



# Programming Language Detector

## Members

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## Description

Different softwares can be made by various languages and skilled programmers often can recognize dozens of programming languages. But computer scientists and engineers have given birth to thousands of programming languages which cannot be detected by everyone, especially less popular and older ones. So, our project will tackle this problem and will detect the given programming language.

## Tools

**Python** - Python is a widely used high-level programming language for general-purpose programming, An interpreted language, Python has a design philosophy that emphasizes code readability (notably using whitespace indentation to delimit code blocks rather than curly brackets or keywords), and a syntax that allows programmers to express concepts in fewer lines of code than might be used in languages such as C++ or Java.

**JavaScript** – JavaScript, often abbreviated as JS, is a high-level, dynamic, weakly typed, object-based, multi-paradigm, and interpreted programming language.

**Scikit-Learn** - Scikit-learn (formerly scikits.learn) is a free software machine learning library for the Python programming language.[3] It features various classification, regression and clustering algorithms including support vector machines, random forests, gradient boosting, k-means and DBSCAN, and is designed to interoperate with the Python numerical and scientific libraries NumPy and SciPy.

**Numpy** - NumPy is a library for the Python programming language, adding support for large, multidimensional arrays and matrices, along with a large collection of high-level mathematical functions to operate on these arrays.

**Scipy** - SciPy is an open source Python library used for scientific computing and technical computing. SciPy contains modules for optimization, linear algebra, integration, interpolation, special functions, FFT, signal and image processing, ODE solvers and other tasks common in science and engineering.

## Time Line

1. Web Interface
2. Python Code for Detecting Language
3. Integrating Output of the Python Code to Web Interface

## Roles of individuals in the group

**Soumi Pal** and **Mayank Singh** = Web Interface (JavaScript)  
**Isha Pali, Praneeth, Shourya** = Python Code

## Deliverables

1. Our software will enable the user to detect the programming language without the help of file extension.
2. It can be used by different competitive coding platforms to generally take code and select compiler on it's own.

## Future Scope

Once you can detect the code then we can do much more things with it. One, we can Integrate online compilers to it which in turn help to run and compile code.