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Portfolio

1. ScolioWarner

<https://github.com/Mic4u/ScolioWarner>

Language: Java

Android mobile app used for measuring curvature of the spine, which was subject of my Engineering thesis. Measure is based on the data supplied by accelerometers and magnetometers, which are used to calculate deviation and orientation in three dimensions.

Key functionalities:

- Measuring spinal curvature (vertical deviation and three-dimensional orientation)
- Saving results as text files in device memory and browsing saved results

2. Easy-Quizzie

<https://github.com/Mic4u/Easy-Quizzie>

Language: Java

Android mobile app used for creation, sharing, and solving multiple-choice tests. Part of bigger group project, during which me and one more person, worked on the app, and third person was responsible for program intended to run on server and database, to which the mobile app connected using API.

Key functionalities:

- User registration and login
- Creation of multiple-choice tests and sending them to external server
- Setting the test as public (all users can access it) or private (only selected users have access)
- Solving available tests, saving results, and sharing them on leaderboards
- Deleting tests
- Deleting account
- Administrator tools (deleting tests and accounts)

3. First Helper

<https://github.com/Mic4u/FirstHelper>

Language: Kotlin

Android mobile app which purpose is to help to learn the algorithm of first aid, or helping to remember the steps of the algorithm during the first aid. Thanks to the flexible construction of the app, it can be used also to go through the steps of any provided algorithm.

Key functionalities:

- Going through the steps of first aid algorithm (steps can include question, branching the path, or just simple instruction)
- Playing audio recordings that contain “read out loud” instructions of the current
- Setting the rhythm and counting pushes during the heart massage

4. Cooking Time

<https://github.com/Mic4u/CookingTime>

Language: Kotlin

Android mobile app intended as help to keep track of the steps of a recipe. App was created during exercise which goal was to create an app making use of the most important features of Kotlin programming language.

Key functionalities:

- Going through the steps of recipe
- Timer
- Scaling amount of ingredients based on how number of people. Scaling doesn't have to be linear