Practical Work 1 ESE: Planning and starting to execute an RSL (or Systematic Mapping)

The didactic objective of this work:

- The primary aim of this endeavor is to empower the student to apply the acquired concepts about Systematic Literature Reviews (SLR) within the domain of Experimental Software Engineering to their research pursuits. This undertaking primarily centers on the elucidation of concepts expounded in Chapters 3, 4, 5, and 6 of the book titled 'Evidence-based Software Engineering and Systematic Reviews,' as well as the content found in the Almanac for Popularization of Computer Science Series 6 Volumes 7, 8, 9, and 10.

- This work focuses on **planning** and **starting** an RSL (or Systematic Mapping).
    - It is strongly suggested that a systematic mapping should be chosen. Only students who have done Systematic Mapping before should decide, plan, and start an SRL.
    - Suppose the student has already carried out Systematic Mapping and would like to update it. In that case, they can decide on this option (planning must be submitted for the complete mapping – already done + update).

- **General Instructions:**
- **For graduate Students:**
    - **Individual work.**
    - **It should focus on the student's research topic.**
    - **Any copying between graduate students' work will result in a zero grade for all students involved. Work must be done individually.**

- **For Undergraduate Students:**
    - **Working in teams of 3 to 6 students**.
        - Each team must send an e-mail to the teacher and monitors (with all team members in a copy), confirming the team members by **18/04 at 23:45**.
        - In this email, the team should present the Systematic Mapping theme they would like to plan (the teacher or monitors will confirm that the theme is appropriate).
    - **If the undergraduate student is interested in working on a specific topic, they can choose to do it individually**
        - It is necessary to send an e-mail to the teacher and the monitors in this case too, presenting the theme of the mapping, by **18/04 at 23h45.**

Work items:

- Prepare a **technical report** containing:
    - Research topic selected for RSL/Mapping
    - Review protocol containing the following items:
        - Background
        - Research questions(s)
        - Search strategy (display search string)
        - Study selection (present the inclusion and exclusion criteria)
        - Data extraction (submit extraction form)
    - Search string and search result in only 1 digital library (*the work must show the print screen of the result(s) of the execution in the chosen library*);
        - For graduate students: show the refinements in the search string and the results of each refinement (you don't need a print screen of all of them, just the result of the first string and the result of the last string);
    - 1º Filter: list the article titles and a field showing the criteria for

classifying each article in the 1º Filter. For graduates and undergraduates: make the 1st filter for only **50 articles**

- 2º Filter/ Extraction: show the extraction of articles that have passed the 2º filter (show the inclusion criterion associated with each article extracted because it has passed the 2º filter).
  - For graduate and undergraduate courses: extract the data from the **first 5 articles** that pass the 2nd filter.
  - If the article doesn't pass the 2nd filter when it is completely read, another article must be read until are 5 articles included in the 2nd filter and extracted.
- Reflection on what you want to achieve with this mapping/ RSL
  - Why Mapping / RSL is important for your research
- Sources and materials consulted:
  - List all materials consulted for the work (including articles from related work, tutorials, YouTube videos, etc.), with the date of consultation and the link or full reference to the material;
  - If you had any questions with one of the monitors and/or other students, list the questions and who answered them (also list the question and the date).
- For team and individual work: Minutes containing who did what and when.
  - The idea is to record when each activity was carried out.
  - Note: this work will take time to complete!

Important comments:

- Questions about this work will only be accepted until **02/05/2023**.
- **Every student is expected to be ethical in their work!**

Deadline:

- Deadline for submitting the file to the platform: **May 3, 2023 (23:45)**.
- Work submitted after the deadline will not be accepted - **the team or graduate student will receive a zero grade**.

Delivery via the platform - only one member per team should deliver.

- File on the platform - named: Fulano_Trab1_ESE* (*Fulano = student's name) or Beltrano_Fulano_Sicrano_Trab3_ESE (with the names of the team members)
- If the platform is down, the team can send an e-mail to the teacher and tutors with the work attached, respecting the deadline. Only one team member needs to send the email, but they must copy all team members on the email.