# Software Requirements Specification (SRS) Document

**Brief problem statement**

This Document is made to give a detailed description of the Online Coding Judge. It will explain the purpose, features, the interfaces of the coding judge, the constraints involved, working of the App, and how the platform responds to external stimuli, etc. This document provides all the necessary details of the project.

## Scope of the project

The purpose of this project is to build an online Coding Judge which helps users to Practice and improve their Coding skills and their Data Structure and Algorithms by offering a variety of Problems, Contests and by providing an elegant and user-friendly interface. The user would be able to handpick from a variety of problems and solve or bookmark the problem. This platform is designed to maximize the efficiency of the user by providing hints, solutions, and a discussion section where users can get help from other users and admins by writing their concerns. The platform supports several programming languages like C, C++, Java, Python.

## System requirements

The app will work on most of the web browsers like chrome,firefox, safari, etc although the latest version is recommended. As it is a web app it doesn't necessarily depend on the machine.

## Users profile

There will be the following three types of user  :

1. **Administrator:** The admin users have access to more features and data which would allow them to do maintenance if required. They have more privileges than a normal user.
2. **Author:** An author is the one who contributes to the Coding Judge or adds some content to the coding judge.
3. **Customers:**  Customers can browse through the coding judge, solve problems, give competitions or contests, review their performance or rank, check their history, etc.

# Feature requirements

The following are some feature requirements.

| No. | User Case Name | Description |
| --- | --- | --- |
| 1 | Sign Up | The user can register through this to the portal. |
| 2 | Log in | The user would be able to login in using this. |
| 3 | Problems | Provides the list of problems with the option to choose 1 and open the problem |
| 4 | Compile/Run | This would check the uploaded code for errors and provide output. |
| 5 | Submit | The user can submit the code and check his program against all test cases and get the result if his code is correct and works for all test cases. |
| 6 | Register for Contest | This would allow users to register for any upcoming contest or competition before due time/date. |
| 7 | Submissions | The user can view/edit all his submissions to the given problem along with the code and time of submission. |
| 8 | Profile | The user profile contains basic information like email, name, Rank, Friends, etc. |