Usability
- Compatibility



Softserve

SMOKE & FUNCTIONAL TESTING

- First step is checking of app installation
- Second step is registration and checking correct work of DB's by entering with credentials
- Next step is testing main functional (map scrolling, searching destination object, checking tabs by the car, by the train, taxi services e.t.c)
- Checking 'Share' function
- Checking 'Map view' function

0

@#\$\$_ Asv super.3359@gmail.com

Get news, offers and more by email.

M11 Getting around

Q Where to?

...0,5K6/c 🗑 .₁ऻ .₁। 📚 🖭 10:36 Q Where to? Шкіряне Підприємство Світанок вченківський район Зупинний пункт Гната 🖳 Хоткевича Високий Замок Личаківський *Личаківська ву* иць Львів Цитадель Паркім. Б. Лісопа Погуля Getting around

COME IN

- App has successfully installed
- Registration has completed
- Functions like 'Map view' and 'Share' work well

POTENTIAL DEFECTS

- No information about TAXI sevices available in my town
- No timetables of local Railway Station with inputed destination
- inadequate behaviour while scrolling





0

softserve

UI TESTING

- Checking all fields

 (e.g. buttons, labels, text-areas)
 for alignment properties in the Login Page
- Checking font types, colors, visual elements for compliance
- Check for spelling errors throughout the application
- Checking the readability of the text

0

POSSIBLE RESULT

Sign in with your HERE account **(7)** Sign in with Facebook Sign in with your HERE account **Email** Password Forgot your password? SIGN IN **NO ACCOUNT? REGISTER**

ACTUAL RESULT

Sign in with your HERE account
Sign in with Facebook
or
Sign in with your HERE account
Email
Password
Forgot your password?
SIGN IN
NO ACCOUNT? REGISTER



- UI components are carefully aligned
- Fonts and colors are agreed
- Spelling errors are absent
- Text is well readable

POTENTIAL DEFECTS

- Margins between UI elements aren't agreed
- The interface elements are aligned in a chaotic manner





softserve

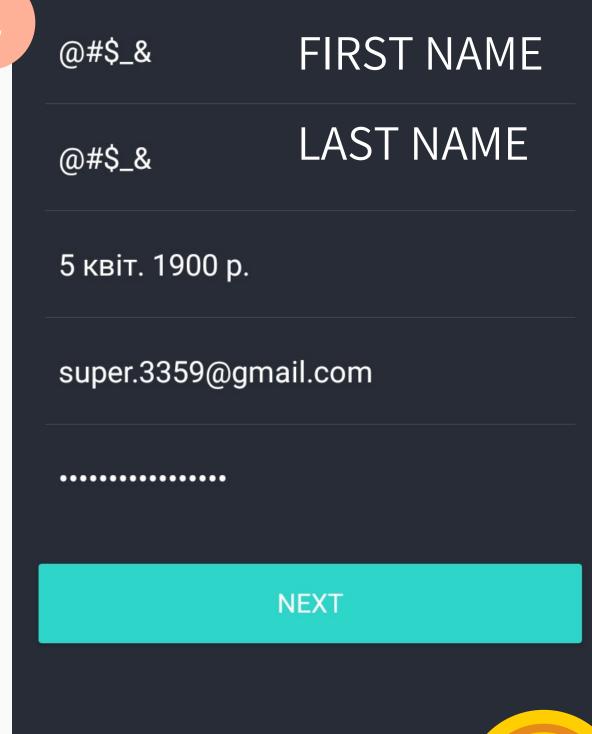
VERIFICATION & VALIDATION

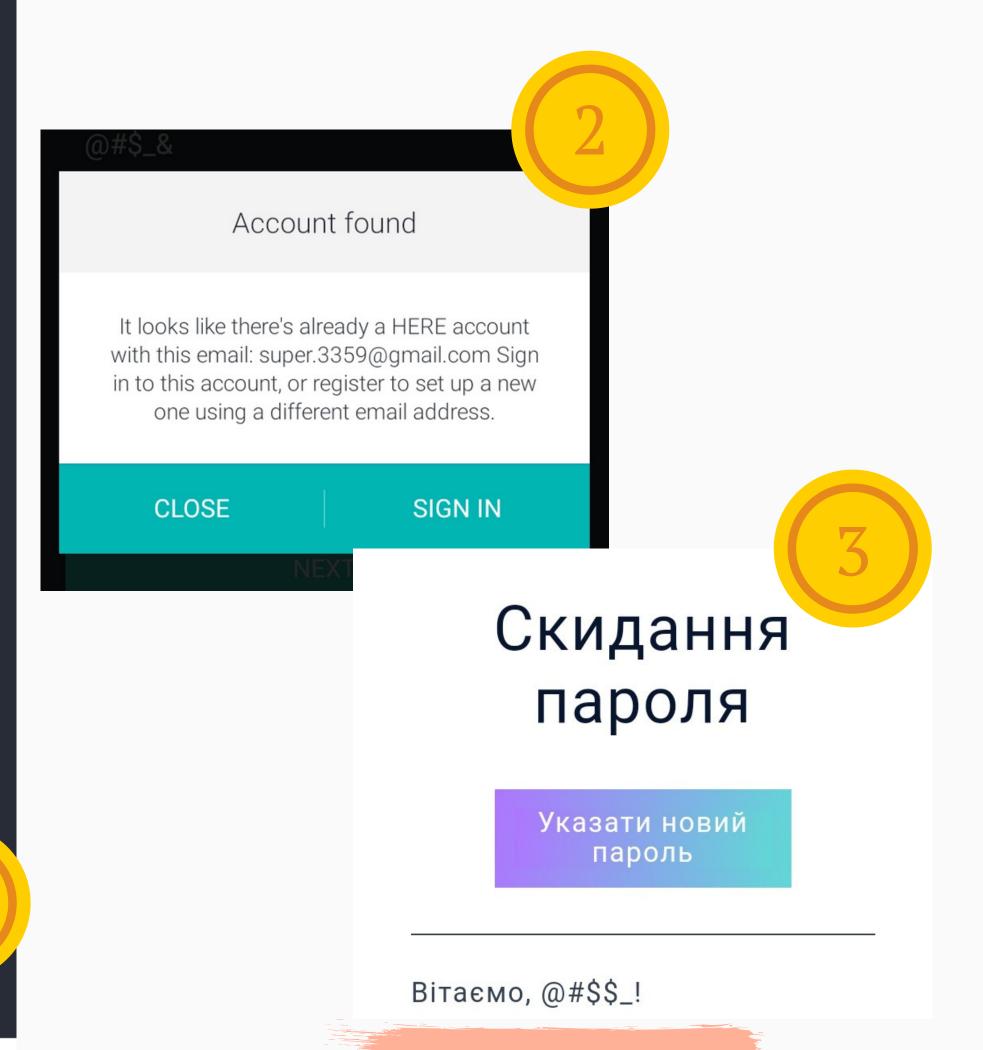
VERIFICATION

- Data-type errors
- Validity of registration
- The correctness of the data entered by the user
- Password reset functionality
- meets the requirements and expectations of a customer

VALIDATION

 Checking requirements for functionality of 'Login Page' and 'Reset Password' with user expectations





- No data type errors
- Validity of registration is correct
- Password reset functionality is working

POTENTIAL DEFECTS

 Fields like "First name" and "Last Name" might consist only special characters







softserve

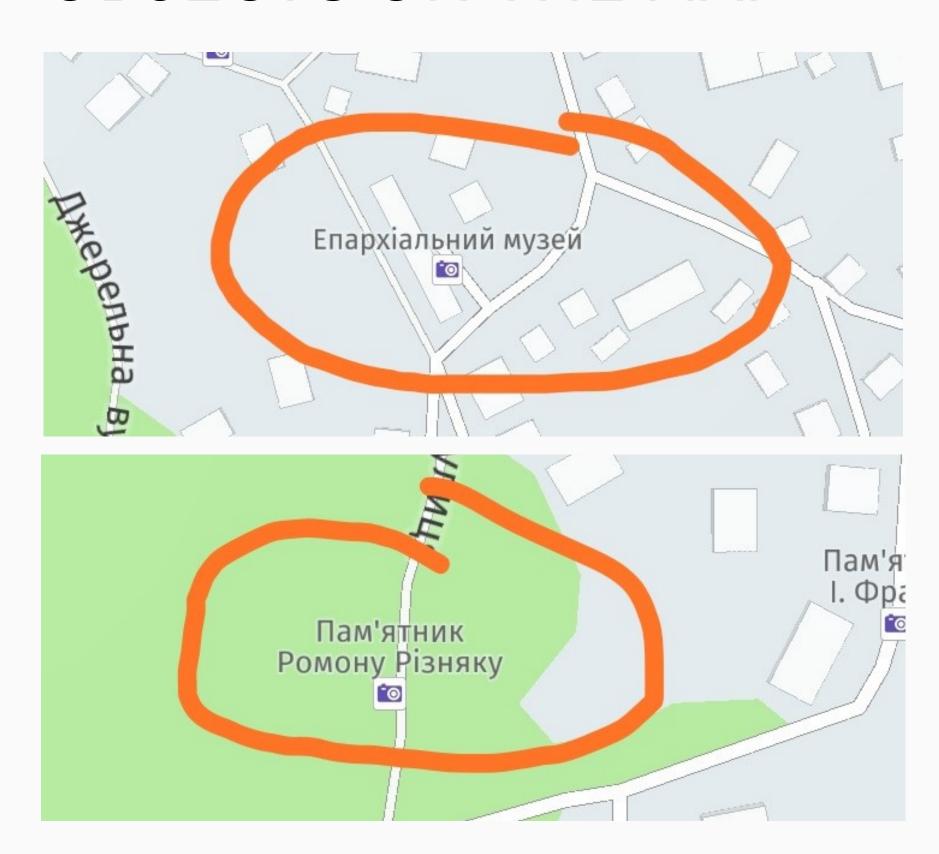
LOCALIZATION TESTING

- Checking the spelling of object names on the map
- Checking the correctness of the name of items in the navigation menu
- Checking the format of street name

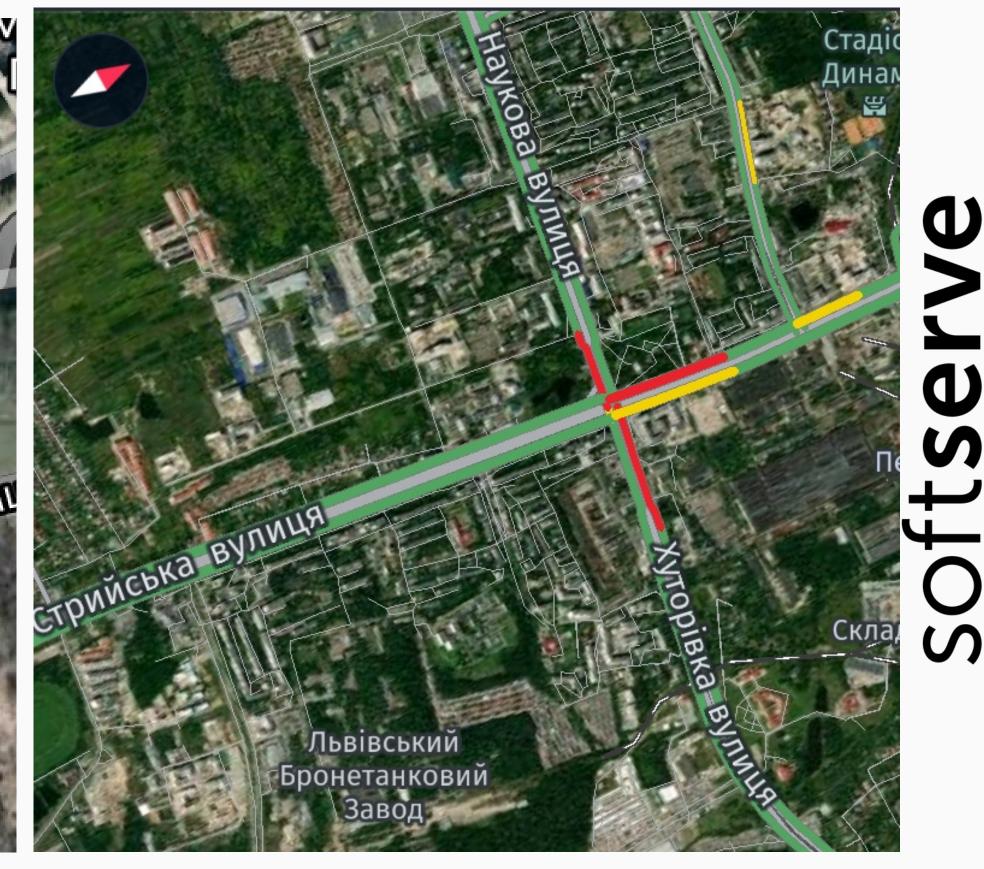
0

Softserve

OBJECTS ON THE MAP



HERE MAPS



16

0

0

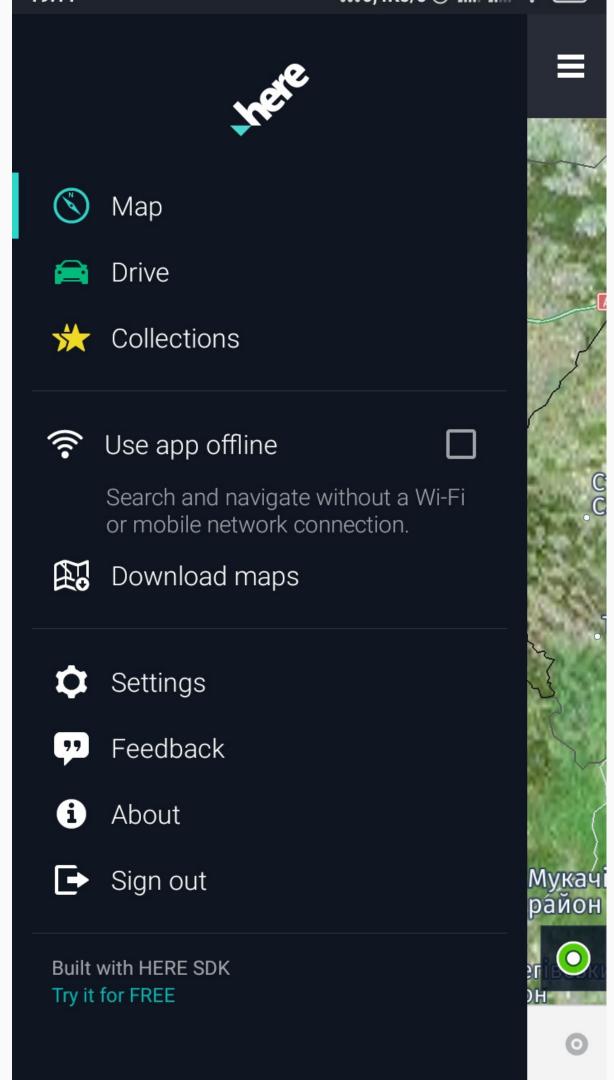
NAVIGATION MENU

New collection

CKACYBATM

OK





- Spelling of object names in some cases incorrect
- English is used in the navigation menu
- Name of the elements is correct
- Text is well readable

POTENTIAL DEFECTS

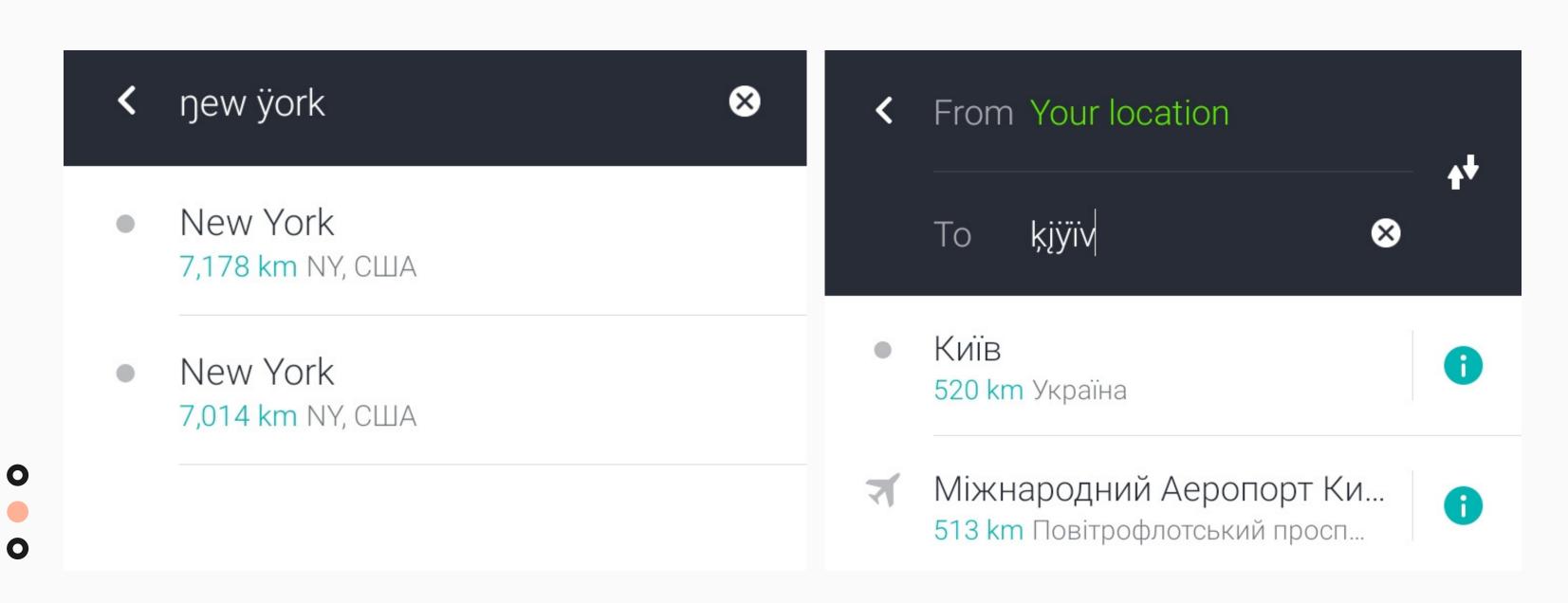
- Format of the street name is is unusual for the region
- In collection tab, label above text-field is written in one language, name of buttons in another one
- Object names are incorrectly translated on the map



softserve

INTERNATIONALIZATION TESTING

 Check the processing of special characters in the search



 Special characters are well handled when searching for a destination

POTENTIAL DEFECTS

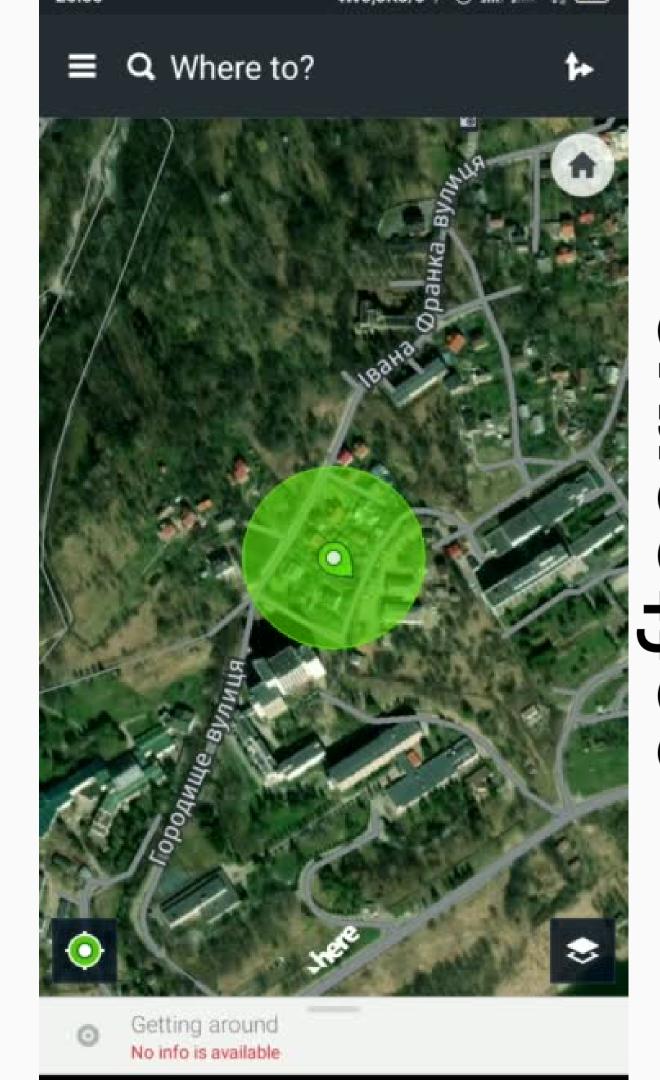
 The search result is "Not found" for a query with special characters





USABILITY TESTING

- Checking real time navigation
- Check the battery usage of the application

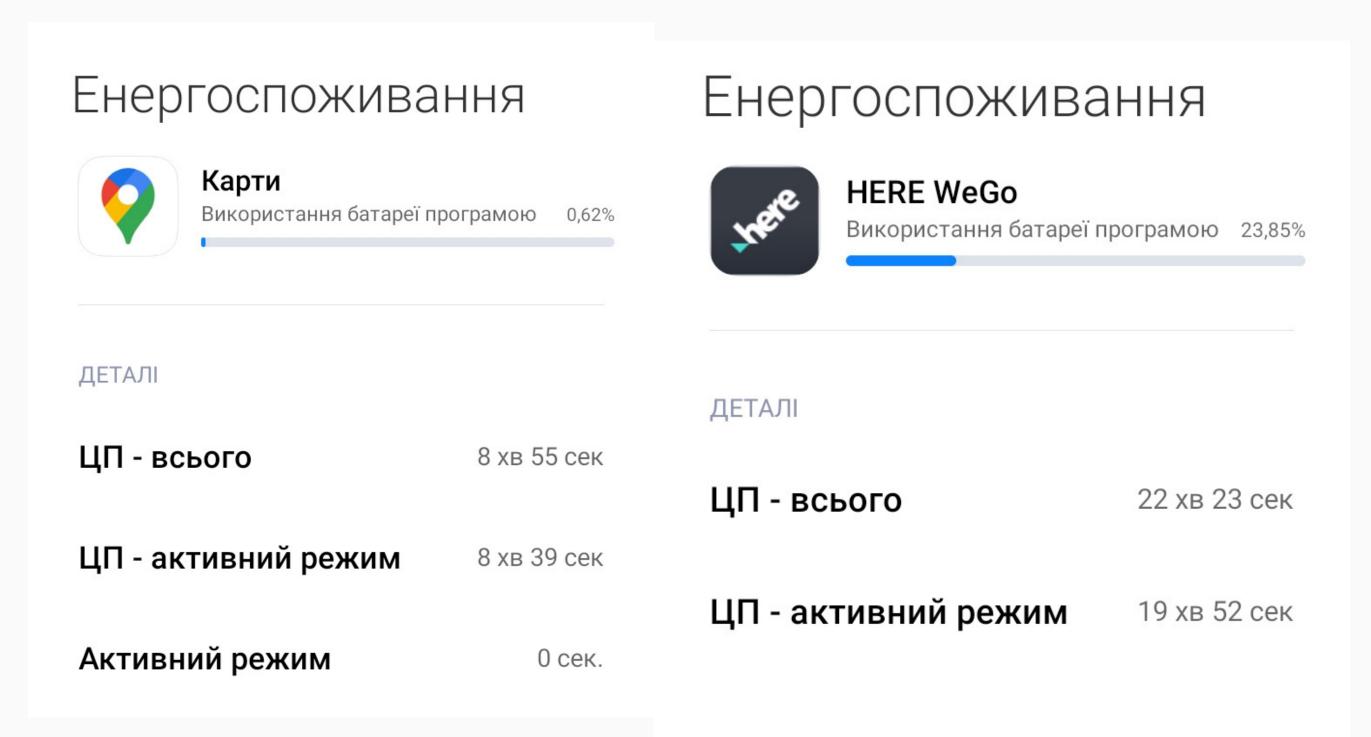






0

THE BATTERY USAGE OF THE APPLICATION



5% /1 Hour

72% /1 Hour

- Real-time navigation is working with enabled GPS tool
- The battery usage of the application is 72%/hour very exhaustive

POTENTIAL DEFECTS

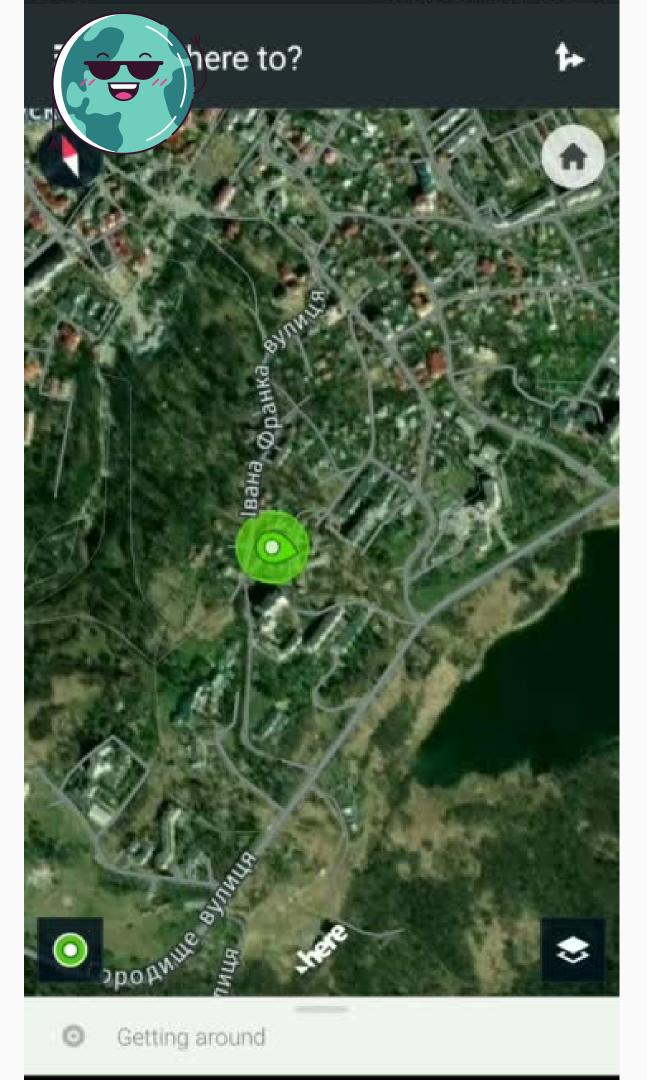
- Real-time navigation is turning off when the program is closed
- The battery usage of the application is very exhaustive.Within 1 hour 40 minutes the entire battery capacity is used

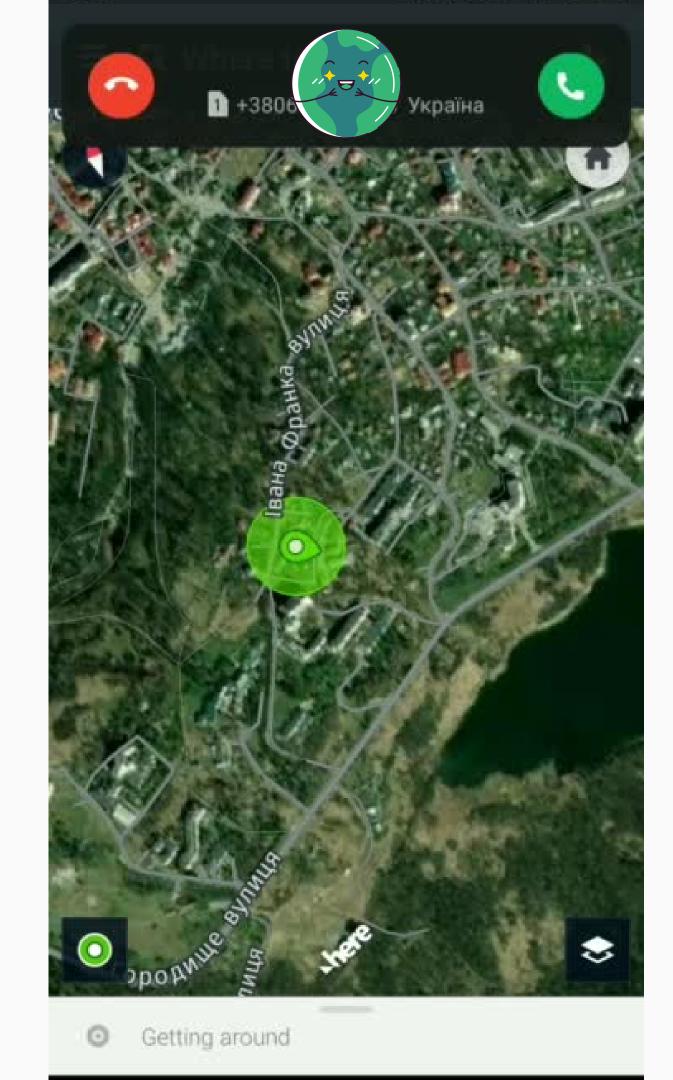


softserve

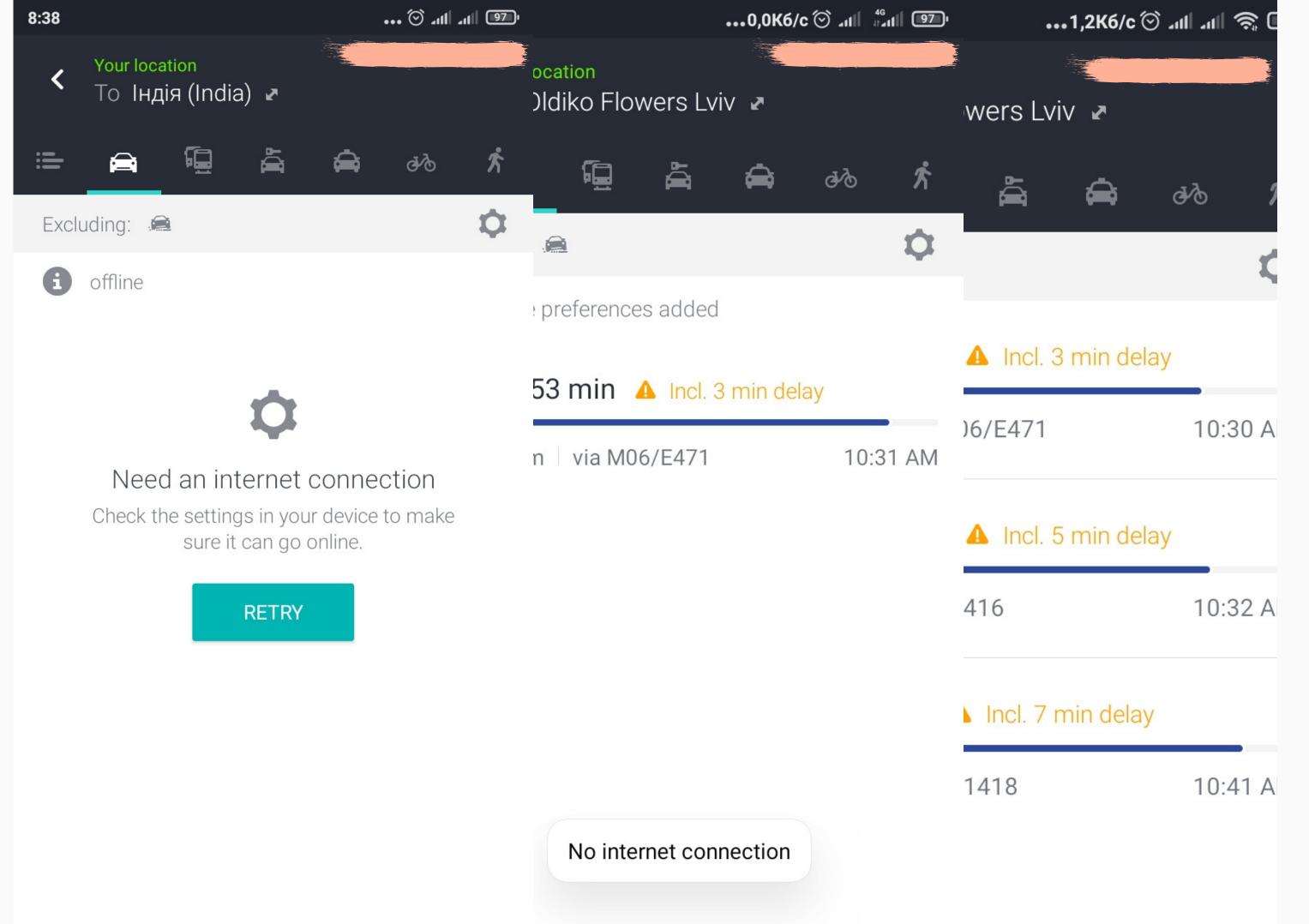
COMPATIBILITY

- Check compatibility between app and phone features (interruptions like phone call and notifications)
- Check the operation of the program without an Internet connection
- Check the operation of the program with an Internet connection via WI-FI
- Check the operation of the program with an Internet connection via 4G









Softserve

softserve

RESULT

- The main functions of the phone work correctly with this application
- When the Internet connection is disconnected, the program works without navigation, user can properly watch only sync map area
- With enable Internet connection via wi-fi or 4G all app functions work in proper way

POTENTIAL DEFECTS

- The application closes when a call comes in
- Notifications and incoming-calls might be disabled when app is running

TESTING ENVIRONMENT

DISPLAY

TYPE IPS LCD

SIZE 5.99 INCHES, 92.6 CM2 (~74.5% SCREEN-TO-BODY RATIO)

RESOLUTION 720 X 1440 PIXELS, 18:9 RATIO (~269 PPI DENSITY)

PLATFORM

OS ANDROID 8.1 (OREO), UPGRADABLE TO ANDROID 9, MIUI 12

CHIPSET

QUALCOMM MSM8953 SNAPDRAGON 625 (14 NM)

CPU OCTA-CORE 2.0 GHZ CORTEX-A53

GPU ADRENO 506

MEMORY

CARD SLOT MICROSDXC (DEDICATED SLOT)

INTERNAL 32GB 3GB RAM, 64GB 4GB RAM

EMMC 5.1









