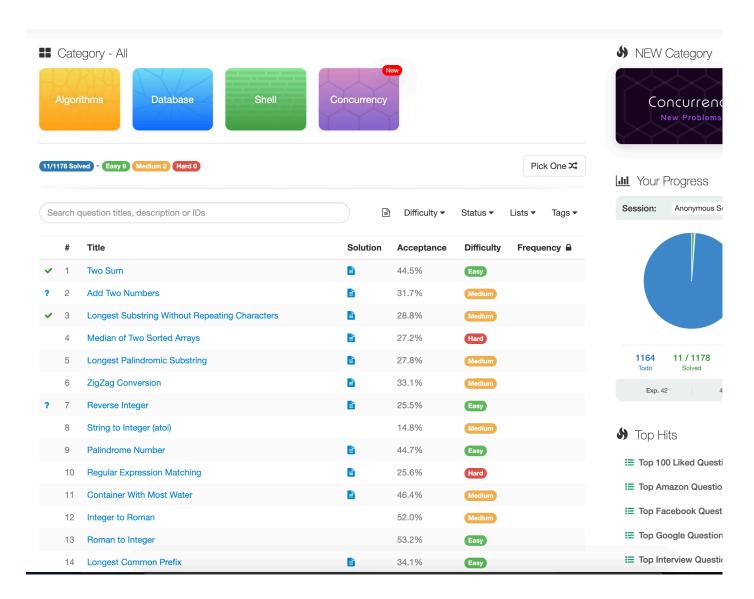
#### **SOFTWARE ENGINEERING**



# Collegiate Competitive Programming Platform

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# PROJECT SUMMARY

## **Objective**

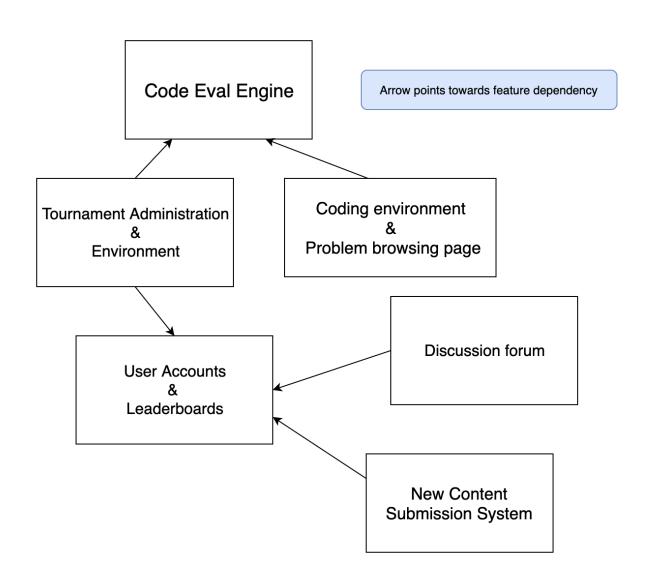
Build a Leetcode/Hackerrank like platform where students and collegiate teams will be able to practice and compete with each other on competitive programming challenges.

#### Goal

Build a functioning Web App that meets the minimal requirements laid out in this document.

# **Project Outline**

\* Each team will be responsible for implementing one or two major features.



# **FEATURES:**

## **CODE EVAL ENGINE**

• The part of the system that takes a submitted solution to a problem and evaluates it against the test cases.

## **CODING ENVIRONMENT**

- The in-browser Text Editor and coding tools
- Also responsible for building the practice problem browsing page

# TOURNAMENT ADMINISTRATION TOOLING

- Page where site admins can set up and specify the restraints (time, eligability) for new tournaments.
- Create system that automatically judges and ranks tournament participants

#### **USER ACCOUNTS**

- Responsible for managing and displaying user account state.

  - → Email
    → Past tournaments
  - ♦ School ♦ Etc
  - **♦** Team
- Also responsible for displaying leaderboards (local, teams, glob.)

#### **CONTENT SUBMISSION SYSTEM**

System that allows users & admins to submit practice problems.

#### **DISCUSSION FORUM**

Page where users can discuss upcoming tournaments and other topics.