

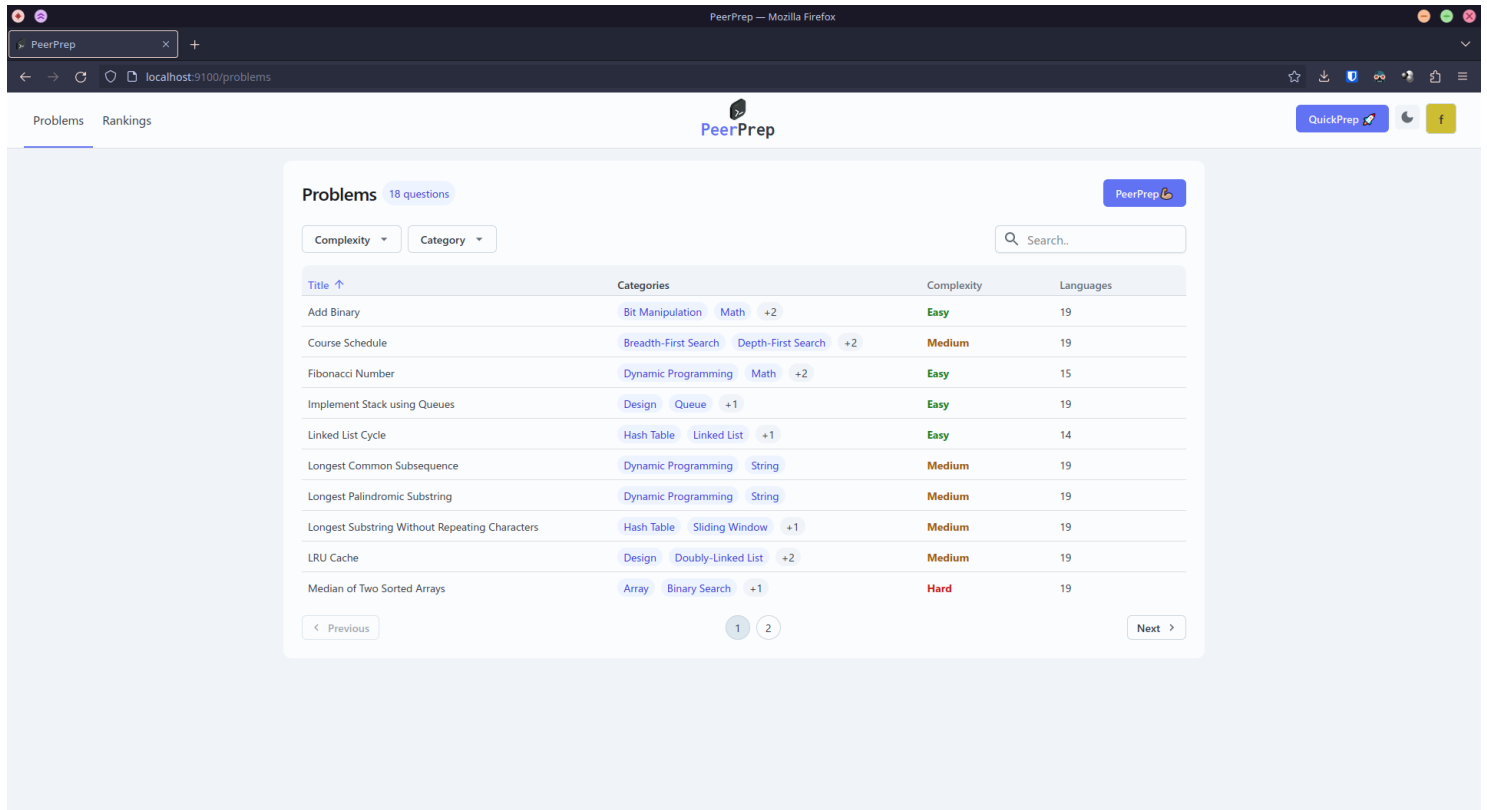


# PeerPrep

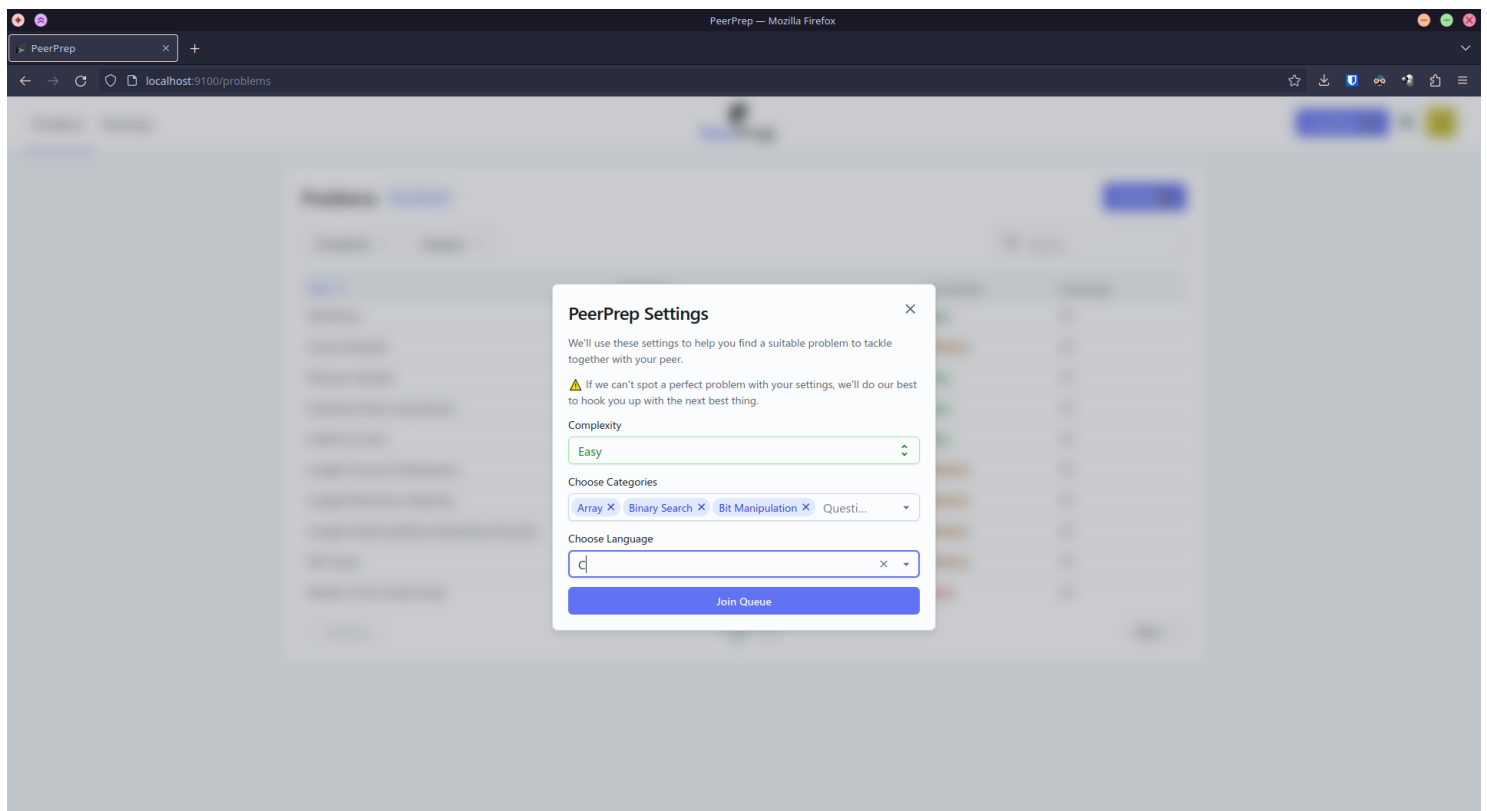
## CS3219 Assignment 5

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<b>Assignment 5 Repo &amp; Readme</b>	<a href="https://github.com/CS3219-AY2324S1/ay2324s1-course-assessment-g04/blob/master/assignment_5/assignment_5.md">https://github.com/CS3219-AY2324S1/ay2324s1-course-assessment-g04/blob/master/assignment_5/assignment_5.md</a>	

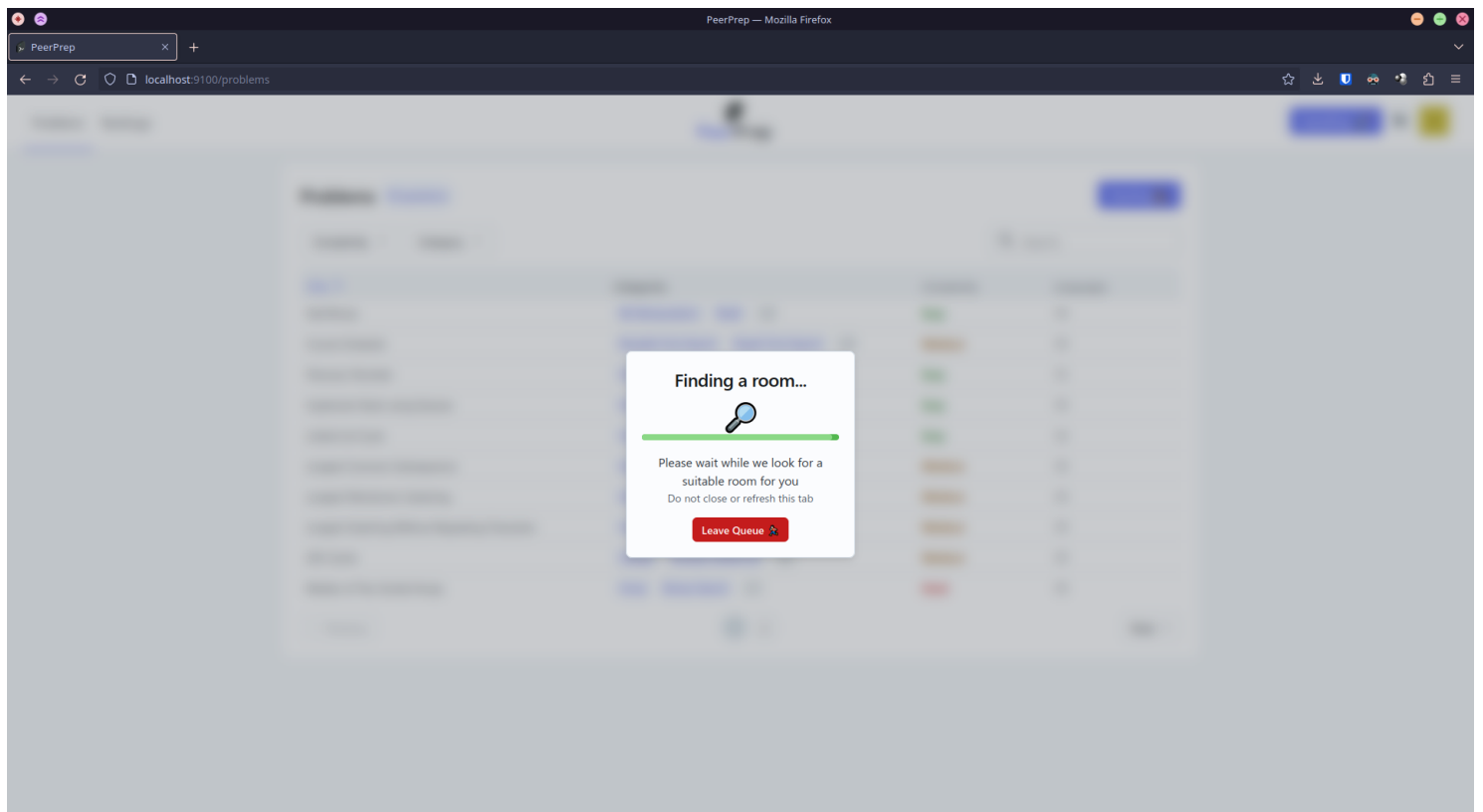
# Scenario: Timeout



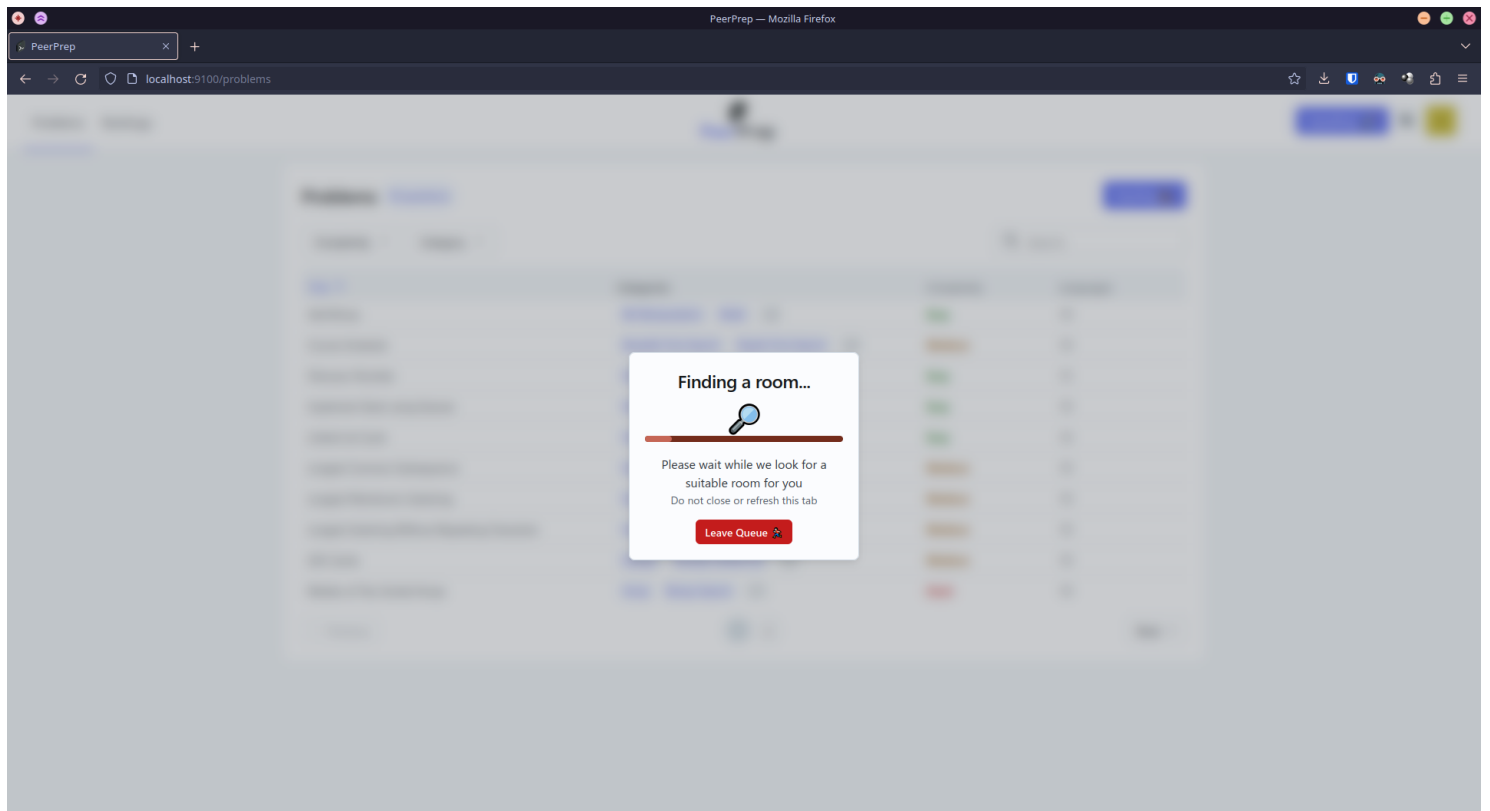
Caption: PeerPrep matching button on the Problems page



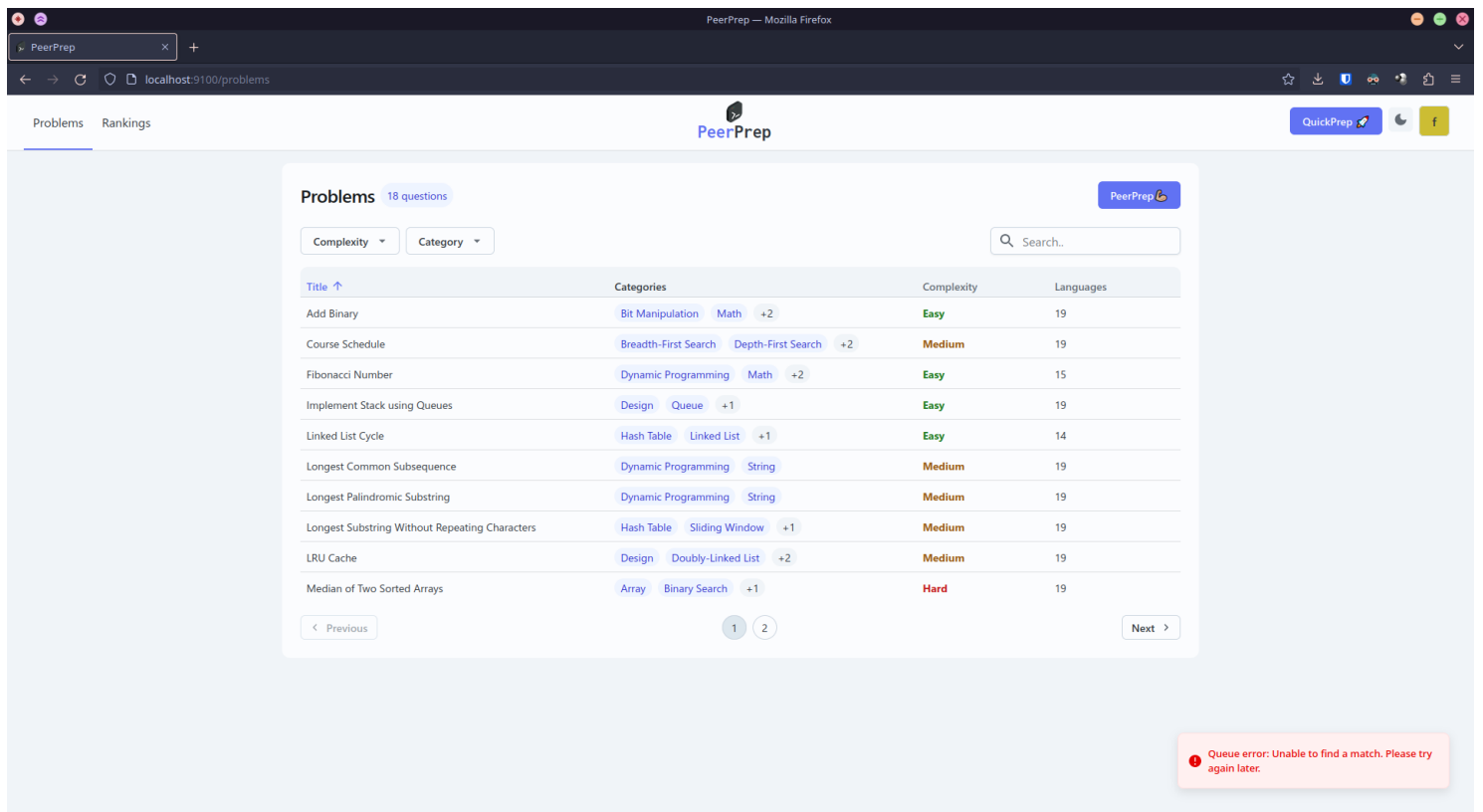
Caption: User is given options to select the complexity of the question, categories of the question, and the programming language.



Caption: Timer which the user sees while waiting for a match

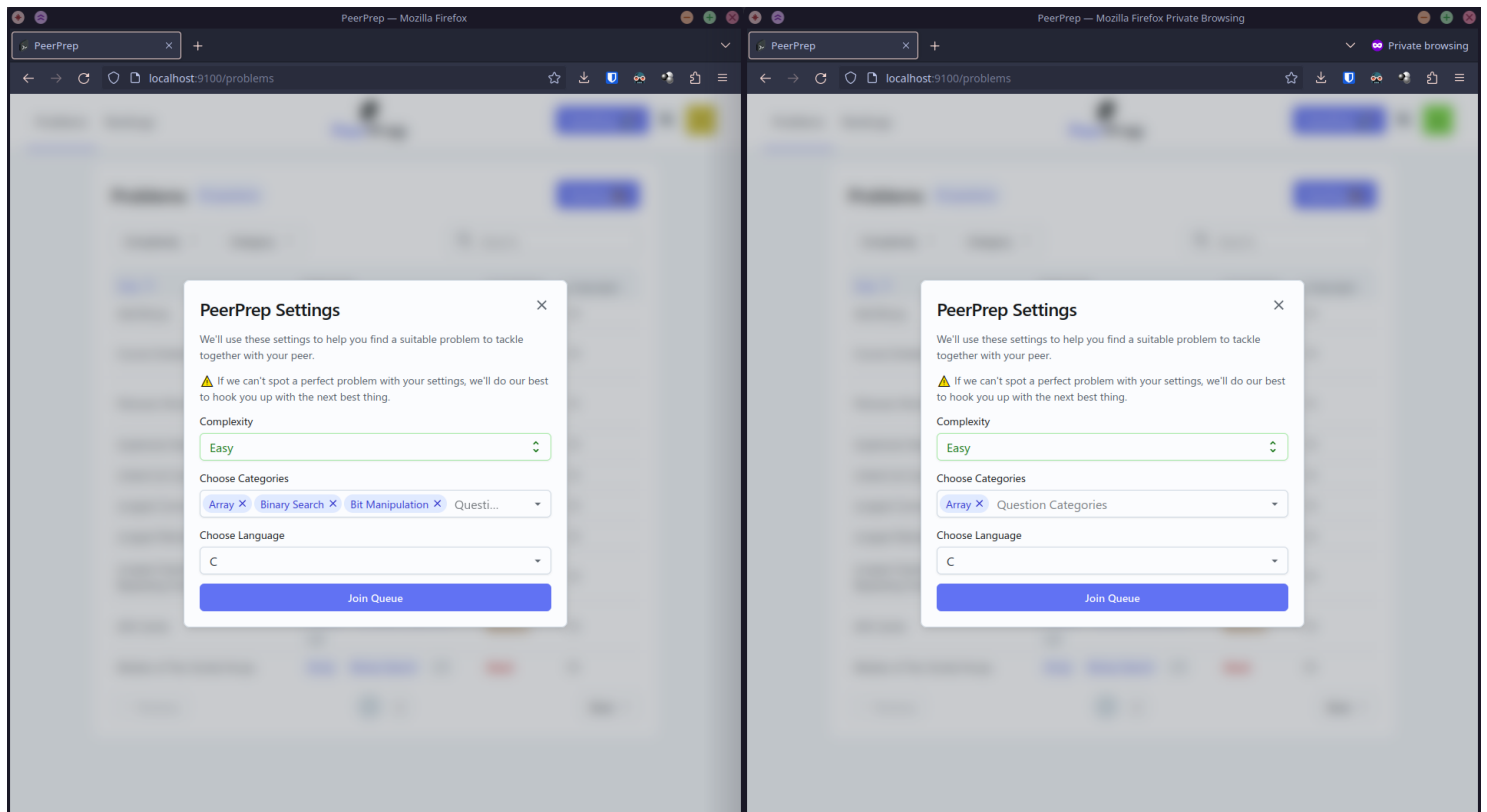


Caption: Timer which the user sees while waiting for a match as it approaches zero

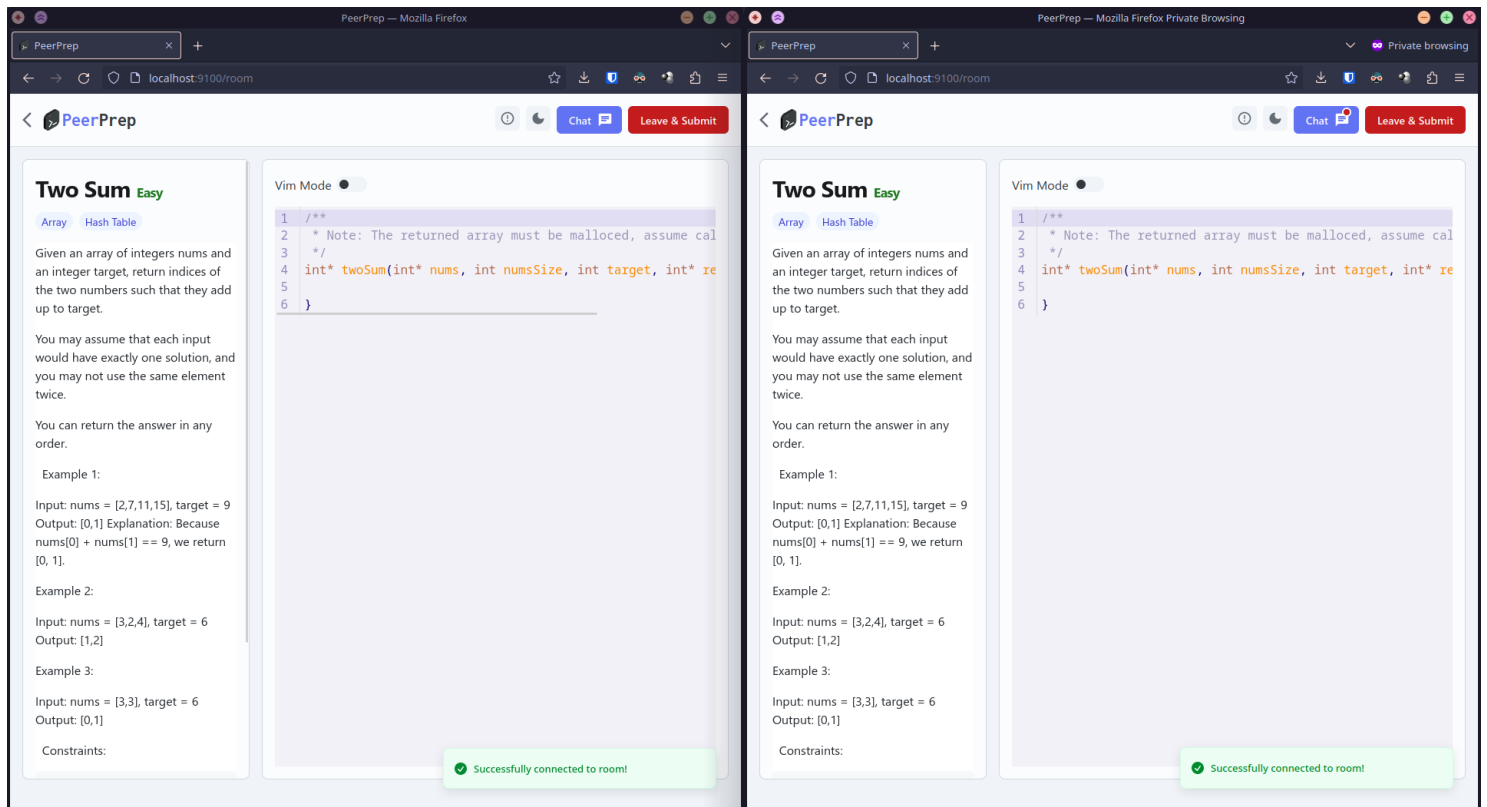


Caption: Unsuccessful or timeout on match, user gets error toast message.

# Scenario: Successful user match



Caption: Before joining queue



Caption: Users joins queue and successfully match

```
matching_service> This is the state of the queue before matching
matching_service> db.match_candidates.find({})

matching_service> This is the state of the queue when one of the player joins
matching_service> db.match_candidates.find({})
[
  {
    _id: ObjectId("65558968f4741a0008d78c28"),
    categories: [ 'Array', 'Binary Search', 'Bit Manipulation' ],
    expireAt: ISODate("2023-11-16T03:16:22.672Z"),
    userID: '2',
    complexity: 'Easy',
    language: 'c',
    __v: 0
  }
]
matching_service> This is the state of the queue after matching
matching_service> db.match_candidates.find({})
matching_service>
```

Caption: Matching database state during stages of matching

```
room=# This is the state of rooms before any matching is completed^C
room=# SELECT * FROM room;
 room_id | user_ids | question_id | question_lang_slug | room_expiry
-----+-----+-----+-----+-----
(0 rows)

room=# This is the state of rooms after a match is made, and room created^C
room=# SELECT * FROM room;
      room_id      | user_ids | question_id | question_lang_slug | room_expiry
-----+-----+-----+-----+-----
 f988c479-2368-4269-abb5-f2c348db8ca5 | {3,2}   | 655580d5998d30d6d6bf444f | c                   | 2023-11-16 03:49:29.744
(1 row)

room=#
```

Caption: Room database state during stages of matching

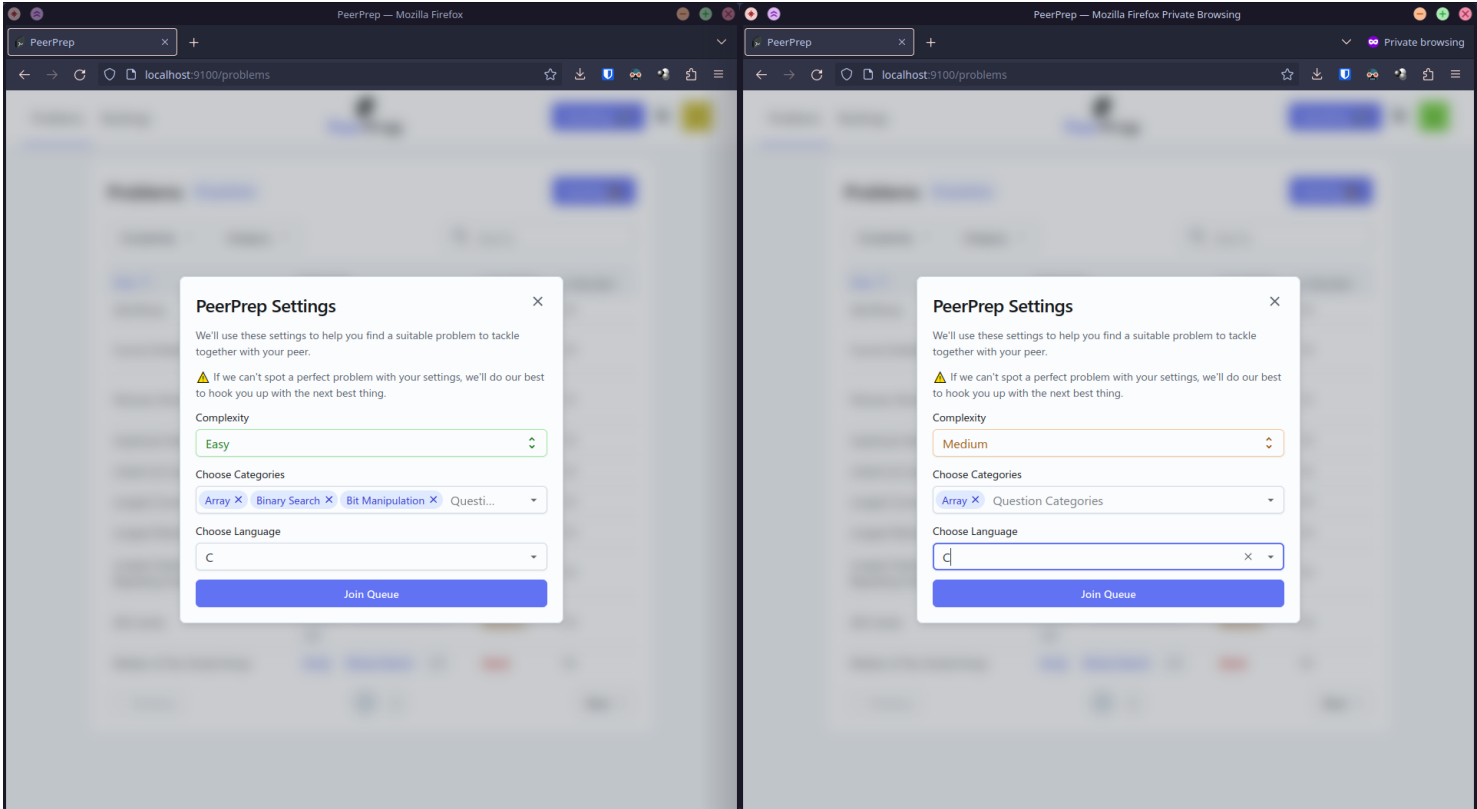
```
~: bash — Konsole
New Tab Split View
Copy Paste Find

User 2 joins
User 2: Not in room, means I can join queue!
Joined queue with Easy, c,
{"data":{"complexity":"Easy","categories":["Array","Bit Manipulation","Breadth-First Search"],"language":"c","expireAt":"2023-11-16T04:35:33.651Z"}}
User 2: In queue! - Thu Nov 16 2023 04:35:03 GMT+0000 (Coordinated Universal Time)
User 3 joins
User 3: Not in room, means I can join queue!
Match is made &
users are informed
User 3: I've matched with someone with same categories! : Array
User 3: I have been matched or I am already in a room!
User 2: I have been matched or I am already in a room!

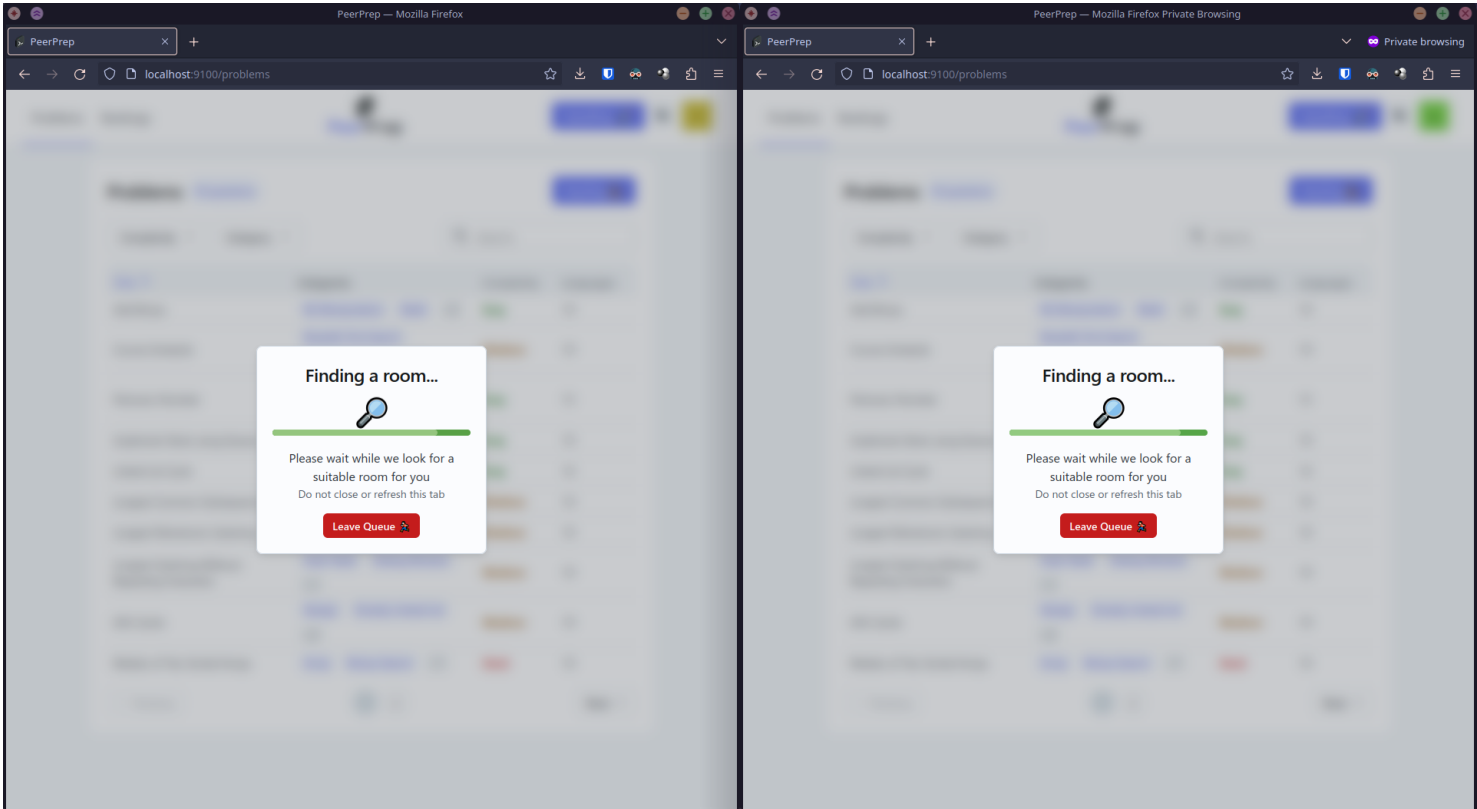
pudding ~ 12:35
```

Caption: API server logs during stages of matching

# Scenario: No match

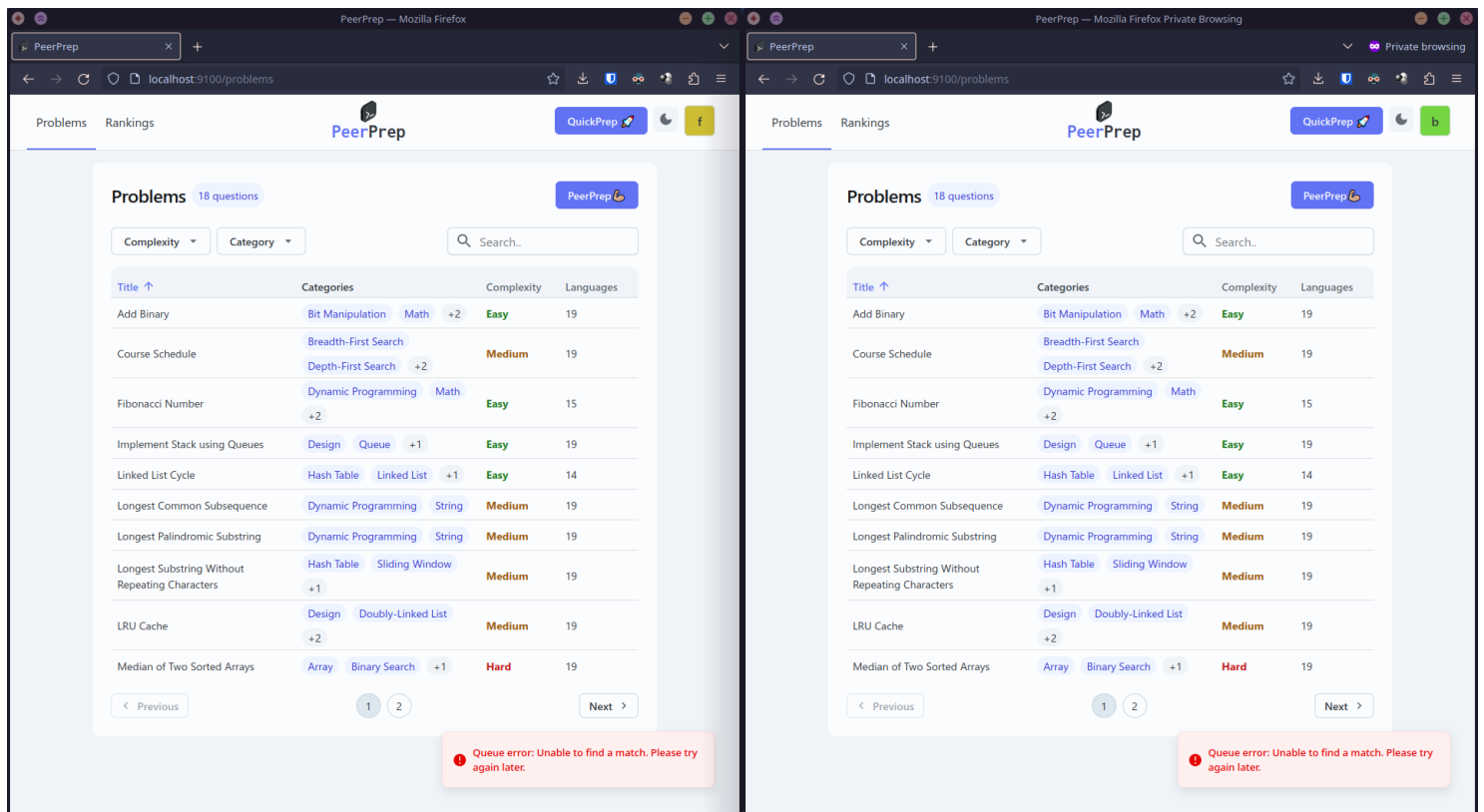


Caption: Two users selecting different requirements

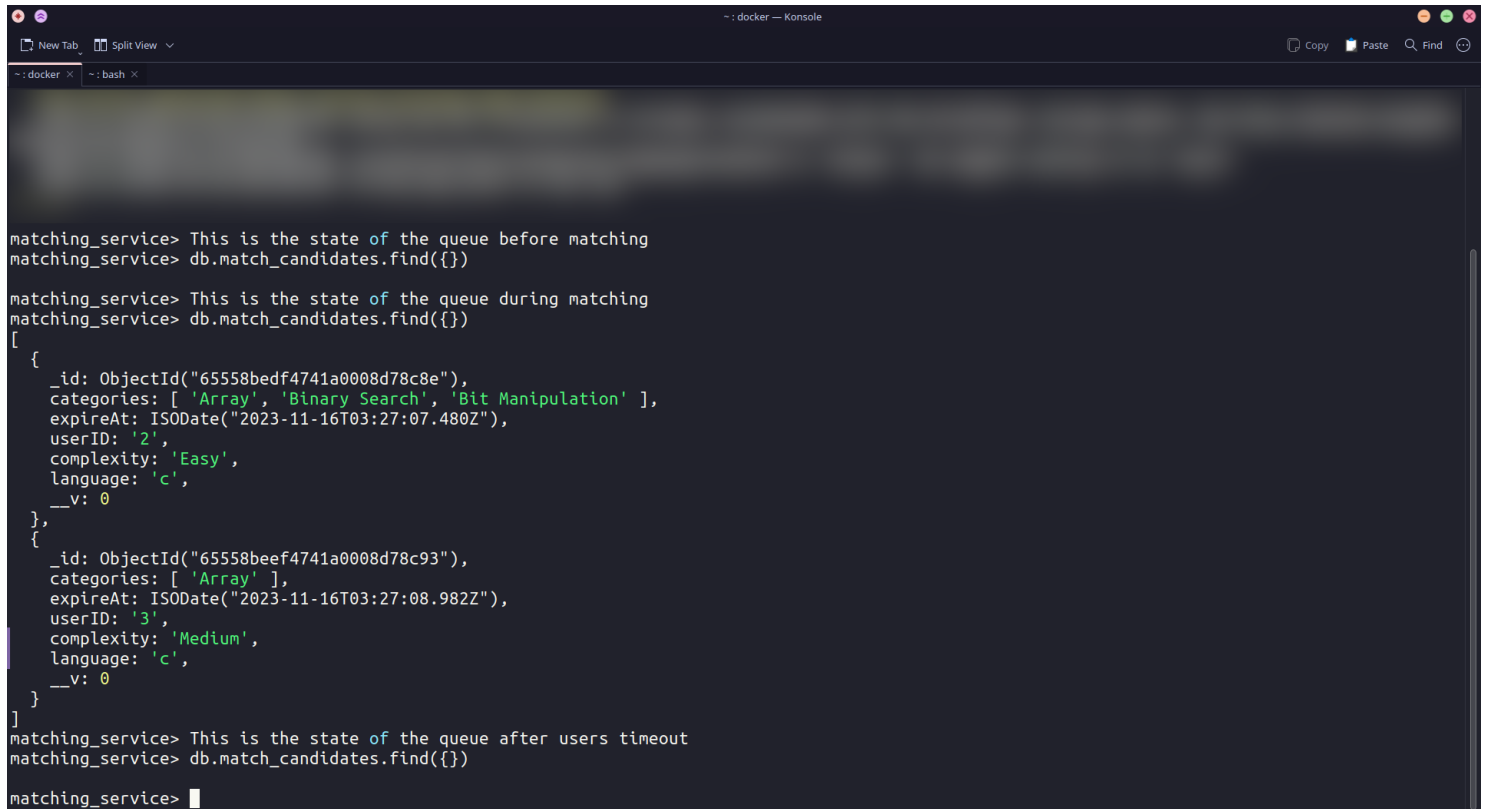


Caption: Both users join queue





Caption: Both users timeout



Caption: Matching database state during stages of matching

```
room=# This is the state of the rooms before any matching is completed^C
room=# SELECT * FROM room;
 room_id | user_ids | question_id | question_lang_slug | room_expiry
-----+-----+-----+-----+-----
(0 rows)

room=# This is the state of the rooms after user matching timeout^C
room=# SELECT * FROM room;
 room_id | user_ids | question_id | question_lang_slug | room_expiry
-----+-----+-----+-----+-----
(0 rows)

room=#
```

Caption: Room database state during stages of matching

```
User 3 joins User 3: Not in room, means I can join queue!
Joined queue with Medium, c,
{"data":{"complexity":"Medium","categories":["Array"],"language":"c","expireAt":"2023-11-16T04:44:52.666Z"}}
User 3: In queue! - Thu Nov 16 2023 04:44:22 GMT+0000 (Coordinated Universal Time)
User 2 joins User 2: Not in room, means I can join queue!
Joined queue with Easy, c,
{"data":{"complexity":"Easy","categories":["Array","Bit Manipulation","Breadth-First Search"],"language":"c","expireAt":"2023-11-16T0
4:44:53.340Z"}}
Users poll at fixed intervals for status
User 2: In queue! - Thu Nov 16 2023 04:44:23 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:25 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:26 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:28 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:29 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:31 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:32 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:34 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:35 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:37 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:38 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:40 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:41 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:43 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:44 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:46 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:47 GMT+0000 (Coordinated Universal Time)
User 3: In queue! - Thu Nov 16 2023 04:44:49 GMT+0000 (Coordinated Universal Time)
User 2: In queue! - Thu Nov 16 2023 04:44:50 GMT+0000 (Coordinated Universal Time)
Users timeout User 3: I am not in a room!
User 2: I am not in a room!
```

Caption: API server logs during stages of matching