

„NAVIGARE NECESSE EST“

Dear HackYeah Participants!

In this edition of HackYeah we have prepared a task to test your knowledge and skills need for application development. We hope that at the same time you will have a chance to test your creative thinking skills and practice scheduling (prioritized), combining and validating structured data.

About our task

The task is to create a working prototype of a user friendly desktop application (dedicated for Windows 10), which we could make available to small business owners for free mostly for record keeping (for those who are settling in a form of lump sum tax payers). We hope, that it will enable them to perform their tax duties in an intuitive and automated way.

An additional advantage would be the functionalities, that support entrepreneurs not only in the tax reporting, but also in the process of company management.

The requirements that we set for the application prototype designed by you are divided and described as mandatory and desirable.

We do not require any legal knowledge, including tax law. Therefore we prepared appendixes which should help you to clear your doubts/concerns and translate content of the legal regulations into digital reality. All appendixes you will find on Discord.

Of course, apart from what you will find in our files, we will also remain at your disposal during the HackYeah in as Mentors.

Our requirements

I Application must (mandatory requirements):

- be created as a desktop-based app and adapted to Windows 10 operating system,
- have as simple, friendly, functional and intuitive interface as possible,
- enable to save all documents, including partitioning by lump sum tax rate and automatically sort by date of income from Appendix I,
- allow for flat file import and automatic sort by date of income from Appendix I,
- allow for creation of a summary of sales at each rates for a selected period in accordance with Appendix I,
- ensure conventional format of numerical data used in Poland, i.e. the decimal separator should be comma, no thousands separator and without the currency code,
- enable to save information on paid social and health contributions,
- automatically sum and transfer data according to the formula in Appendix I,

- calculate the lump sum tax due for a given reporting period according to the formula in Appendix I,
- provide a real-time access to records with an option to edit and print data in an order automatically sorted by date of income from Appendix I as well as generate pdf file,
- enable generation of the Standard JPK_EWP Control File for a given period in a certain logical structure [XML format] (current JPK_EWP(2) structure in .xsd format - Revenue records – JPK_EWP available on www.gov.pl/web/kas/struktury-jpk),
- ensure identification and authentication of the taxpayer when logging in,
- enable the taxpayer to define his status i.e. settling lump sum tax on a monthly basis (M) or in a quarterly cycle (K) according to the formula in Appendix II,
- be compatible with WCAG 2.1 requirements,
- ensure the use of uniform, standard data formats (e.g. YYYY-MM-DD, checking correctness of data on both application and server sides)
- display necessary alerts according to Appendix II,
- archive the database and create backup copies
- enable compatibility of the interface with MF visual identification (files on Discord).

The total records for each month should take the form corresponding to the format in Appendix I.

II The application may allow (desirable requirements):

- creation and editing of counterparty database,
- to save additional data regarding: the amount of lump sum tax paid for the period, additions and deductions, sources of income,
- to inform about the loss of the right to pay tax as a lump sum (with the need to download application updates; annual limit for 2021 is PLN 9 030 600),
- to generate reports that are useful in the process of company management according to Appendix II as well as generate xls/xlsx file.

Evaluation of your projects

The results of your application's prototype will be one of the elements of the overall assessment which consists of:

STEP 1

- Idea – 30%
- Technical aspects – 30%
- Design– 20%
- Relation to task category – 10%,
- Wow! Factor – 10%

STEP 2

- interface and ergonomics (0-40 points)
- efficiency and configurability of the application (0-30 points),
- presentation of results and document generation (0-20 points)
- innovation of the solution including additional functionalities we didn't think of, which significantly increase the efficiency and ergonomics of your prototype (0-10 points).

At each stage of the assessment (evaluation) we will reward solutions developed by you from scratch or those solutions which use open-source tools.

If you use commercial solutions you must consider possibility to provide us any information necessary for quick evaluation of your application without having to bear extra costs by us.

Additional information

Your solution package should include at least:

- file named „1.INFO.zip” - an archive containing all information materials, requirements, including possible configuration of the environment, which will allow us to quickly run the solution on Windows, as well as visualizations of the solution (e.g. descriptions, screenshots, presentations, links to films),
- file named „2.CODE.zip” - an archive containing source codes files or their locations, enabling to obtain a compiled, working version of the software,
- file named „3.NAVIGARE_NECESSÉ_EST.zip” - an archive containing a compiled version of the tool or a link with its location and description of steps, based on the source codes contained in the file "2.CODE.ZIP", which will allow us to quickly run the solution on Windows,
- file named „4.OTHERS.zip” - an archive containing any other relevant information.