



# **SDP Project - Online Assessment System**

## **A bit about the system :**

The goal is to develop a web application that provides the platform for faculties & students to manage their C programming assignments and many more including coding competition, doubt solving, peer code review. Faculties can even share their approach for a problem in a form of blog or pre-recorded video lectures.

Total 3 type of users:

1. Admin
2. Faculty
3. Students

## **Informal Functional Requirements**

- Create Class [ unique code will be generated by the system ]
- CRUD Lab/competition [Including leader board]
- View assignment submissions
- **View code and Suggest improvement [comments]**
- CRUD problems per lab / competition
- Comment on problem
- **Lab grading [ 1 -10 ]**
- Plagiarism Check
- Create blog to provide solution [ with discussion panel ]
- **Record Visualisation**
- Faculty can upload pre-recorded video lecture or any other resources for the topic
- Live Class
- submit assignments
- attend contest
- online editor / compiler
- View Statistics
- Email notifications [ Assessment / Deadline / New Contest or lab ]
- peer code review

### **Resources :**

Online free APIs to compile C code

<https://github.com/Cloud-Compiler-API/Cloud-Compiler-API>

<https://www.npmjs.com/package/compile-run>

<https://codechef.ideone.com/api>

[https://cran.r-project.org/web/packages/lintr/vignettes/creating\\_linters.html](https://cran.r-project.org/web/packages/lintr/vignettes/creating_linters.html)