



# Web Technologies II Laboratory Project

## PES University

### UE17CS355

### 6th Semester

Project Title : Build an online coding platform

Project Team : S Thejas PES1201701621  
Ramakrishnan K PES1201701906  
Vaibhav V Pawar PES1201701131



## Project Description

A platform where users can code and improve their coding skills.

Intelligently suggest next question to be solved by user .

Users can automatically solve the suggested question no need to search for questions again.

Each user can submit any number of time he want until he gets correct ans





## Technologies Used

- HTML
- CSS
- BOOTSTRAP
- JAVASCRIPT
- VUE (used in front end)
- FLASK (used to implement backend)



## Techniques Implemented

### Predictive Fetch (AJAX Pattern)

To view questions predictive fetch is used, as the user scrolls down next questions are being fetched

### Rest API

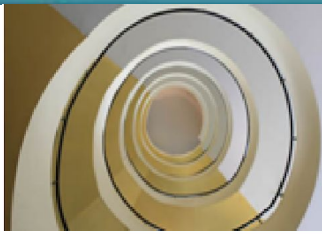
Rest API is used to communicate between different code

used in following :

- Evaluate question

- Authentication using tokens

- Question details



## Intelligent Functionality

Name : Question Suggestion Module

Method used : Compact Prediction Tree

Input : Series of question user have solved .

Ex : ['array1','Heap1','matrix1','HashTable1']

Its is data structure used for that question and difficulty level of that question will form an element in an array

Output : Questions that are suggested to solve next

Ex: ['array2','Heap2','matrix2']







## How it works :

Training with the data : Data is the order in which other users have solved the questions .

Building Prediction Tree : It build a tree which the help of data present in training data

Data structure Used : To store the tree a data structure similar to trie is used

Input : Series of question user have solved

Traverse the tree : With the sequence provided as input the model traverse the tree and try to find the next question that the user need solve

Output : Questions that are suggested to solve next



Thank You

