THE IMPLICATIONS OF SULFIDE SOIL

Group 2 - Ecoloop

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01
INTRODUCTION
& BACKGROUND

ABSTRACT

- The Problem; Sulfide Soil
- Easy-to-use tool for detection
- The Goal of the application

BACKGROUND

- SULFIDE SOIL
- ECOLOOP
- CLASSIFICATION OF SULFIDE SOIL

02
AIM & OBJECTIVES

CONCRETE OBJECTIVES / GOALS

APPLICATION

Create a website that allows users to input soil metrics and receive a clear result indicating if the soil is sulfide or not.

USER FRIENDLY & ACCESSIBLE

Ensure the website is user-friendly and accessible to individuals with little to no expertise in excel or soil analysis.

DATA COLLECTION

Collect user data and feedback so that in the future the data can be used to fine-tune the tool's algorithms for soil detection.

LONG TERM OBJECTIVES / GOALS

TOOL IMPROVEMENT

To enhance the sulfide soil detection tool's precision

EXPAND THE APPLICATION

To expand the tool beyond sulfide soil detection to include other tools

CONTRIBUTE TO SUSTAINABILITY

To contribute to the development of sustainable practices and environmental protection

03
PROJECT DESIGN & RESULT

PROJECT DESIGN

EXCEL DOCUMENT

Familiarizing ourselves with the document and its functionalities,

TECHNOLOGY

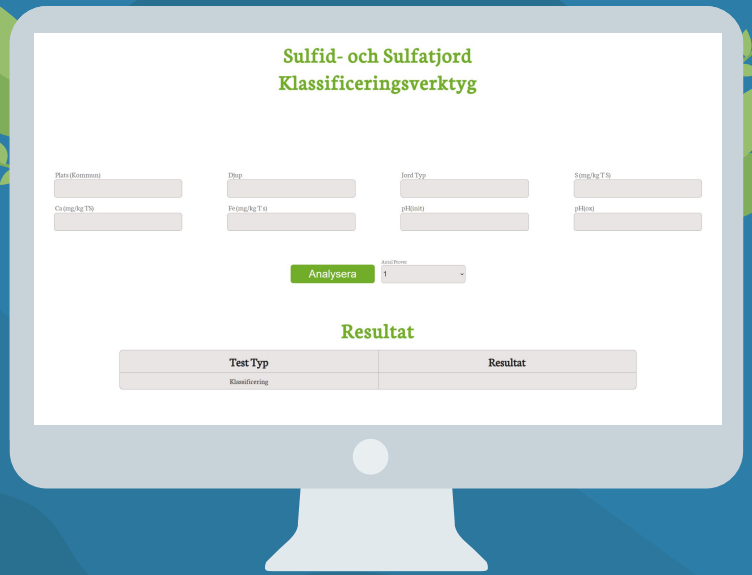
Deciding the different technologies to use in the project

FIRST PROTOTYPE

Creating the first demo prototype in in figma

IMPROVEMENT

Adjustments made after a meeting. Based on feedback improved the application



THE APPLICATION

The final product for the project can be accessed on:
http://verktyg.optimass.se/

RESULT

01

CLEAR INDICATION OF SOIL TYPE

The tool presents the type of soil and what the appropriate action to proceed with is.

02

FOCUS ON USER FRIENDLINESS

The tool has a very simple design where the user can input the lab data in their respective fields to find the result

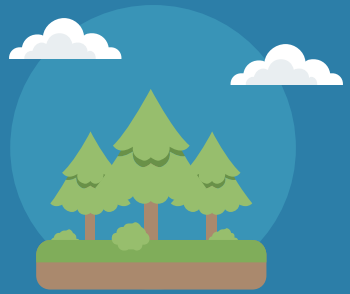
03

OVERALL RESULT

The development of the tool was done towards the aims of the project.

04
DISCUSSION

REFLECTION ON GOALS & FUTURE WORK



WHAT DID WE SUCCEED WITH

Easy to use website to identify sulfide soil that is accessible

FUTURE WORK

- Implement Database
- Improve tool accuracy
- Map of Sulfide Prevalence
- Mobile App

IMPROVEMENTS IN THE WEBSITE-BASED TOOL

- Can be kept private and still be updateable
- Available to the public
- Simple design and easy to use
- Good foundation for development

THE SUSTAINABILITY IMPACTS

A small part of the mission for sustainable handling of soil. Quick classification can lead to:

- Less unnecessary trips,
- Increased soil analysis,
- Less time and energy wasted to classify soil, and
- Make it economically advantageous to do the environmentally friendly thing.

CONCLUSION

Classification of sulfide soil is now a little bit easier.

A good example of how ICT can be used to aid sustainable development.

QUESTIONS?