

Online Judge

10th July 2022

Database

- **Users:**
 - UserID: Int
 - UserPassword: String
 - UserEmail: String (Unique)
 - UserName: String (Unique)
- **Problems:**
 - ProblemID: Int
 - ProblemName: String (Unique)
 - ProblemStatement: String
 - Difficulty: String
- **Test-Cases:**
 - TCID: Int
 - ProblemID: Int
 - TCInput: Int
 - TCOOutput: Int
- **Submissions:**
 - SubmissionID: Int
 - ProblemID: Int (foreign key)
 - UserName: String (foreign key)
 - Code: String/File
 - Verdict: String

Frontend + Backend

- **Landing Page:** Login/SignUp - compulsory to access further contests. Verify for auth using API.
 - A card with 2 options Login and Sign Up.
 - The login card will ask for UserName, Password
 - Sign Up card will ask for UserName, UserEmail, Password

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- **ProblemList:** Use GET method to fetch the problems and displays them as the list.
 - Will fetch all the ProblemName from the Problems schema
 - The name of the problem will be clickable and redirect to the Problem page.
 - **Problem:** Use GET method to fetch the statement of the selected problem and display it.
 - Will contain/show the ProblemStatement, Submit button, and Upload File button.
 - Submit button will POST the code/file and run through all the test cases of the problem and redirect to the submissions Page.
 - The upload button will choose the file (.cpp only).
 - **SubmissionPage:** List of recent submissions by all the users by using GET method
 - Shows SubmissionID, UserName, ProblemName, Verdict

Timeline

- ☐ Landing Page: 13 July
- ☐ ProblemList Page && Problem Page(only UI): 14 July
- ☐ Submit Button+ Compiler: 15 July
- ☐ Submission Page: 16 July
- ☐ Dockerization: 19 July
- ☐ Deployment: 21 July