

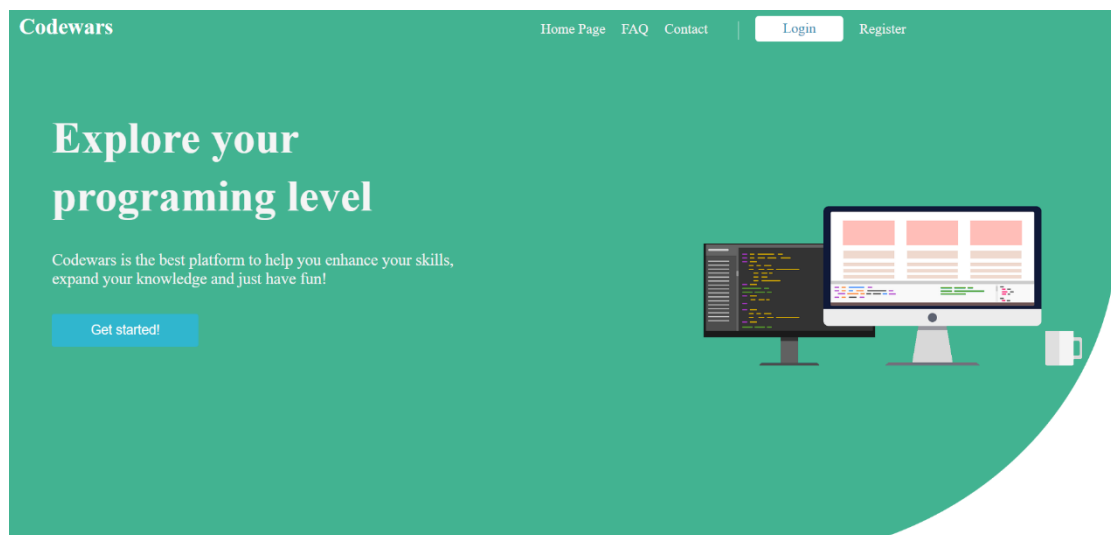
User Manual

Home Page

When the visitor enters to Codewars website, this is the first page he sees. At the top of the page there is the navigation bar that includes the links and by clicking on one of them he will be transferred to:

- Home - The homepage.
- FAQ - The page with frequently asked questions and explanations how everything works.
- Contact - All details for the user to contact the developers.
- Register – The registration page.
- Login - The login page.

Also, there is a "Get Started" button and after clicking on it the visitor will be transferred to the login page.



Further down the page there are explanations about the website and what it provides. At the bottom of the page there is a contact box with which the visitor can contact the developers (can also be reached by clicking on the contact link found in the navigation bar).

**Don't be a stranger
just say hello.**

Feel free to get in touch with me. I am always open to discussing new projects, creative ideas or opportunities to be part of your visions.

Ashdod, Israel codewarsproject@gmail.com

Description

Submit

Register Page

After pressing the "Register" button the guest will be transferred to this page. At this page he can register to the website by providing all the necessary information, after registering the user will be transferred to the homepage.

The user should provide his actual information and his password must be at least 6 characters long and contain only lower or upper case letters and numbers.

Codewars Improve your skills

Sign up to Codewars

First name Last name

Email

Password

Date of birth:

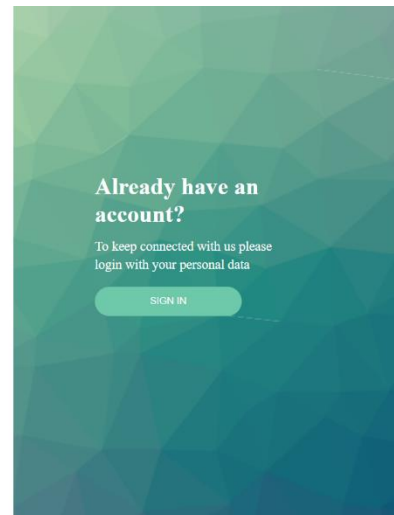
Country:

Gender:
☒ Other ☐ Female ☐ Male

What is your programming level?
☒ Beginner ☐ Intermediate ☐ Expert

Where you learn to code?
☒ Alone ☐ School ☐ Academia ☐ Work

[SIGN UP](#)



By clicking on the logo at the top right of the screen you can return to the main page. If the guest is already registered to the website, he can click on the SIGN IN button and he will be transferred to the login page.

Login Page

After pressing the "Login" button the guest will be transferred to this page. The guest can enter to the website by providing all the necessary details, after providing correct login details the user will be transferred to the homepage.

Codewars Improve your skills

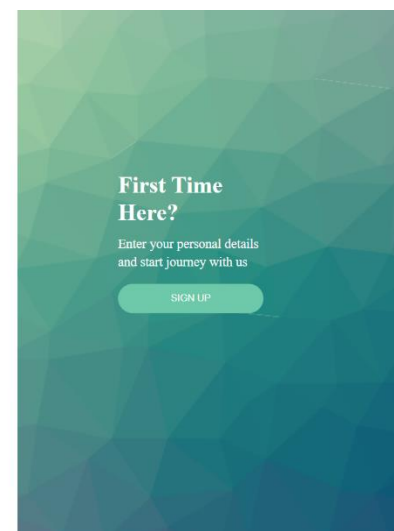
Sign in to Codewars

Email

Password

[Forget your password?](#)

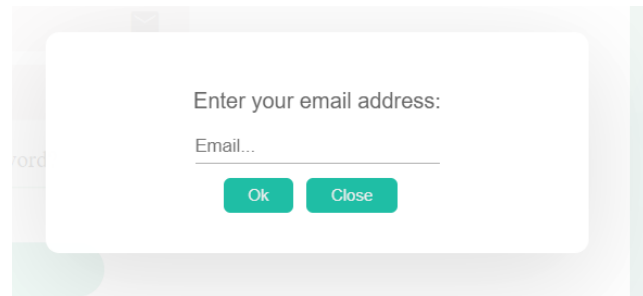
[SIGN IN](#)



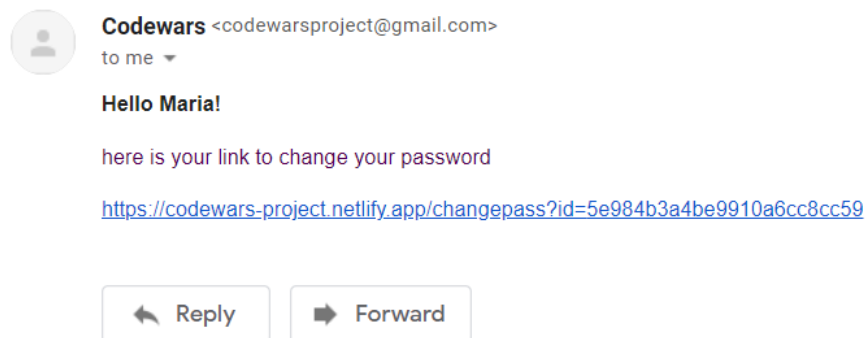
If the guest is not registered yet, he can click on the SIGN UP button and he will be transferred to the register page. By clicking on the logo at the top right of the screen he can return to the main page.

Password Recovery

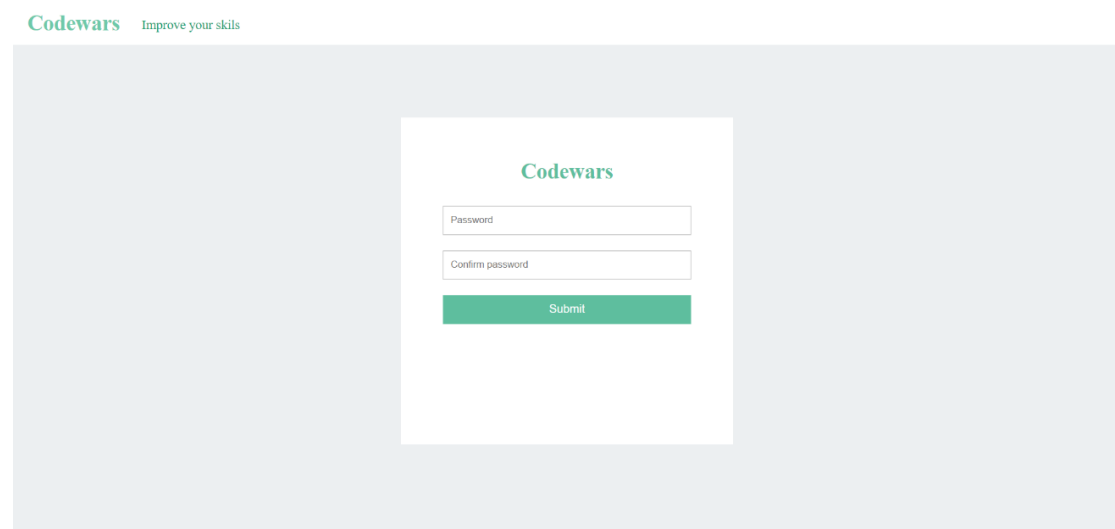
If the user forgot his password or has trouble with logging in, he can navigate to the login page and click on "Forget your password?". After clicking on it, he will enter his e-mail address with which he has registered to the website.

A modal dialog box with a white background and rounded corners. It contains the text "Enter your email address:" followed by a text input field with the placeholder "Email...". Below the input field are two green buttons: "Ok" and "Close".

After pressing on the Ok button, he will be notified that if the email address exists, it will receive a message to the email he entered. This is how the email should look like



After clicking on the link, the user will be transferred to the password recovery page where he will enter his new password

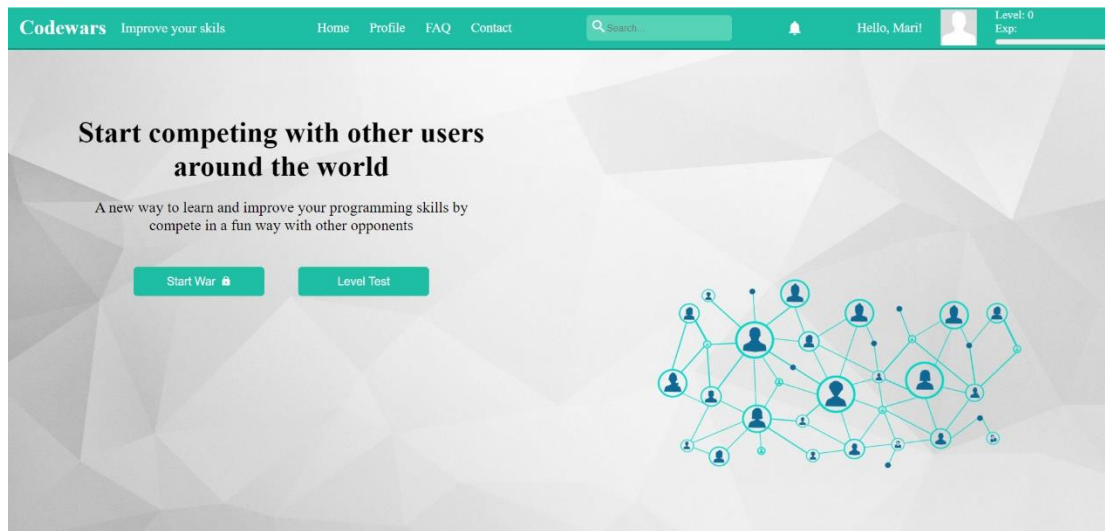
A password recovery form on a light gray background. The form is white with rounded corners and features the "Codewars" logo at the top. It contains two text input fields: "Password" and "Confirm password". Below these fields is a green "Submit" button. The Codewars logo and tagline "Improve your skills" are visible in the top left corner of the page.

After entering a new valid password and clicking on the Submit button, he will be notified that his new password has been updated and he will automatically be transferred to the login page.

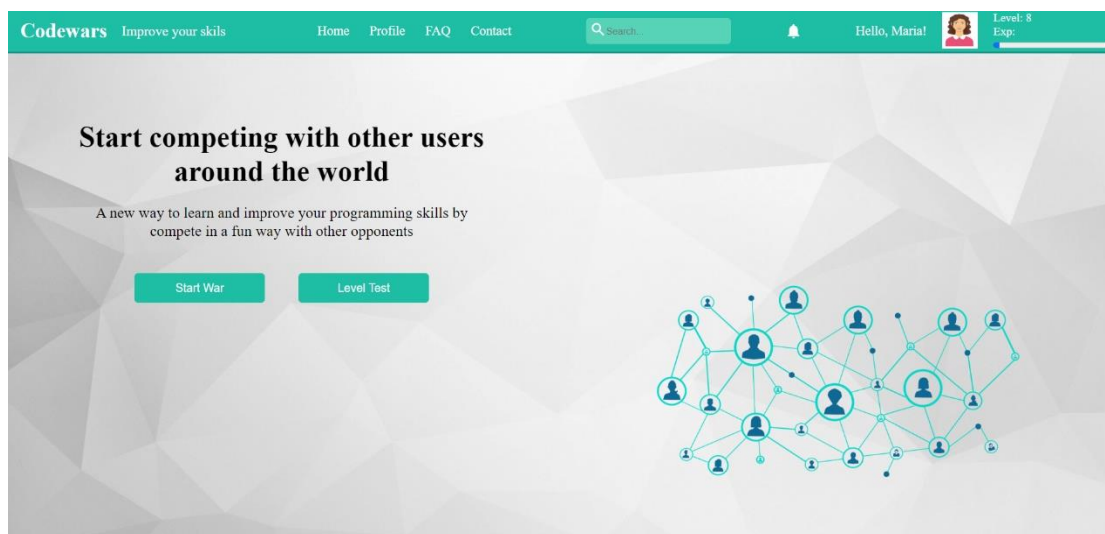
Dashboard

After logging in or registering, this is the home page of the logged in user.

For new users, the start war button will be blocked until the user completes the level test.



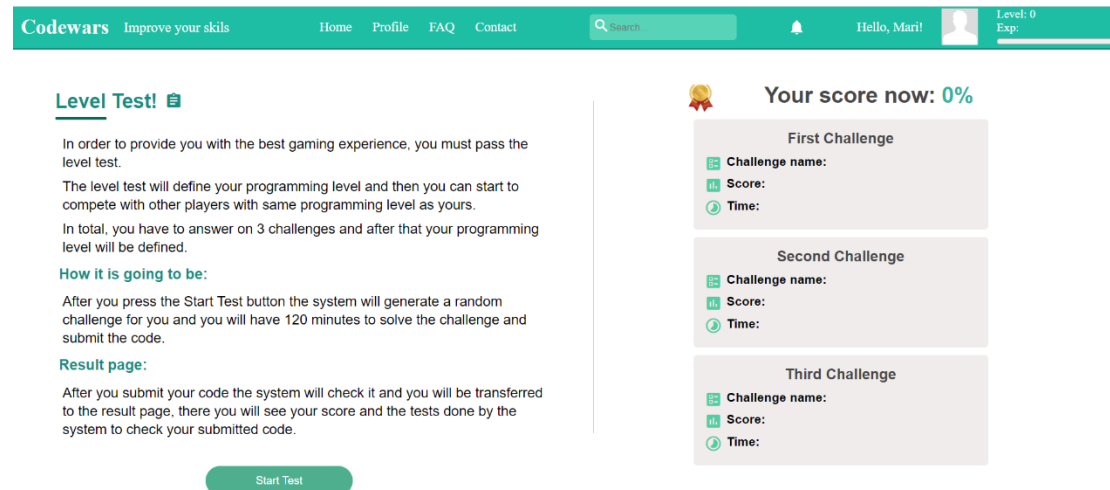
If the user already completed the level test, pressing on "Start War" button will transfer him to the rooms page.



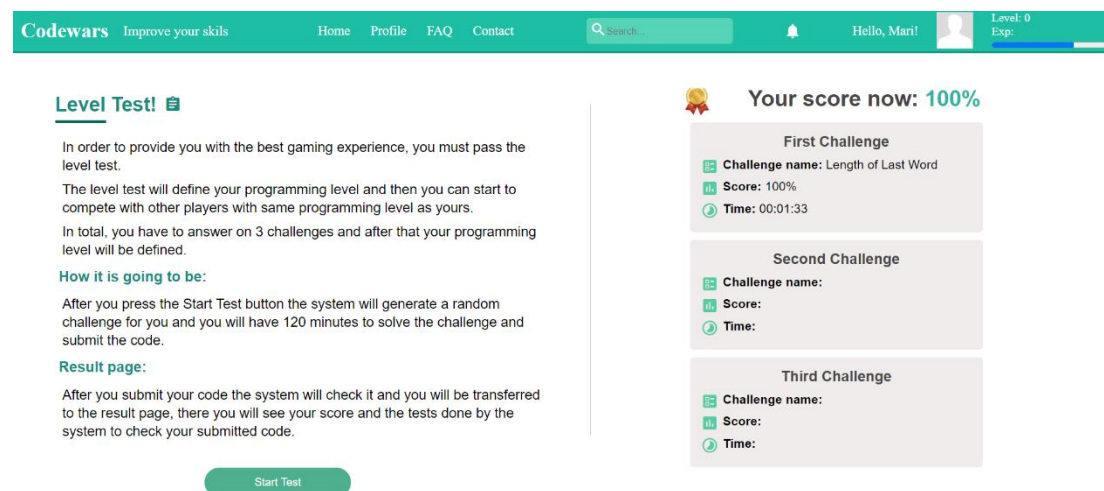
Level Test Page

After registration, to start any war the user should pass the level test and only after his programming level has been set, we will be able to start a war. At this page, the user can see from the right side the challenges he has completed and the challenges he had left. The user must pass 3 challenges to get the programming level.

If the user does not completed the level test yet, pressing on "Start Test" button will generate a new random challenge and the user will be transferred to the challenge page.



This is how the page looks after the user completed one challenge



At the end of the 3 challenges the user will get his programming level, at this point he can get one of the following two programming levels: beginner or intermediate

Challenge Page

On this page, a new challenge is assigned to the user each time. On the left side you can see the question, it is accompanied by examples and explanations. At the top of the page you can see the allotted time for each challenge, as soon as the time ends the question will automatically be submitted for review. In addition, there is also a "Hide Timer" button that can be used to hide the allotted time.

Below the timer you can see the editor with the function signature and the arguments it receives, this is the place where the user will write his answer.

There are 2 buttons at the bottom of the page:

- **Run Code** - At the click of a button you can run and test the code listed in the editor as many times as you want. The result of the code run will appear in the output box located under the editor.
- **Submit** - By pressing the button, the user's code can be submitted for review, before it the user is asked whether he is sure that he wants to submit his answer. If the user chooses not to submit the code, he can continue to work on it until the time runs out or he can press the button again. If the user chooses to submit the code, he will be transferred to the results page.

At the top of the page you can also see the exit button, by clicking on it, the user can leave the challenge, if the user chooses to leave, his answer will not be saved, the challenge will not be considered and the user will be transferred to the level test.

The screenshot shows the Codewars interface for the 'Reverse Integer' challenge. At the top, a green header bar contains the Codewars logo, the tagline 'Improve your skills', a user greeting 'Good Luck, Mari!', a progress indicator 'Level: 0 Exp: [bar]', and an 'Exit' button. Below the header, a timer shows 'War Started! 1h 59m 40s' with a 'Hide Timer' button. A message states: 'After 2 hours the system will submit automatically the challenge.' The challenge title 'Reverse Integer' is displayed. The problem description reads: 'Given a 32-bit signed integer, reverse digits of an integer.' Three examples are provided: Example 1 (Input: 123, Output: 321), Example 2 (Input: -123, Output: -321), and Example 3 (Input: 120, Output: 21). Constraints specify: 'Assume we are dealing with an environment which could only store integers within the 32-bit signed integer range: [-2³¹, 2³¹ - 1]'. The code editor on the right contains the function signature: `1 - def reverse(x):`. Below the editor is an 'Output:' label and an empty text box. At the bottom right, there are 'Run Code' and 'Submit' buttons.

Challenge Results Page

After the user will submit his code, it will be submitted for review and the system will provide the user a score on the code. At the same time, the user will be transferred to the results page, where he can see the score he received on the code, the question, the code he submitted and what the test cases were.

By pressing the exit button, the user will be transferred to the level test page.

Codewars

Candidate Report: Mari Garber

Test Score

100 out of 100 points

100%

You Pass This Challenge Congratulations

Reverse Integer

Given a 32-bit signed integer, reverse digits of an integer.

Example 1:

Input: 123

Output: 321

Example 2:

Input: -123

Output: -321

Example 3:

Input: 120

Output: 21

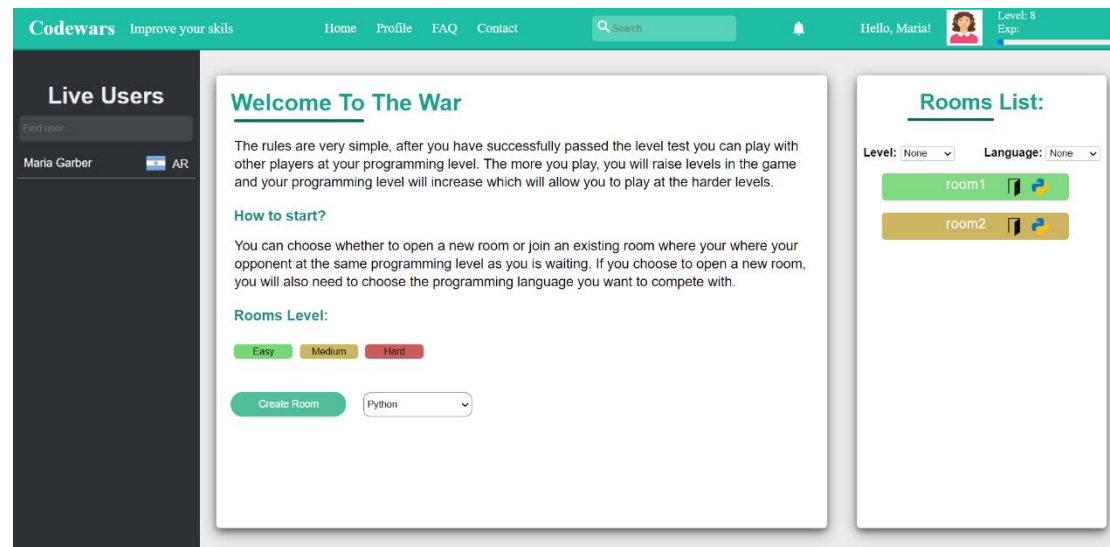
```
1- def reverse(x):
2-     result = 0
3-     abs_x = abs(x)
4-     while abs_x != 0 :
5-         remainder = abs_x % 10
6-         abs_x = abs_x //10
7-         temp = result * 10 + remainder
8-         result = temp
9-     if x < 0 :
10-        result = -1 * result
11-    if result < - 2**31 or result > 2**31 -1:
12-        result = 0
13-    return result
```

Test cases

Tested values	Users answer	Expected answer	Test Status
reverse(123)	321	321	true
reverse(-123)	-321	-321	true
reverse(-12300)	-321	-321	true
reverse(100000003)	300000001	300000001	true
reverse(100000000)	1	1	true

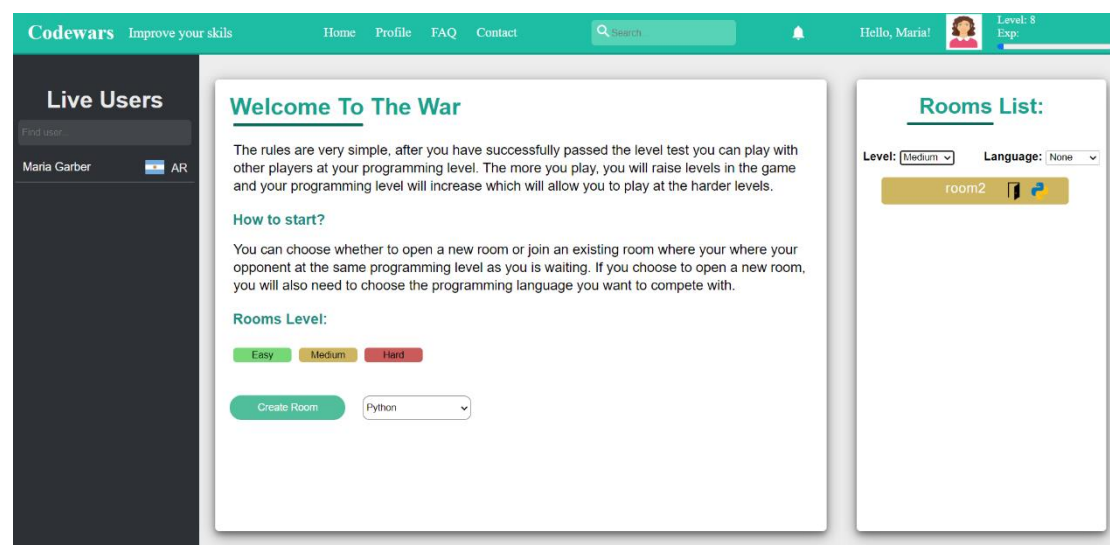
Rooms Page

The rooms page can only be entered after the user's level has been set. On the left side of the page you can see all the users who are in real time on the same page, by clicking on the username you can reach their page. In the right part of the page you can see the list of all open rooms, they will be in different colors according to different user programming levels.



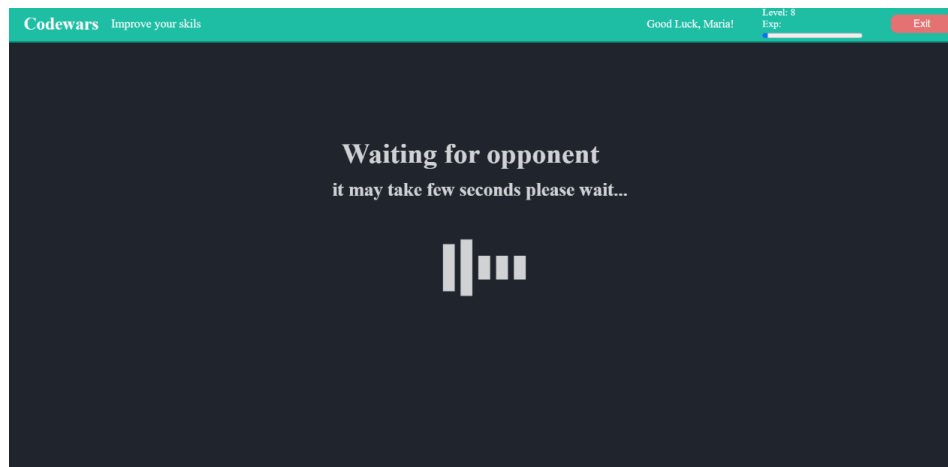
The user can choose to enter an existing room and compete with the user who opened the room or open a new room and choose the language in which he would like to compete. If the user choose to create his own room he will be transferred to the War page and wait for an opponent. Otherwise, if he chooses to enter into existing room he will be transferred to the War page and the war will start immediately. The challenge will appear only when there are two users in a room. The user could access only to a room that matches his programming level.

Also, various filter options are available in the rooms list. By levels and by programming language.



War Page

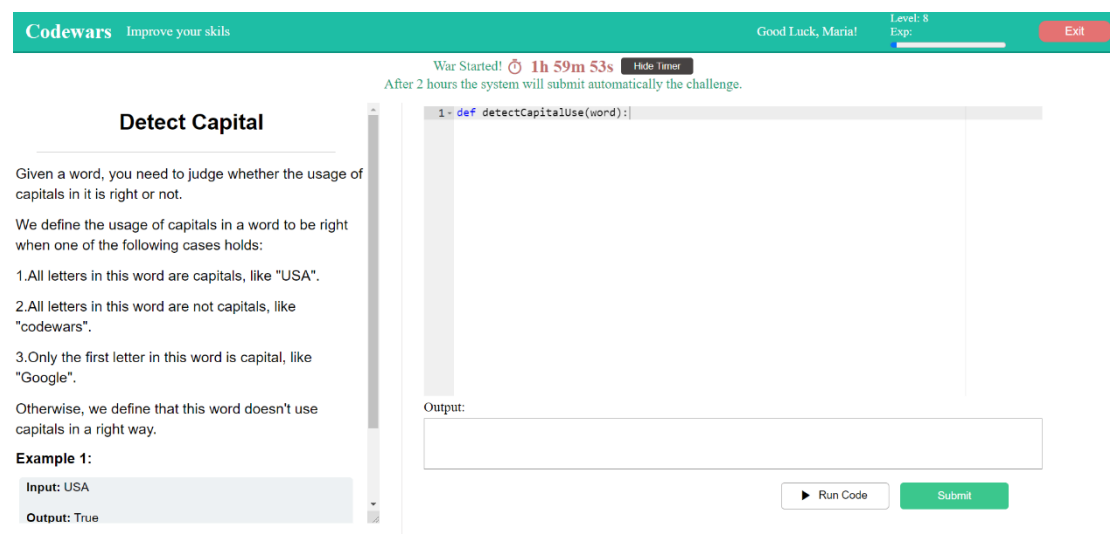
When the user opens a new room, he is transferred to the "War Room" and wait there for his opponent. At each stage, the user can exit the "War Room" by pressing the exit button.



As soon as another user joins the room, both users are get a random question based on the level of the room and the war begins. On the left side you can see the question, it is accompanied by examples and explanations. At the top of the page you can see the allotted time for each challenge, as soon as the time ends the question will automatically be submitted for review. In addition, there is also a "Hide Timer" button that can be used to hide the allotted time. Below the timer you can see the editor with the function signature and the arguments it receives, where the user will have to write his answer.

There are 2 buttons at the bottom of the page:

- Run Code - At the click of a button you can run and test the code listed in the editor as many times as you want. The result of the code run will appear in the output box located under the editor.
- Submit - By pressing the button, the user's code can be submitted for review, before the user is asked whether he is sure that he wants to submit his answer. If the user chooses not to submit the code, he can continue to work on it until the time runs out or his opponent submits the code or he presses the button again.



If one of the users submits his code, the timer will change and the code will be submitted for testing after 15 seconds. All of that to give the opponent the opportunity to finish working on his code. As you can see after one user has submitted his code, the Submit button turns gray and can no longer be clicked.

Codewars

Improve your skills

Good Luck, Eliran!

Level: 10
Exp:

Exit

🕒 Your opponent submitted his code
the code will be automatically submitted in 13 seconds

Detect Capital

Given a word, you need to judge whether the usage of capitals in it is right or not.

We define the usage of capitals in a word to be right when one of the following cases holds:

- 1.All letters in this word are capitals, like "USA".
- 2.All letters in this word are not capitals, like "codewars".
- 3.Only the first letter in this word is capital, like "Google".

Otherwise, we define that this word doesn't use capitals in a right way.

Example 1:

Input: USA

Output: True

```
1- def detectCapitalUse(word):  
2-     def detectCapitalUse(word):  
3-         cap = word.upper()  
4-         low = word.lower()  
5-         mix = word[0].upper() + word[1:].lower()  
6-         return word in [cap, low]
```

Output:

▶ Run Code

Submit

At the top of the page you can also see the exit button, by clicking on it user can leave the war, if the user chooses to leave his answer will not be saved, he will lose the war and be transferred to the rooms page. The opponent will be notified that he has won because his opponent has left.

Codewars

Improve your skills

Good Luck, Moria!

Level: 10
Exp:

Exit

War Started! 🕒 1h 59m 49s

Remaining time

After 2 hours the system will submit automatically the challenge.

Detect Capital

Given a word, you need to judge whether the usage of capitals in it is right or not.

We define the usage of capitals in a word to be right when one of the following cases holds:

- 1.All letters in this word are capitals, like "USA".
- 2.All letters in this word are not capitals, like "codewars".
- 3.Only the first letter in this word is capital, like "Google".

Otherwise, we define that this word doesn't use capitals in a right way.

Example 1:

Input: USA

Output: True

1- def detectCapitalUse(word):

Congratulations you won the war!!

Your opponent left the war and you will be transferred to the rooms page

OK

Output:

▶ Run Code

Solve

War Results Page

At the war results page, the user will be able to see if he won or lost, the score he received on the code, the question, the code he submitted and what the test cases were.

If the user wins the battle, he will receive a medal, the type of medal is influenced only by the grade he received and not by his programming level. If the user received a gold medal, his score was 90 or higher, if he received a silver medal, the score was between 70 and 90, and if he received a bronze medal, his score was less than 70.

The color of the message and the score varies according to the loss / victory. If the user wins, his score and message will be printed in green, otherwise in red.

By pressing the exit button, the user will be taken to the level test page.

Codewars Improve your skills

Good Luck, Maria!

Level: 8
Exp:

Exit

Codewars

Candidate Report: Maria Garber

Test Score

100 out of 100 points

100% 

You Win This Challenge Congratulations

Detect Capital

Given a word, you need to judge whether the usage of capitals in it is right or not.

We define the usage of capitals in a word to be right when one of the following cases holds:

- 1.All letters in this word are capitals, like "USA".
- 2.All letters in this word are not capitals, like "codewars".
- 3.Only the first letter in this word is capital, like "Google".

Otherwise, we define that this word doesn't use capitals in a right way.

Example 1:

Input: USA

```
1- def detectCapitalUse(word):
2-     cap = word.upper()
3-     low = word.lower()
4-     mix = word[0].upper() + word[1:].lower()
5-     return word in [cap, low, mix]
```

Test cases

Tested values	Users answer	Expected answer	Test Status
detectCapitalUse("USA")	True	True	true
detectCapitalUse("FliaG")	False	False	true
detectCapitalUse("codewars")	True	True	true
detectCapitalUse("r")	True	True	true
detectCapitalUse("G")	True	True	true
detectCapitalUse("isRaE")	False	False	true

Codewars

Candidate Report: Eliran Naduyev

Test Score

50 out of 100 points

50%

You Lose This Challenge, try next time better...

Detect Capital

Given a word, you need to judge whether the usage of capitals in it is right or not.

We define the usage of capitals in a word to be right when one of the following cases holds:

- 1.All letters in this word are capitals, like "USA".
- 2.All letters in this word are not capitals, like "codewars".
- 3.Only the first letter in this word is capital, like "Google".

Otherwise, we define that this word doesn't use capitals in a right way.

Example 1:

Input: USA

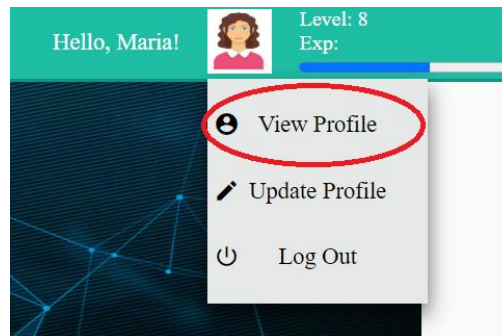
```
1 def detectCapitalUse(word):
2     if len(word) > 1 and word[0].islower() and word[1].isupper():
3         return False
4
5     for i in range(1,len(word)-1):
6         if word[i].isupper() != word[i+1].isupper():
7             return False
8
9     return True
```

Test cases

Tested values	Users answer	Expected answer	Test Status
detectCapitalUse("USA")	True	True	true
detectCapitalUse("FliaG")	True	False	false
detectCapitalUse("codewars")	True	True	true
detectCapitalUse("l")	None	True	false
detectCapitalUse("G")	None	True	false
detectCapitalUse("IsRaEl")	False	False	true

Profile Page

Every user can reach the Profile page by clicking on "Profile" link at the navigation bar or hovering over the profile picture and clicking on "View Profile" in the menu that opens.



At the profile page users can see their personal details and their programming level (Tier). If the user is on another user's profile page, he will see all that user's data.

A screenshot of the user profile page. The page is divided into two main sections: a top section for personal information and a bottom section for statistics.

Personal Information:

- Name:** Maria Garber
- Email:** maria@gmail.com
- Birth Date:** 11/5/1997
- Gender:** Female
- Member Since:** 6/4/2020
- Last Seen:** 17/6/2020
- Tier:** Beginner (indicated by a red arrow)

Statistics:

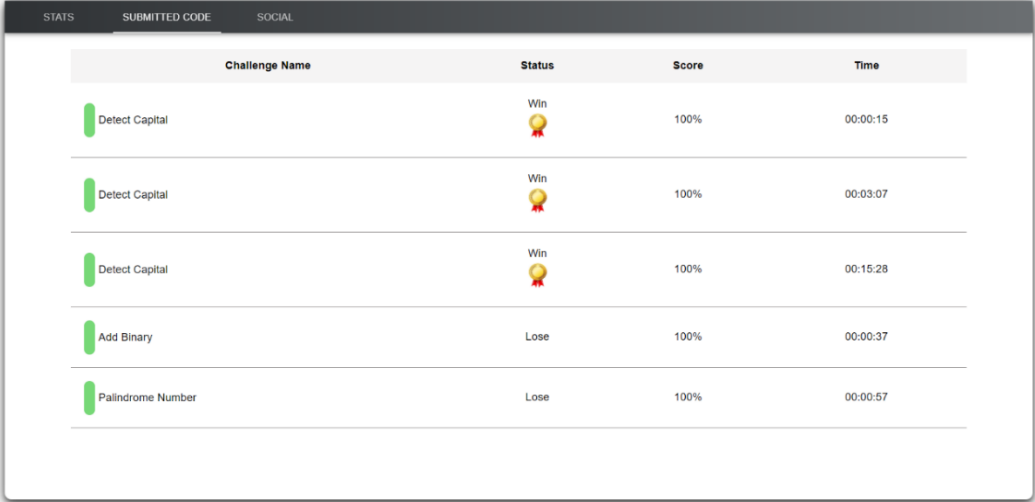
- Total Score:** 37%
- Match Played:** 97
- Wins:** 32 (Gold medal icon), 0 (Silver medal icon), 19 (Bronze medal icon)
- W/L ratio:** 1.11

Performance by Tier:

Tier	Longest Win	Fastest Win	AVG Win	W/L Ratio
Beginner Wars	00:15:28	00:00:04	00:00:56	1.48
Intermediate Wars	00:00:06	00:00:05	00:00:06	0.07
Expert Wars	00:00:32	00:00:02	00:00:42	0.21

Below the user's personal information, you can see his statistics.

In addition, you can also see the last 5 wars of the user by clicking on SUBMITTED CODE

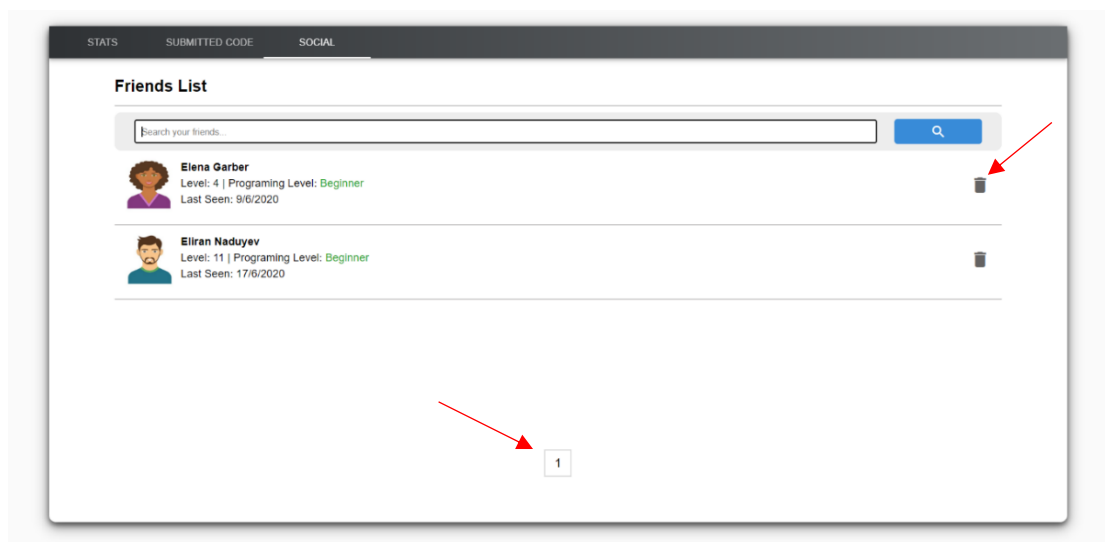


The screenshot shows the 'SUBMITTED CODE' tab in a web application. It displays a table with the following columns: Challenge Name, Status, Score, and Time. There are five rows of data, each representing a challenge attempt. Each row starts with a green progress bar icon. The first three rows show 'Detect Capital' challenges with a 'Win' status, 100% score, and times of 00:00:15, 00:03:07, and 00:15:28 respectively. The next two rows show 'Add Binary' and 'Palindrome Number' challenges with a 'Lose' status, 100% score, and times of 00:00:37 and 00:00:57 respectively.

Challenge Name	Status	Score	Time
Detect Capital	Win	100%	00:00:15
Detect Capital	Win	100%	00:03:07
Detect Capital	Win	100%	00:15:28
Add Binary	Lose	100%	00:00:37
Palindrome Number	Lose	100%	00:00:57

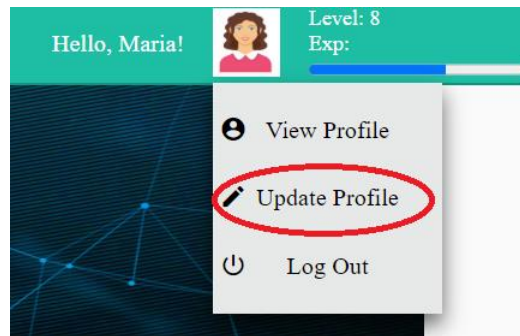
And by clicking on SOCIAL you can see the list of user friends (if a certain user has a lot of friends they will be displayed in several pages, this number varies according to the number of members) and search them.

If the user is on his profile page, he will see a bin icon near the friend, if the user will click on it the friend will be deleted from the friends list.



Update Profile Page

You can reach the update profile page by hovering over the profile picture and clicking Update Profile in the menu that opens.

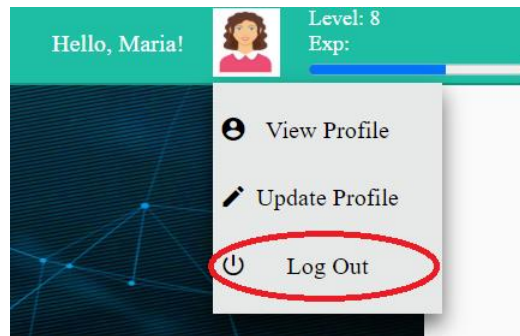


On the page that opens, you can update your personal information, select a new profile picture, change your password and delete the user forever.

A screenshot of the Codewars "Update Profile" page. The page has a green header with the Codewars logo, navigation links (Home, Profile, FAQ, Contact), a search bar, a notification bell, and a user profile section showing "Hello, Eliran!" and "Level: 11 Exp:". The main content area is divided into three sections: "Information:", "Password:", and "Delete Account". The "Information:" section contains form fields for "First Name:", "Last Name:", "Date of birth:" (with a "select date" button), "Country:" (with a "Select Country" dropdown), and "Gender:" (with radio buttons for "Other", "Female", and "Male"). To the right of these fields is a grid of 12 profile picture icons. The "Password:" section contains form fields for "New Password:", "Confirm Password:", and "Current Password (needed if you want to change your password):". The "Delete Account" section contains a warning message and a "DELETE MY ACCOUNT" button. At the bottom of the page is a blue "Update" button.

Log Out

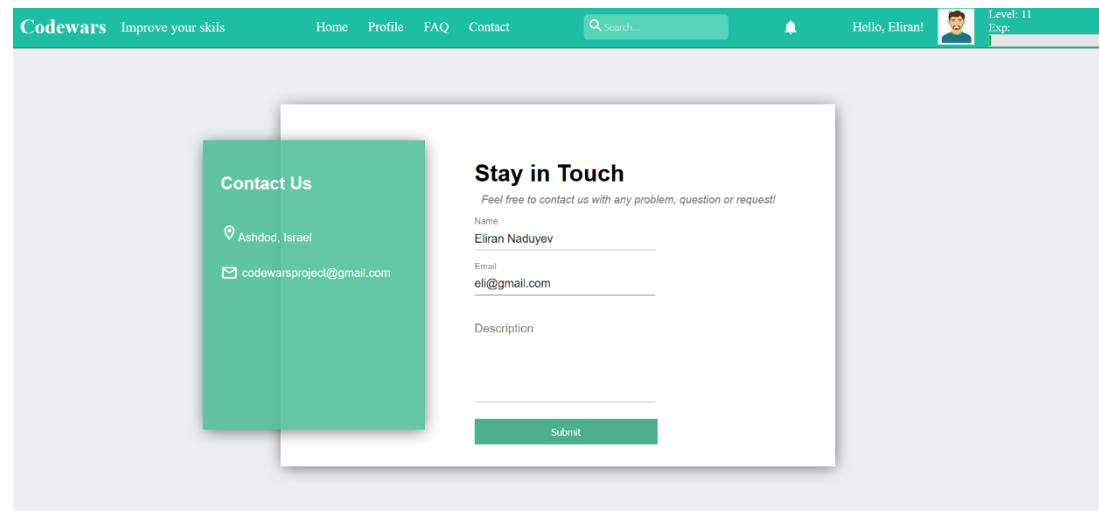
User can log out by hovering over the profile picture and clicking on Log Out at the menu that opens. After pressing the button the user will be transferred to the home page.



Contact Page

Clicking on Contact at the navigation bar will transfer the user to the contact page. In the appropriate boxes, the user's details will appear as they are updated on his profile page.

If the user presses on the Submit button, his application will be sent to the developers.



Search Other Users

At the navigation bar there is a search option by the user's name. You can only enter a last name or first name or all together.

After the user enters the desired search and clicks on the magnifying glass icon, he will be transferred to the search results page and there he will see all users whose name is the same or similar to what he were looking for.

The screenshot shows the Codewars search results page for the letter 'e'. The navigation bar at the top includes the Codewars logo, a link to 'Improve your skills', and links for 'Home', 'Profile', 'FAQ', and 'Contact'. A search bar with a magnifying glass icon is present, along with a notification bell, a greeting 'Hello, Ehiran!', a user profile picture, and a level indicator 'Level: 11 Exp:'. The main content area is titled 'Search Results: e (showing 1 - 6 users)'. It contains a table with the following data:

Name	Member Since	Country	Add User
 Maria Garber Programming Level: Beginner Last Seen: 18/6/2020	6/4/2020	Argentina	Friends
 Ehiran Naduyev Programming Level: Beginner Last Seen: 17/6/2020	6/4/2020	Antarctica	
 Elena Garber Programming Level: Beginner Last Seen: 9/6/2020	16/4/2020	Bahamas	Friends
 Eliko New Programming Level: None Last Seen: 19/4/2020	18/4/2020	Russian Federation	Friend request sent
 Eliko Nadu Programming Level: Beginner Last Seen: 12/6/2020	27/5/2020	Russian Federation	+
 Mari Garber Programming Level: Intermediate Last Seen: 18/6/2020	17/6/2020	Australia	+

Each search result contains the details of the user that found and the status of their friendship with the user. If the user himself has searched, he will not be able to add himself to friends. If any search result has a red + sign, the user searched for and the user that found are not friends. In other cases, users can be friends or one of them has already requested a membership.

FAQ Page

At the navigation bar the user can click on the FAQ link and get to the FAQ page. At the top of the page he will find information about the project itself, followed by a list of frequently asked questions that we have decided will help the user. If the user did not find an answer to his question, he is welcome to contact the developers on the contact page.

The screenshot shows the Codewars FAQ page. The navigation bar is identical to the previous screenshot, but the greeting is 'Hello, Maria!'. The main content area has a title 'About' and a paragraph describing Codewars as a learning environment for code competitions. Below this is a paragraph about the website's security and a paragraph about the tool's development by students from Sami Shamoon College. The FAQ section is titled 'FAQ' and contains a list of questions with expandable/collapsible arrows:

- Who can play the game?
- How does it all work?
- What sort of code will I write during the war?
- How will my solutions be assessed?
- Do I need to install any software?
- Can I use my own IDE?

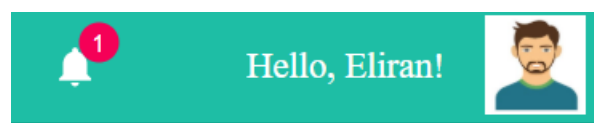
Friends

The user can create a network of friends by adding other users to the friends list to keep track of their progress. He can add a user to friends by searching his name in the search bar at the navigation bar and clicking on **+** button next to his name.

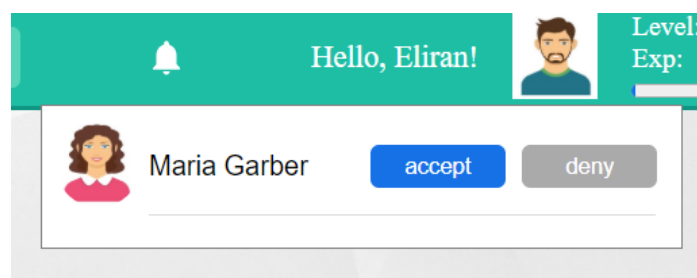
Another option to add a user to friends is by entering into his profile page and clicking "add to friends" which is below his details.



Once the user clicks on the button, a friends request will be sent to the other user and he will be notified in real time.



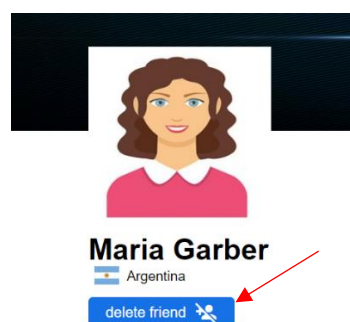
As soon as he presses on it, the alert box will open and he will see the friends request. He will be able to choose whether to deny or accept the request and be able to enter the profile page of the user who sent the request by clicking on his profile picture.



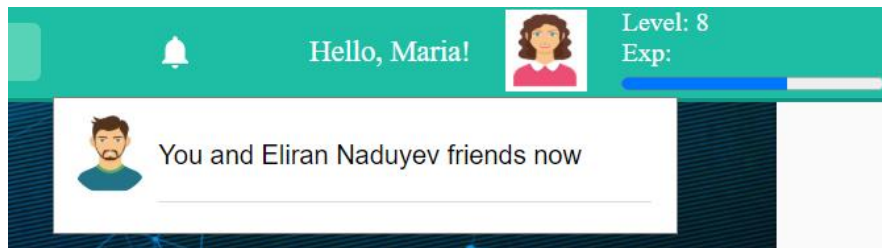
If you choose to enter the profile page, he will see the following box through which he can also accept the request that was sent to him



If you choose to accept the friends request, the request will disappear from the notifications box and the profile page. The user can delete the friend by clicking on "delete friend" (he can also delete a friend from his profile page in the Social tab).



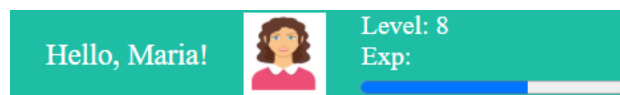
At the same time, the user who sent the request will receive a real-time alert that the request he sent has been accepted. He will be able to click on the profile photo of the user who approved the friendship request and transfer to his profile page.



In addition, if a user sent friends request and it has not yet been approved, he can cancel it at any time by clicking on cancel request that located at the user's profile page to which the request was sent.



User Level



On the right side of the navigation bar you can see the user level and the Exp. To increase levels the user must accumulate Exp. When the Exp reaches the amount of points needed to increase the stage, the level will rise and the Exp will reset.

Exp can be accumulated already during the level test and then during the battles, the more the user participates in wars the amount of his Exp increases and he increases levels.