

ONLINE CODE EDITOR

BRAIN MENTORS

[HTTPS://WWW.BRAIN-MENTORS.COM](https://www.brain-mentors.com)

ONLINE CODE EDITOR

This is an Online Editor , where user can login and register here, and once user is login then a Secure token is generated for the User Session, After this user can see the problem statements in pagination way.

User can choose/select the question/problem and then the question/problem description along with Input and Output.

User can upload / submit the test and get the score.

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PROBLEM STATEMENT

- ▶ User / Register MicroService and DB Design
- ▶ Token Generation and Verification MicroService and DB Design
- ▶

USER MICROSERVICE

Express PORT - 1234




Route

User login

User Register

Verify

Password Reset

users			  
User Collection contains user info			
_id	{ objectId }		
userid	{ string }		
password	{ string }		
email	{ string }		
phone	{ string }		
token	{ string }		
lastaccesstime	{ date }		
rank	{ string }		
verified	{ string }	Is Email Verified (Y/N)	
otp	{ string }	Email OTP	
otptime	{ timestamp }		

USER MICROSERVICE & TOKEN MICROSERVICE

Express PORT - 1234

Route




User login

User Register

Express

TOKEN GENERATE
SERVICE
(JWT)

After successful Login

users					
User Collection contains user info					
_id	{ objectId }				
userid	{ string }				
password	{ string }				
email	{ string }				
phone	{ string }				
token	{ string }				
lastaccesstime	{ date }				
rank	{ string }				
verified	{ string }	Is Email Verified (Y/N)			
otp	{ string }	Email OTP			
otptime	{ timestamp }				




Generate Token / Compare Token/ Remove Token/Expire




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VIEW LIST OF PROBLEMS – PAGINATION

PROBLEM
MICROSERVICE
SCORE-CRUD

Express

scoreinfo			  
this contains score info of problem statement			
_id	{ objectId }		
level	{ string }	Level of the Problem, - E for Easy M for Medium H for Hard	
score	{ string }	Score based on level E-5 M-7 H-10	

problems			  
Contains the list of question/problems			
_id	{ objectId }		
question	{ string }	this contains the problem statement	
level	{ string }	Level of the Problem (Easy - E, Medium M, Hard - H)	
title	{ string }	Contains the title of the problem	
companies	{ string }	Question Asked by Companies	




SCORE
MICROSERVICE
SCORE-CRUD

Express

PROBLEM/QUESTION COLLECTION

PROBLEM I/O
MICROSERVICE
SCORE-CRUD

Express




problem_input_output			  
_id	{ objectId }		
pid	{ objectId }	Contains the Reference of Problem Collection _id	
input	{ string }	contains the input information	
output	{ string }	Contains the output information	
status	{ string }	Switch On and Off of I/O testcase for problem statement	


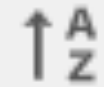

Get the Problem/QuestionId from Problem MicroService , then add it problem input/output microservice

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PROBLEM SUBMISSION MICROSERVICE

PROBLEM SUBMISSION
MICROSERVICE
WRITE/UPDATE/READ/SUCCESS
SUBMISSION

problem_submission			  
_id	{ objectId }		
pid	{ string }	Contains the Reference of the Problem Collection _id	
code	{ string }	Contains the Code	
problem_input_output	{ string }	This Contains Reference of Problem Input and output Id	
result	{ string }	Result After Execution (Compile Time Error, Runtime Error, Wrong Output , Correct Output)	
userid	{ string }	Contains the User Collection _id as a Reference	
datetime	{ timestamp }		
attempts	{ int }		
language	{ string }	Choice of a Language	



problem_success_submission			  
_id	{ objectId }		
problem_submission_id	{ string }	Problem Submission Id as a Reference Key	
userid	{ string }		



SCORE CARD LISTING OF A USER

SCORE CARD
MICROSERVICE
WRITE/UPDATE/READ

WAGON WHEEL

- 1. Easy
- 2. Medium
- 3. Hard
- 4. Total

problems			 1 1/2 
Contains the list of questions/problems			
_id	{ objectId }		
question	{ string }	this contains the problem statement	
level	{ string }	Level of the Problem (Easy - E, Medium M, Hard - H)	
title	{ string }	Contains the title of the problem	
companies	{ string }	Question Asked by Companies	




problem_submission			 1 1/2 
_id	{ objectId }		
pid	{ string }	Contains the Reference of the Problem Collection _id	
code	{ string }	Contains the Code	
problem_input_output	{ string }	This Contains Reference of Problem Input and output Id	
result	{ string }	Result After Execution (Compile Time Error, Runtime Error, Wrong Output , Correct Output)	
userid	{ string }	Contains the User Collection _id as a Reference	
datetime	{ timestamp }		
attempts	{ int }		
language	{ string }	Choice of a Language	

http

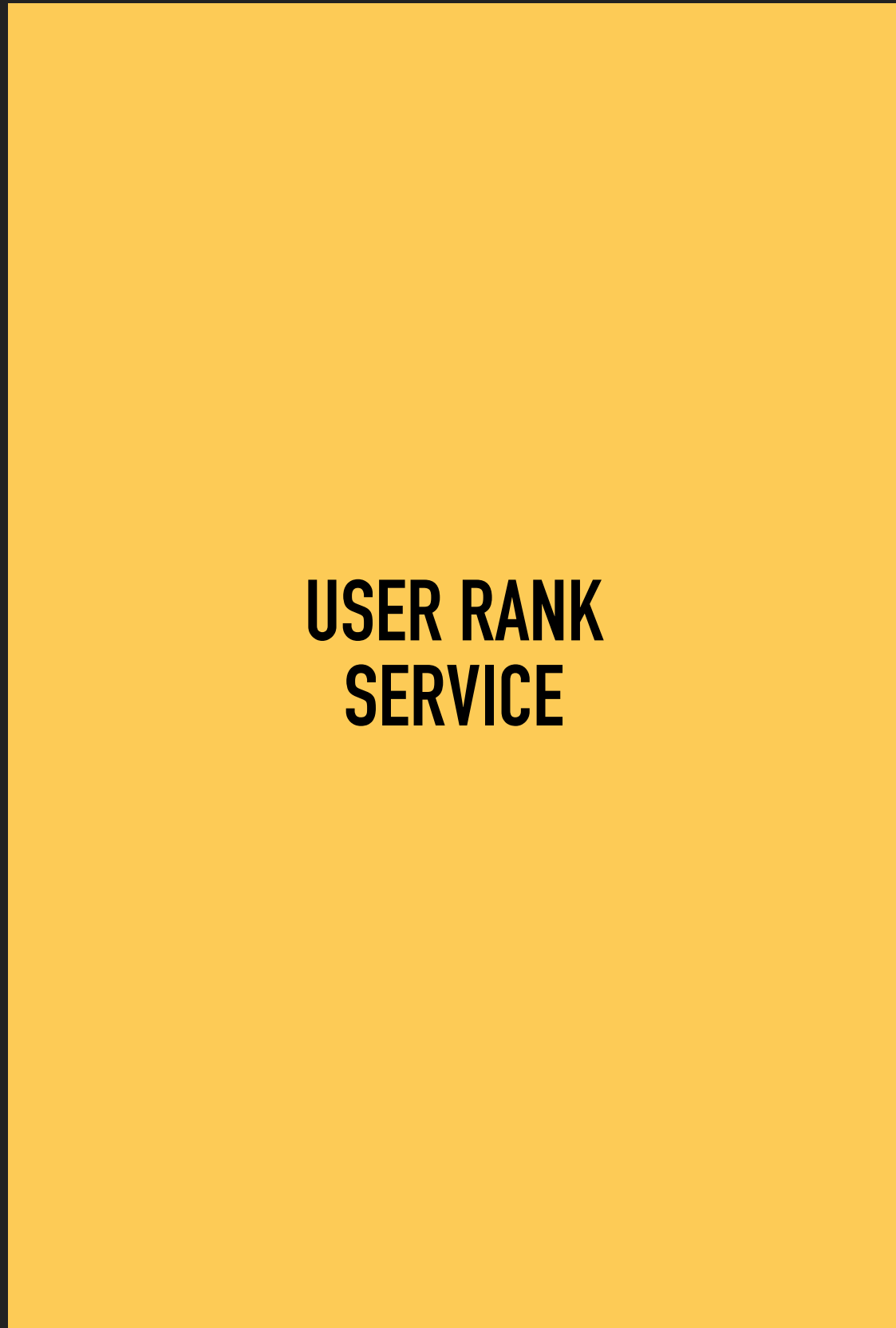
n

SOLUTION SERVICE

SOLUTION SERVICE
CRUD

solutions			  
Contains Solution of a Problem			
_id	{ objectId }		
pid	{ objectId }	Join with Problem Collection	
name	{ string }	Name of the Solution	
solution	{ string }	Contains the Reference File Path , All Code	
language	{ string }		
status	{ string }	A/D	
author	{ string }		

RANK OF A USER IN OUR PORTAL



USER RANK
SERVICE

Rank of a User

users   	
User Collection contains user info	
_id	{ objectId }
userid	{ string }
password	{ string }
email	{ string }
phone	{ string }
token	{ string }
lastaccesstime	{ date }
rank	{ string }

TOP 20 RANKERS

ALL USER RANK
SERVICE

rank		  
info about rank users (top 20)		
_id	{ objectId }	
userid	{ string }	
rank	{ string }	rank no

BRAIN MENTORS

users	
User Collection contains user info	
_id	{ objectId }
userid	{ string }
password	{ string }
email	{ string }
phone	{ string }
token	{ string }
lastaccesstime	{ date }
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this contains score info of problem statement	
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Contains the list of questions/problems		
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question	{ string }	this contains the problem statement
level	{ string }	Level of the Problem (Easy - E, Medium M, Hard - H)
title	{ string }	Contains the title of the problem
companies	{ string }	Question Asked by Companies

problem_input_output		
_id	{ objectId }	
pid	{ objectId }	Contains the Reference of Problem Collection _id
input	{ string }	contains the input information
output	{ string }	Contains the output information
status	{ string }	Switch On and Off of I/O testcase for probem statement

rank	
info about rank users (top 20)	
_id	{ objectId }
userid	{ string }
rank	{ string } rank no

problem_submission		
_id	{ objectId }	
pid	{ string }	Contains the Reference of the Problem Collection _id
code	{ string }	Contains the Code
problem_input_output	{ string }	This Contains Reference of Problem Input and output Id
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userid	{ string }	Contains the User Collection _id as a Reference
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attempts	{ int }	
language	{ string }	Choice of a Language