



Online Round Task iOS Developer | DEV Challenge XIX

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1. Task description

Since 2014, the <u>Center for Civil Liberties</u> has been helping to protect people's rights and release from prison military prisoners, including civilians, soldiers who defended their land, and political prisoners who opposed Putin.

Thousands of people have been saved by the Center for Civil Liberties. During the war, the center defused more than 10,000 war crimes committed by the Russian military on the territory of Ukraine.

Your task. Developing an iPad (Swift) application that is going to visualize crimes in Ukraine using the provided database, your task is to create a map visualization of the points along with general statistics of the crimes that happened (e.g. number of distinct crimes, total crimes). This project's idea is to spread the news to the rest of the world about unjustified aggression against the Ukrainian nation. The final application should fill in the following requirements.

Required:

- 1. The application is loading the points from the provided files.
- 2. Map should display all the points, you can leverage Apple's MapKit.
- 3. Next to the map should be some general statistics about the crimes, and the count of specific crime types.
- 4. Point aggregation (if you zoom out you should aggregate pins together).
- 5. There should be a possibility to switch between dates.

Optional: users can select the time period they want to filter to (start/end date).

We will be evaluating the challenge based on working functionality first but you can score additional points if you add some UX flavor to it like animations, please read our evaluation criteria for detailed scoring.

You can use any frameworks or architecture that you want, please provide Readme.MD file with a general (high-level) overview of how / why you did things if it's non-standard.

2. Description of input data

Contents of event.json (archive link):

- from start date
- till end date
- lat, lot coordinates
- event id of event type

File name.json contains localized names of events listed in event.json

- qualification legal qualification
- object_status type of object that was attacked
- affected_type type of harmed people
- affected_number number of people affected (per episode)

3. Format of presentation of results

Downloads the decision in the Participant's account on the platform in one file archive.

Please note that the name of the archive and file names inside the archive should not contain your first or last name. The size of the solution archive should not exceed **10 MB**.

The Organizers and Judges reserve the right to disqualify the Participant's work if the work:

- contains any reference to the Participant's name, surname, e-mail address, company, address, or other personal data;
- completed in a different format than specified in the task;
- performed with the help of third parties, and not by the Participant personally.

Requirements:

- project should build on Xcode 14.0+.
- language should be Swift.
- target should support the iPad as the main platform.
- minimal iOS version is 15.0.

4. Deadline for submission of decisions

October 3, 2022 — after the time runs out, the possibility of uploading works to the platform will be automatically blocked.

The participants who have moved on to the Final will be announced on October 10, 2022.

5. Evaluation criteria

Criteria	Points
Technical assessment	180
The map displays all data	80
Display and animation of statistical data	60
Pins aggregate as you scale the map	40
Expert assessment	76
Code quality (SOLID principles, Testability, Lack of warnings)	76
Bonus points	128
Time period selection	60
Animations / UX	40
Application responsiveness (not dropping frames, etc)	28

6. Contacts

Questions and clarifications regarding the content of tasks:

Slack channel: <u>#nomination-ios-developer</u>.

Judges will ignore questions that do not relate to the tasks of the Championship.

Organizational questions:

Contact us via e-mail hello@devchallenge.it or Slack channel #02-ask-the-organizers.