

# Crit A- Planning

## Coal Blending Formulation

### Defining the Problem

Client/Worker Mr xx is a coal mining company employee working as Exploration & Quality Control Geologist. He wants help simplifying his work, especially on some work that he does the math manually.

In November 2022, Mr xx was doing his work and calculating it by paper. He complains about doing all the calculations manually for every task.

As he talked about his problem, helping him was a good plan while I was doing my Internal Assessment as I could give him an IT solution by creating an application.

To further know the calculations and analyze the issue, I contacted Mr xx to do an interview and further reinform that in my future software.

(xx, 2022)

### Rationale for Proposed Solution

Java program is effective in solving Mr xx problem. Creating a calculation from a specific formula will be possible with this programming language. The work will become more efficient as it only needs to give variable input without rewriting the calculation.

The calculation is nearly a basic mathematical with improved formula, so writing a program will not be a problem.

According to these requirements, I decided to make my program in Java because of the following condition:

- Platform Independence
- Have learned Java
- Netbeans IDE will be a big help for creating interactive UI/UX

## Stating Success Criteria

1. The program will allow reading external input in .docx(word) file format
2. The program will give output in the form of an output file as a separate .docx(word) file.
3. The program will be user-friendly program and easy to understand in the stage of worker/adult.
4. The program will give an advanced option as the formula for calculating the same goal can differ.
5. The program will provide an error message for empty input or wrong format input.
6. The program will provide an instruction for each calculation and give hints for the input.

**Word count: 303**