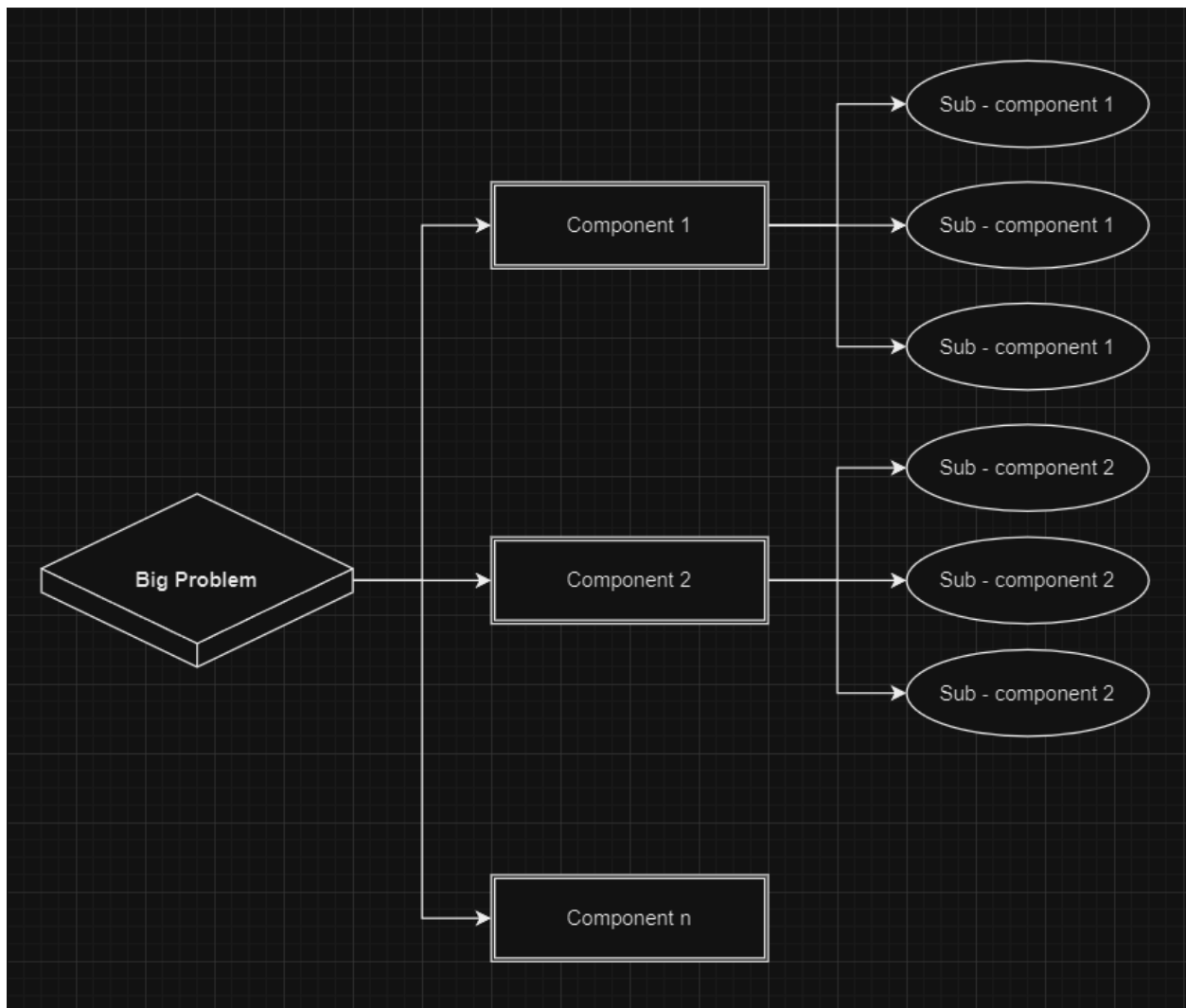


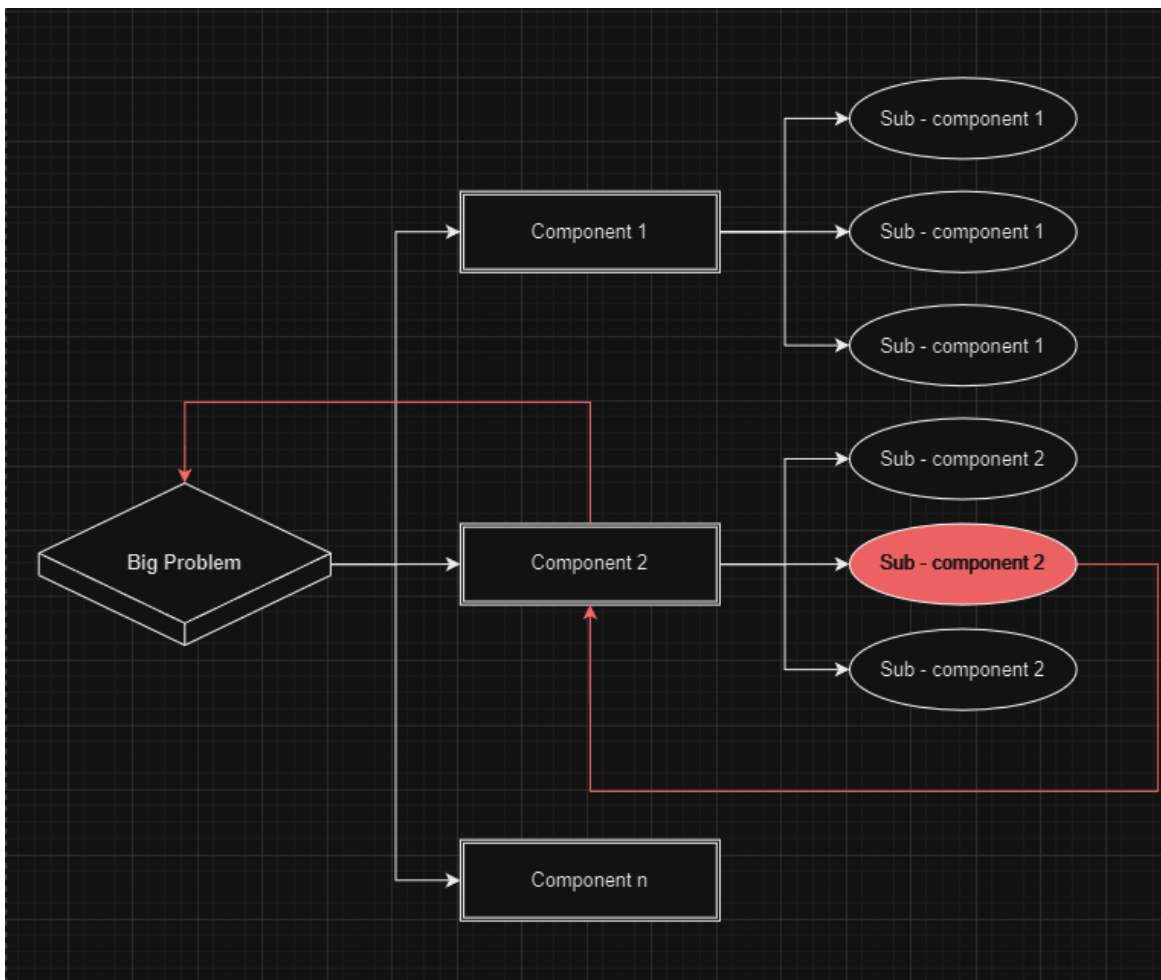
CHALLENGE ZERO

❖ What is top-down approach and how to apply it to the assignment of the program?

- What is top-down approach?
 - Is a strategy, that starts with the big picture and breaks it down into smaller, more manageable pieces.
 - The overall goal or objective is defined first!



- Then broken down into small (sub-goal, component,...)
 - Flowchart
 - Mindmap
 - ...etc
- Ensures everyone is working toward the same goals.
- How to apply it to the assignment of the program?
 - Using the program's mindmap as the highest levels.
 - Each mission should be divided into smaller and easier to understand and complete.
 - Make clear output when completing a mission.
 - Review output and consider a better plan if able
 - Consider using bottom-up whenever ever get stuck on a sub-mission or sub-component of a mission.



❖ How to learn and learn fast?

➤ *Learn*

- Learning is a process of acquiring knowledge and applying that knowledge to life or to solve problems related to that knowledge.
- Learning is unlimited but human life is limited. So we should know who we are and what we need to learn which will help to improve ourselves.

➤ *Learn fast*

- Study and practice: Always practice applying knowledge during the learning process to be able to clearly understand and grasp the essential elements of that knowledge.
- Learn and ask: Always consider knowledge learned from many different aspects, and at the same time ask questions to clarify aspects that you find confusing.