

REQUIREMENTS ANALYSIS

CSE 4408 SYSTEM
ANALYSIS AND DESIGN

MEET THE TEAM

TEAM ASKME

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01

OVERVIEW

Next generation coding platform convenient for all type of coders as well as new learners. Comes with smart upsolve method, live contests, analysis curves and motivating reward system

FEATURES:

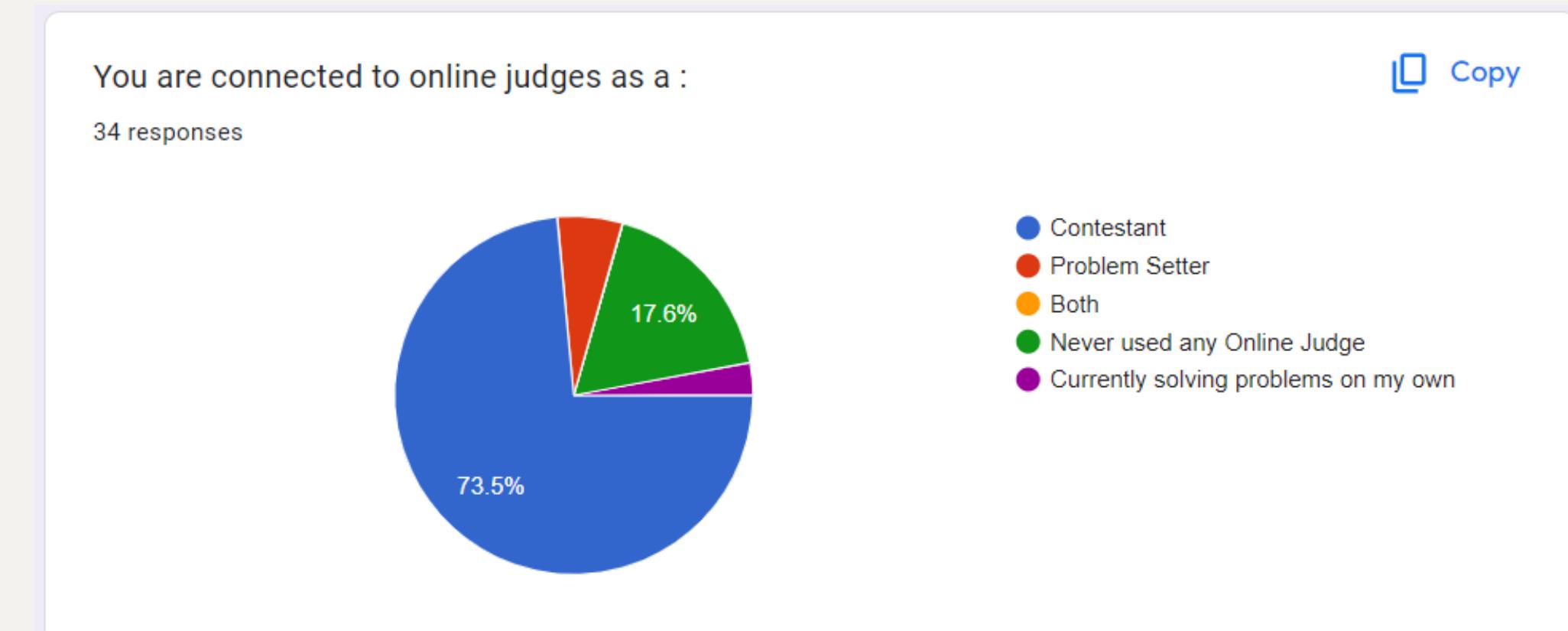
- SMART UPSOLVING
- PERFORMANCE ANALYSER
- CODER'S CALENDAR
- CUSTOMIZED PROBLEM SOLVING
- MOTIVATING REWARD SYSTEM AND INTERACTIVE USER INTERFACE

SURVEY PROCESS

02

- Data was collected in form of a survey
- To create the survey Google form was used
- Survey was distributed amongst personnel thought to provide useful feedback
- Questions were formed based on stakeholders' roles

Roles	Percentage
Contestant	75%
Problem Setter	16.7%



KEY FINDINGS

03

User Demographics:

Two types of target audience were kept in mind while distributing the surveys which are Contestants and Problem Setters.

The majority of respondents were contestants, highlighting their significant presence in the target user base.

CONTESTANT

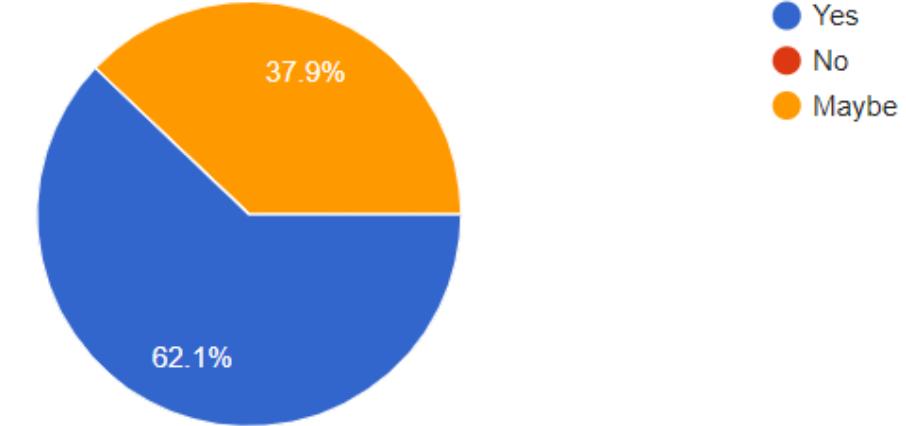
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Functional Requirements

Functional Requirements	Priority Value (Ranking)
Smart Upsolving	1
Reward System	2
Performance analytics for progress tracking	3
Structured Problem Variation	4
Revision Tracker	5

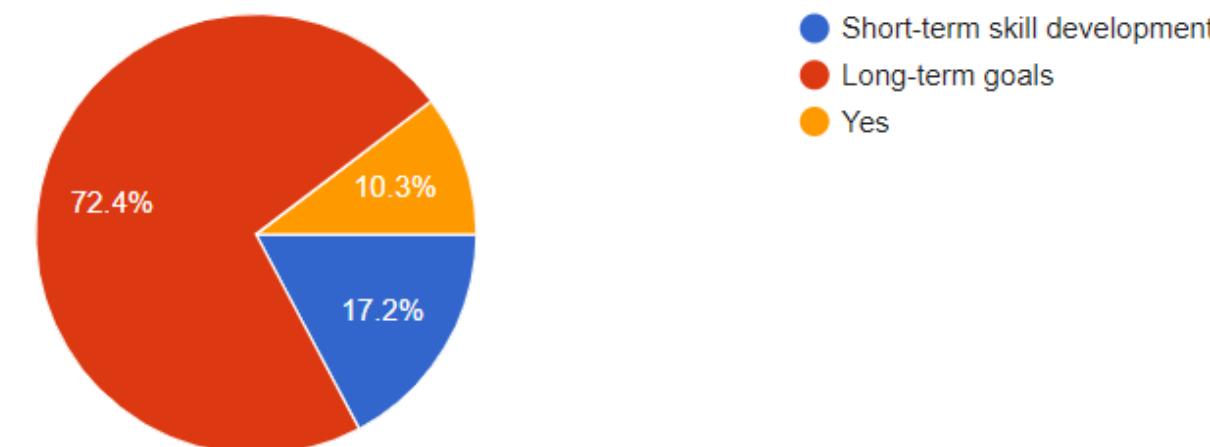
Do you believe that features like smart upsolving, revision tracking, or performance analytics would enhance your contest experience?

29 responses



Are you aiming for short-term skill improvements such as mastering specific algorithms, or long-term goals, like advancing your overall coding proficiency?

29 responses



CONTESTANT

05

What type of rewards do you expect for contest successes or completing problem-solving quotas?

23 responses

Depends on how big of a deal it is. Either a small shout out or a treat 😊

Points, Rank-ups

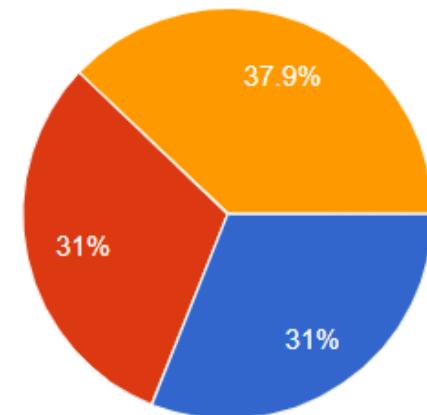
Maybe like some badges or stickers

Food coupons

maybe the platform can give a certificate for reaching a milestone, for example: solve at least one problem consecutively for 30 days

Is it challenging to track your progress and manage your problem-solving journey on existing platforms?

29 responses



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What specific functionalities or tools do you anticipate that would greatly enhance your experience? ("N/A" if it does not apply to you)

30 responses

Upsolve tracker

Better tools

Smart upsolve methods

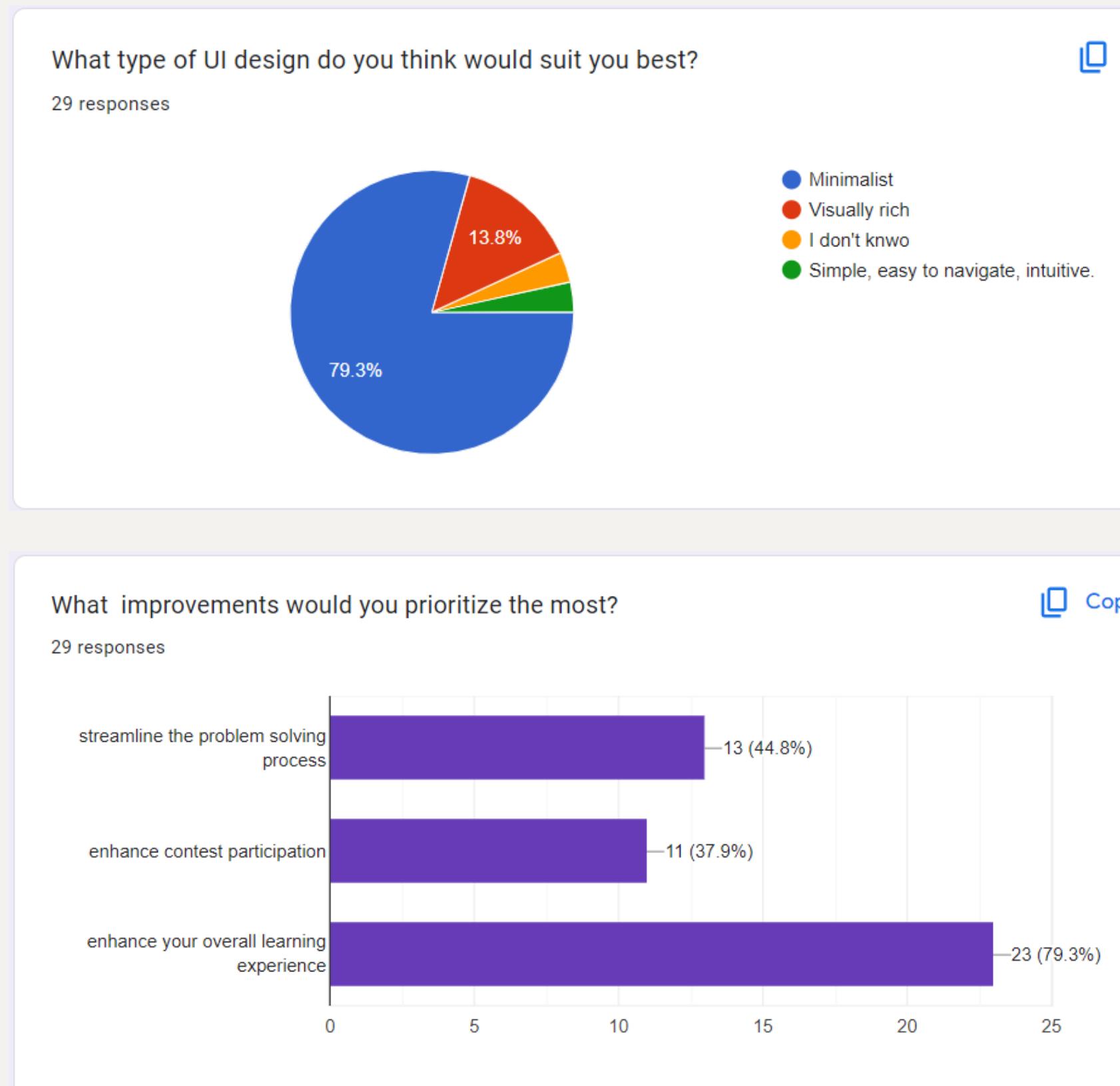
Rediscovering problems which I failed to solve. Focusing on my weak zones

reward system

chart/tracker showing my progress over time

CONTESTANT

Non-Functional Requirements	Priority Value (Ranking)
Minimalistic UI Design	1
Enhance overall learning experience	2
Streamline problem solving process	3
Obtaining Input data as test case	4
Reduce Bugs and Buffering Problem	5

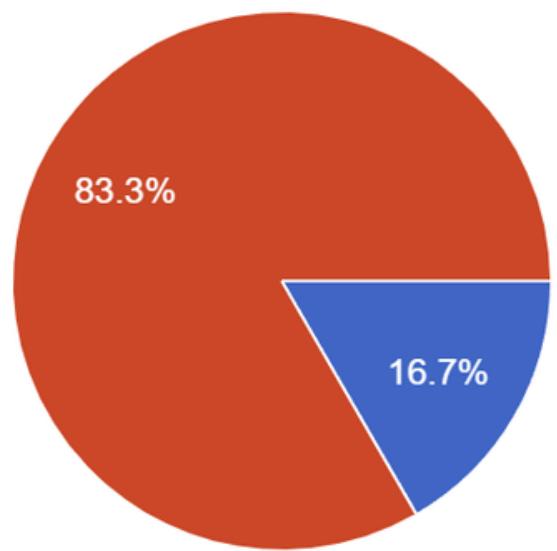


CONTESTANT

07

While solving problems, do you find input data typically as code snippets or test cases?

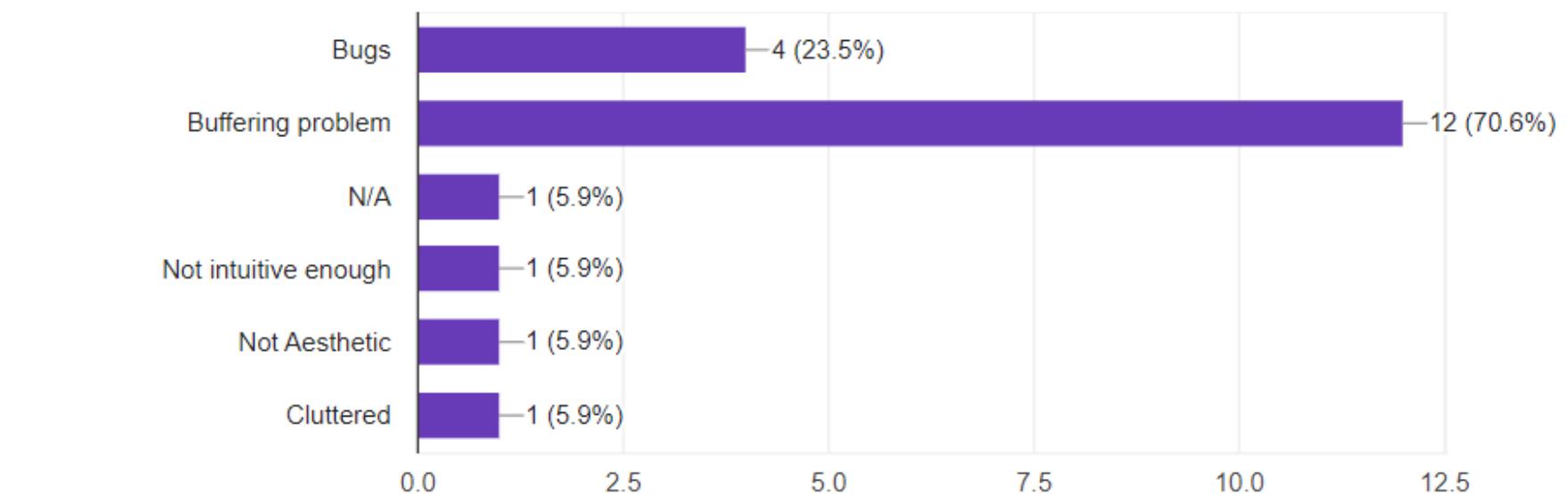
30 responses



● Code snippet
● Test case

What type of issues are you facing? (If you have faced any)

17 responses



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PROBLEM SETTER

08

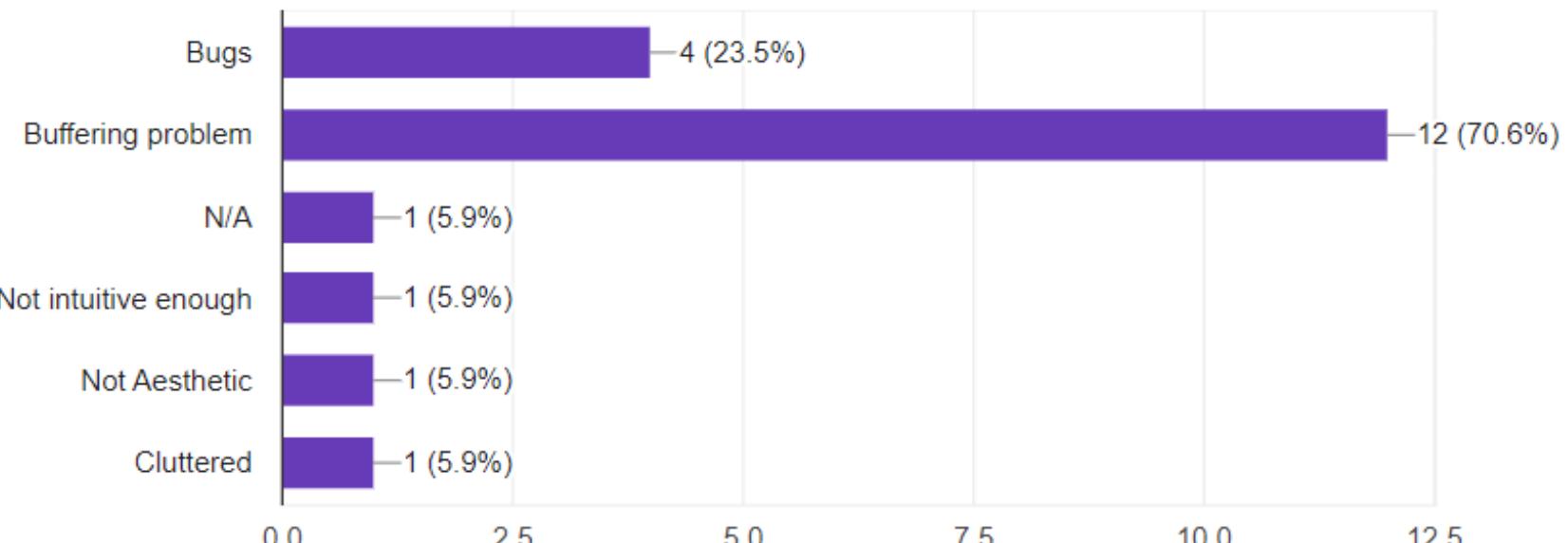
Functional Requirements

Priority Value (Ranking)

zero buffering	1
secured interface	2
Interactive input-output structure	3
flexibility in problem setting	4

What type of issues are you facing? (If you have faced any)

17 responses



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PROBLEM SETTER

09

Non-Functional Requirements

Priority Value (Ranking)

Minimalistic UI Design

1

stress test-constraint flexibility

2

short -term improvements in problem quality

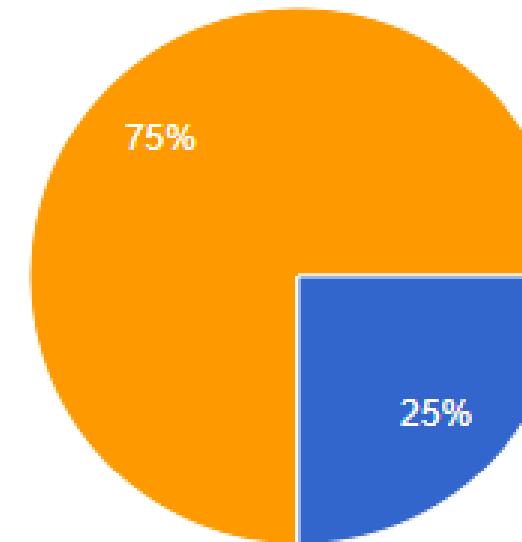
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community feedback

4

Do you believe features like problem recommendation or community feedback would enhance your experience as a problem setter?

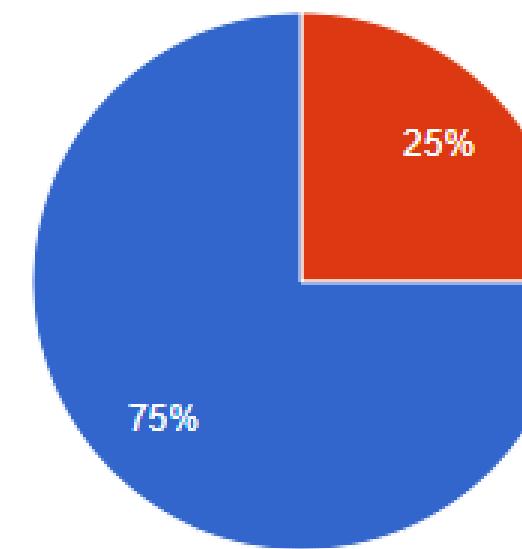
4 responses



- Yes
- No
- Maybe

Are you aiming for short-term improvements in problem quality or long-term enhancements in problem diversity?

4 responses



- Short-term
- Long-term

Contestant

Must Have

- **Functional** : Must provide user access to features like smart upsolving and performance tracker.
- **Non-Functional** : Must provide a user-friendly interface a clear dashboard of available coding problem

Should Have

- **Functional** : Should provide a platform for contestants to discuss problem-solving approaches and collaborate with peers.
- **Non-Functional** : Should optimize code execution to minimize waiting times for results

Could Have

- **Functional** : Could provide detailed analytics on code performance, such as time complexity and memory usage.
- **Non-Functional** : Could allow code editor environment customization features.

PROBLEM SETTER

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Must Have

- **Functional** : System must have a secured interface with zero buffering issues.
- **Non-functional** : System must provide stress test-constraint flexibility .

Should Have

- **Functional** : System should have flexibility in problem setting
- **Non-functional** : System should provide long-term enhancements in problem diversity.

Could Have

- **Functional** : System could have Interactive input-output structure .
- **Non-functional** : System could provide community feedback.

CONCLUSION

The requirements discussed as critical user needs such as upsolve, reward system; creating a flexible problem setting experience minimizing buffering for problem setters as well as creating a seamless problem solving experience and enable users in problem free contest participation.

Notable requirements are simple minimal UI interface, obtain analytics on performance and enhancements in problem diversity.

THANK YOU

FOR YOUR ATTENTION