

## Android Developer Nanodegree

### Project 7: Capstone, Stage 1

by Marcin P. Gruszecki

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**GitHub Username:** [mpgruszecki](#)

## EuroQuiz

### Description

The application is a quiz about European Union countries and their demographic data. Users answer 20 multiple-choice questions.

### Intended User

The target user is 20+ years old English-speaking student.

## Features

The application:

- Obtains statistical data from INQStats API and converts them into random question
- Assigns points for each correct answer on the basis: “the faster answer, the bigger gain”

## User Interface Mocks

### Screen 1

EuroQuiz
Question Categories:
Population
Crime Rate
✓ Population
Area

Screen Type 1 allows to choose the next question category (a subject of knowledge).

## Screen 2

EuroQuiz
Question 1: What country has the biggest population?
Poland
Malta
✓ Germany
Greece

Screen Type 2 displays multiple-choice question out of the category selected on the previous screen.

## Screen 3

EuroQuiz
Correct!
Question: What country has the biggest population?
Answer: Germany

Screen Type 3 provides the answer for the question displayed on the previous screen.

Next Screens Type 1, 2 and 3 are repeated up to 20 times.  
Finally,

#### Screen 4

EuroQuiz
Your result: 1234 points.
Well done!

Screen Type 4 displays the total score.

## Key Considerations

### How will your app handle data persistence?

Statistical data will be stored in SQLite database and accessed via Content Provider. Short duration, periodical, incremental updates will be performed using IntentService.

### Describe any corner cases in the UX.

If user press "Back" button, the application asks using Alert Dialog if s/he wishes to cancel the quiz.

### Describe any libraries you'll be using and share your reasoning for including them.

The application will use Google Play Services: Admob (to display test ads) and Analytics (to study user decisions).

## Next Steps: Required Tasks

### Task 1: Project Setup

- Create project using Android Studio
- Generate INQStats API Key
- Set Up a Firebase Cloud Messaging Client
- Configure Google Services Gradle Plugin

### Task 2: Provide View

- Build UI for Screen1
- Build UI for Screen2
- Build UI for Screen3
- Build UI for Screen4
- Build widget with the best score (like Screen4)

### Task 3: Provide Data

- Fill SQLite database with the initial data
- Build IntentService that access once a month INQStats API for future updates
- Handle data errors

### Task 4: Provide Model

- Build navigation between the screens
- Build question generator
- Implement Google Play Services for Admob
- Implement Google Play Services for Analytics