Lab13. Summary project

Script Languages (INZ002025)

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1 Learning goals

After this lab you should be able to:

1. Create your own Python window application

2 Exercises

Artefacts to be uploaded to ePortal: - file: `lab13.py`

1. Main goal: Create a window application using Python Tkinter module. The application should store data downloaded from the Internet in the database and display summaries of downloaded data and its graphical representation.

2. Find a web site that provides data in the JSON format.

   Synchronize your search with the rest of the group to avoid using the same site.

3. Create a menu to:

   - clear the content of the database,
   - get data from the Internet (see next task),
   - set some additional options for your app (e.g. colours, fonts etc.)

4. Download data and store it in the SQLite database. You can save only a subset of downloaded data (size, name, status, length). What would you do if a user requests the application to download data and the database is not empty?

5. Inside the main window:

   - Add a button that displays an aggregation of the downloaded data (e.g. sum or an average of chosen value). Use SQL query to calculate a result.
   - Add a button to display data from the database as a chart.

   In both cases: result and chart must be placed inside the main window of the application.

6. General remarks:

- As it is a final project handle exceptions to prevent your application from crashing.
- Create a status line at the bottom of the main window and use it to display information about the status of the last operation.