# WellLog Analysis

# Project Proposal

**Title:** WellLog Analysis

**Idea Owners:**

|  |  |  |
| --- | --- | --- |
| **No.** | **Name** | **Track** |
| 1 | Ahmed Abd-Elmaasouad | SD – Mobile Cross-Platform |
| 2 | Ahmed Mohamed Ahmed Hamed | SD – Software Architect |
| 3 | Eman Hosam Mohamed | SD – Software Architect |
| 4 | Esraa Mohamed Ahmed | SD – Mobile Cross-Platform |
| 5 | May Zakaria | SD – Software Architect |

**Proposal idea:**

An open source Well Log data analysis web application to help geologists, geophysicists and any geoscience student to analysis wells files data and make some decisions based on it.

**Objectives and Benefits from the Project:**

Our objective is to make well log data analysis easy for everyone. Doesn’t need to pay too much for a software and go throw a long process for installation. Our application will be online, easy to access from any device at any time without too much complexity to use. Displaying some important graphs and make some important calculations on the data.

**Feature List & Releases**

* V1
  + Read Las file and Extract Data
  + Display las file information
  + Display 5 types of logs (graph)
    - Gamma Ray
    - Caliper
    - Spontaneous ( SP )
    - Density
    - Neutron
  + Calculate Volume of Shale (Each one of them is a separate graph)
    - Linear equation
    - Larionov for Tertiary rocks (1969)
    - Steiber (1970)
    - Clavier (1971)
    - Larionov for older rock (1969)
  + Control over graphs display
* V2
  + Calculate Density Porosity
  + Calculate Total Porosity
  + Calculate Effective Porosity
  + Calculate Water Saturation
  + Display 2 types of logs (graph)
    - Resistivity
    - Sonic
  + Support custom calculations
* V3
  + Add Authentication and Authorization
  + Support different user packages
  + Support custom calculations
  + Save data over the cloud
  + Processing on the server side

**Target User:**

* + - Geologists
    - Geophysicists
    - Geoscience students

**End-Product:**

Web Application.

**Data Source:**

User will upload las file that he want to analysis.

**Partners and roles:**

None.

**Revenue:**

After version three there will be different user packages in which you will pay amount of money to unlock some more features of the application.

**Risks:**

The security of data may be a concern for some users.

**Technology:**

Angular, node.js, mongo DB, heroku, Azure Devops.