

# SWE 573 Report

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# Honor Code

Related to the submission of all the project deliverables for the Swe573 2022 Fall semester project reported in this report, I, Miray İyidoğan, declare that:

- I am a student in the Software Engineering MS program at Bogazici University and am registered for Swe573 course during the 2022 Fall semester.
- All the material that I am submitting related to my project (including but not limited to the project repository, the final project report, and supplementary documents) have been exclusively prepared by myself.
- I have prepared this material individually without the assistance of anyone else with the exception of permitted peer assistance which I have explicitly disclosed in this report.

Miray İyidoğan

# Project Repository

**Link:** <http://18.184.51.118>

**Git Repository:** [https://github.com/mirayiyidogan/swe\\_573](https://github.com/mirayiyidogan/swe_573)

**Git Wiki:** [https://github.com/mirayiyidogan/swe\\_573/wiki](https://github.com/mirayiyidogan/swe_573/wiki)

## Test User

The user ids and other information I need when testing your deployed system.

Gotya App The user:

- username: suzan.uskudarli
- password: test\_1234

Superuser for deployed project:

- username: gotya\_sp
- password: -gotya-85--

## 3rd Party Softwares

A declaration that all work in the project you are submitting is performed by yourself, and the declaration of any 3rd party software you used to abide by the licenses.

## Languages

- HTML
- Python
- CSS

## Frameworks and other technologies

- Docker
- Django
- AWS
- Bootstrap
- MySQL
- PostgreSQL
- Sqlite
- Git
- Github
- Sentry (optional)

# Project details

## Overview

Hi! My name is Miray and I am a SWE-573 student. It is a project report that I developed under the "Software Development Practices" course, on a kind of content saving web application called "Gotya".

The name Gotya is actually a kind of abbreviation for "got ya", meaning "I got you". In fact, it is a web application where we can save the content we see on more than one platform and create new content. It gives us the opportunity to add the photos and comments we want on the content we have recorded, to name it with the title we want, even to comment and edit it.

## Software Requirements Specification

### Elicitation Questions

- What will be the main purpose of this Web Application?
- Is there any similar project currently?
- What will be the main differences among similar applications?
- On which platforms will this project be used?
- How should the app save the information?
- How long will the content be kept on the site?
- Will the content have an expiration date?
- What to do about inaccessible content?
- What information will be given about the content?
- How will we display the contents?
- Will we be able to filter the recorded content?
- How will we label the contents?
- Will the user be able to create their own tags?
- If the url is private or needs a token to open, what should we do?
- Will we create another library/collection from the saved content?
- Will the recorded contents be erasable?
- Will we be able to edit the recorded content?
- How do we catch the same content?
- Will we delete the same/similar content automatically, in consultation with the user?
- May we ask to take personal notes on their content?
- Will we have any other purpose other than viewing the recorded content?
- Will we support any direct integration with 3rd party software?

### The User Stories

- As a user, I want to add content to my personal area so that I can be able to reach my contents which I have saved intentionally.

- As a user, I want to register to the system so that I can manage my contents.
- As a user, I want to tag my contents so that I can easily find the contents.
- As a user, I want to delete the saved contents so that I can get rid of unwanted contents.
- As a user, I want to filter my content so that I can find specific content.
- As a user, I want to search for content so that I can find the content that I wanted.
- As a user, I want to create a collection so that I can categorize the contents as I wanted.
- As a user, I want to share my content collection publicly so that I can share my personal interests with others.
- As a user, I want to bring my contents to one place so that I can easily find what I want.
- As a user, I want to see only unique contents so that I do not get lost among the contents.
- As a user, I want to see recent contents added at the top of the page so that I can go back to the past.

## Scenarios

### Scenario 1

**Persona name:** Jamie Dorn

**Job:** Student

**Age:** 21

**Hobbies:** Likes to watch popular content!

**Back Story:** Jamie is an Erasmus student at Boğaziçi University. He doesn't like to talk to people too much, but he uses social media frequently. He mostly watches funny cat videos and informational content. It's always a pleasure to watch the cat videos he recorded when he was unhappy.

Jamie complains a lot about constantly losing great content he finds on social media or browsing the web. For this reason, he decides to use the application called "GotYa" upon a suggestion. Jamie is scrolling through social media while trying to get things done on his computer at the airport. He sees a training video of a content producer he loves, but his plane is about to take off. She copies the URL of the relevant tutorial and logs into the application. Pastes the relevant address in the "URL" input field on the homepage of the application, selects the appropriate tags, or leaves a personal note in the note field related to the content. Jamie will no longer lose the training video address when he gets off the plane and will be able to view this content easily within the application until he wants.

### Scenario 2

**Persona name:** Ariel Smith

**Job:** Influencer

**Age:** 28

**Hobbies:** Likes to discover new places!

**Back Story:** Ariel is a social media content creator. Since his father was an ambassador, he had the chance to be in different parts of the world. He also has an interest in

these different cultures, as he has been extremely involved with different food cultures since he was little. For this reason, he built his career on this path and studied gastronomy, but realized that he was not as successful in cooking as food. But he decided to evaluate this passion in a different way and started to produce content on different dishes and culture.

Ariel produces social media content about food. For this reason, she records all the content related to the food that comes in front of her at social media and attracts her attention. She wants to create a collection called "Breakfasts that must be visited in Kadıköy at once" from the previously recorded content in the application and take notes about the contents of this collection. For this reason, by entering the "My Contents" menu, it creates a collection of content that it has filtered by searching for the relevant tags from all the content it has recorded so far. Labels include "kadıköy", "breakfast", "eggs", "pancakes" and so on. she writes tags. It creates the collection related to the contents from the filter.

### Scenario 3

**Persona name:** Ömer Orhan

**Job:** Engineer

**Age:** 33

**Hobbies:** Ankara, History, following the news

**Back Story:** Ömer is normally a software consultant. He likes to follow the agenda actively in his daily life. He especially enjoys catching instant news and being informed. He has a keen interest in history and politics. He also loves his girlfriend very much.

Ömer only wants to view the content that he has not read or checked because he has saved too much content in the application. For this reason, he wants to delete the content he has recorded that does not interest him, and to prevent it from appearing again by marking the ones he has read. For this reason, it deletes the content it does not want, marks what it reads as read, and prevents these contents from appearing in front of it unless it is selected in the filters. In the application, the ones that have been deleted/removed automatically after a certain period of time can also be viewed with the information received during the first registration. After all, he may want to search for the content elsewhere, so even if he cannot view the content, he may have knowledge of what it is about.

### Requirements

- The user should be able login with its username or email and password.
- The user should be able to register to the system with its name, surname, The username and password.
- The user should be able to reset its password.
- The user should be able to change its user information.
- The user should be able to change its profile picture.
- The user should be able to add a profile picture.
- The user should be able to change its registered mail address.
- The user should be able to save the contents.
- The user should be able to add tags when saving a content.
- The user should be able to add notes while saving a content.

- The user should be able to name the content.
- The user should be able to see the saved contents.
- The user should be able to delete saved contents.
- The user should be able to sort the contents.
- The user should be able to filter the contents with tags, date, keyword, content's platform.
- The user should be able to see public content without logging in.
- The user should be able to save contents with their URLs.
- The user should be able to comment on the contents.
- The user should be able to edit saved contents.
- The user should be able to search contents.
- The user should be able to delete contents.
- The user should be able to delete comments.
- The user should edit their comments.
- The user should be able to publicly share its contents.
- The user should be able to save its contents privately.
- The user should be able to tag its content.
- The user should be able to remove the tag from its content.
- The system should have a web application.
- The system should keep passwords encrypted in the database.
- The system should be written with Python and Django Framework.
- The system should use PostgreSQL.
- The system should be dockerize.

## Design (Software & Mockups)

Mockups for Web Application!

- Sign-in

The opening page where user can log-in

A Web Page

https://www.gotya.com/sign-in

Welcome to GotYa !

E-mail address or username

Enter a password

[Forgot your password?](#)

[I am new around here](#)

Sign in

- Sign-up

To sign-up , user needs to fulfill the needed info and join the application

A Web Page

https://www.gotya.com/sign-up

Welcome to GotYa !

Please enter a username

Please enter valid e-mail address

Enter a password

Re-enter the password

Sign up

- Create a content

A page that can be use to create and save a content in the application

A Web Page

https://www.gotya.com/create-a-content

Welcome back !

Create a content My Space Timeline Discover

Please enter the content UML

https://twitter.com/QSolid\_DE/status/1583058333560250368

Name your content (optional)

Notes (optional)

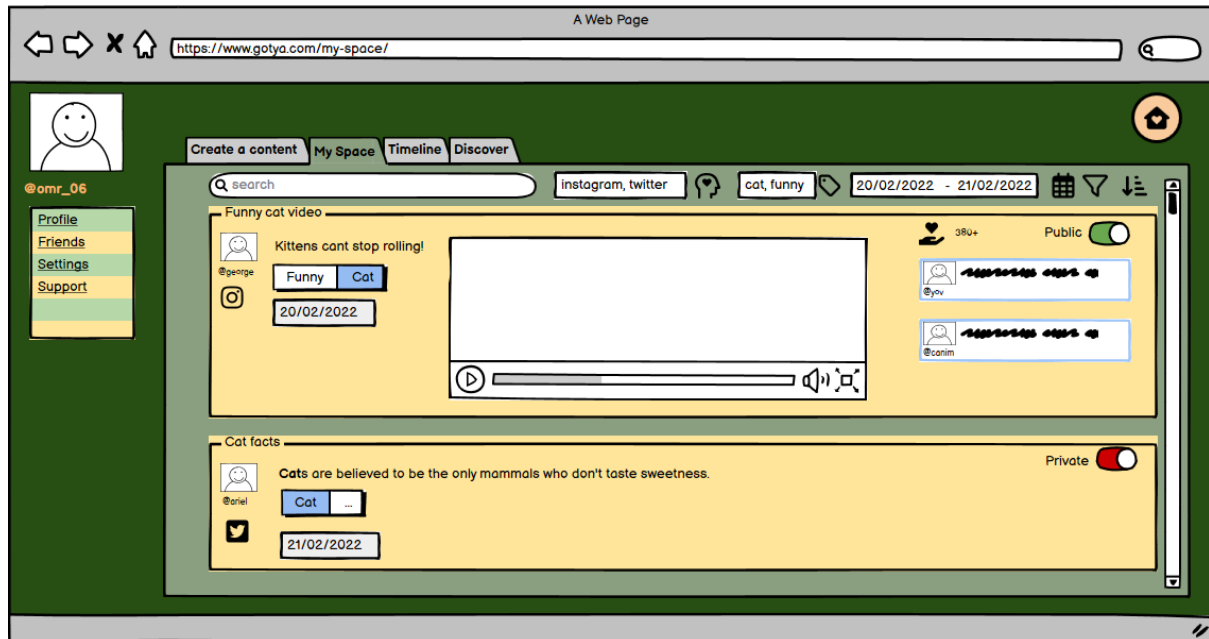
Tags (optional) Technology Public/Private

Got ya!

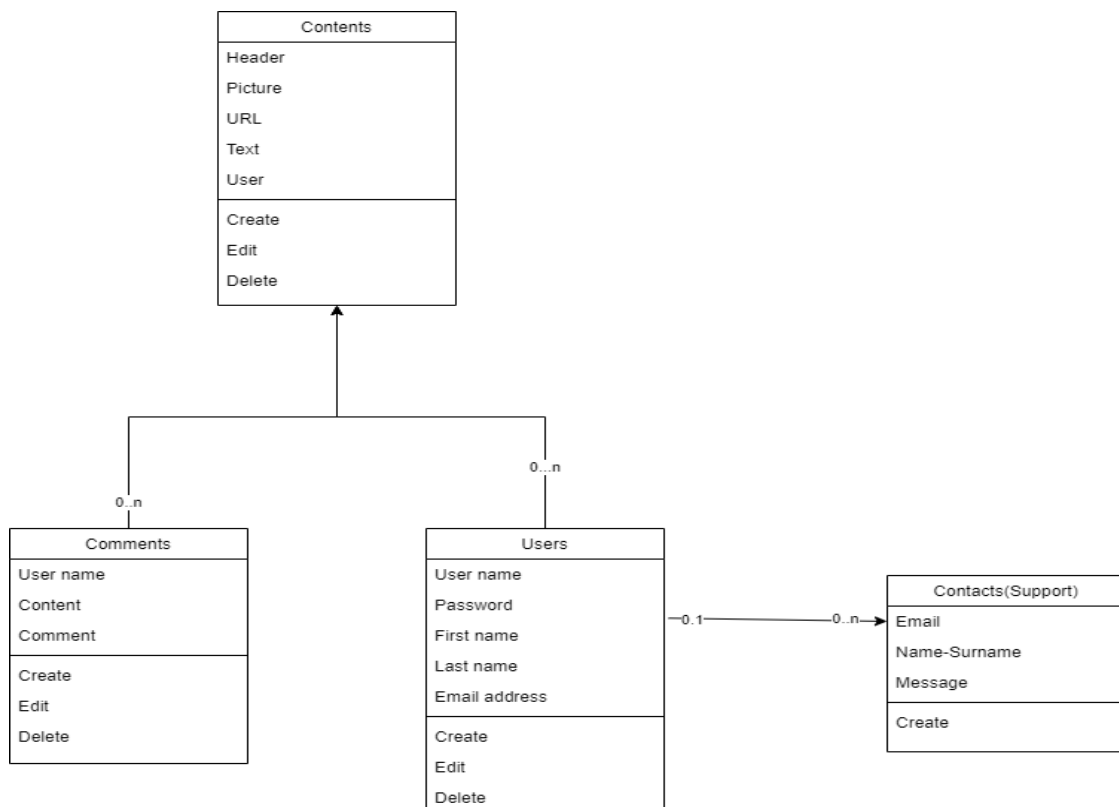


- My space:

A page that will be used to show contents which have been created .



## UML diagrams and images



## Status of your project

The status of each requirement (completed is ticked, not completed where completed means it is documented, tested and deployed not ticked)

- ☒ The user should be able login with its username or email and password.
- ☒ The user should be able to register to the system with its name, surname, The username and password.
- ☒ The user should be able to reset its password.
- ☒ The user should be able to change its user information.
- ☒ The user should be able to change its profile picture.
- ☒ The user should be able to add a profile picture.
- ☒ The user should be able to change its registered mail address.
- ☒ The user should be able to save the contents.
- ☐ The user should be able to add tags when saving a content.
- ☒ The user should be able to add notes while saving a content.
- ☒ The user should be able to name the content.
- ☒ The user should be able to see the saved contents.
- ☒ The user should be able to delete saved contents.
- ☒ The user should be able to sort the contents.
- ☐ The user should be able to filter the contents with tags, date, keyword, content's platform.
- ☒ The user should be able to see public content without logging in.
- ☒ The user should be able to save contents with their URLs.
- ☒ The user should be able to comment on the contents.
- ☒ The user should be able to edit saved contents.
- ☒ The user should be able to search contents.
- ☒ The user should be able to delete contents.
- ☒ The user should be able to delete comments.
- ☒ The user should edit their comments.
- ☒ The user should be able to publicly share its contents.
- ☐ The user should be able to save its contents privately.
- ☐ The user should be able to tag its content.
- ☐ The user should be able to remove the tag from its content.
- ☐ The user should add friends.
- ☒ The system should have a web application.
- ☒ The system should keep passwords encrypted in the database.
- ☒ The system should be written with Python and Django Framework.
- ☒ The system should use PostgreSQL.
- ☒ The system should be dockerize.

## Status of Deployment

- Deployed to AWS: <http://18.184.51.118>
- Dockerized

## System manual

What are the requirements to run this system and installation instructions (docker).

1. To boot your project in Docker, first make sure Docker Desktop is installed on the computer.
2. After that clone the repo in your local with  
*[https://github.com/mirayiyidogan/swe\\_573.git](https://github.com/mirayiyidogan/swe_573.git)*
3. Open the project in a code editor and navigate to the relevant directory where the code is located.
  - `cd swe_573`
4. Since we ignore couple of files under .gitignore for security reasons, you need to create files named below:
  - Create a directory name of “logs” in the same directory of “gotya”. Under “logs” directory, create “.gitkeep” and “content\_read.log” files.
5. Set a password for yourself and name your own DB.
6. Now, your code need to know what's your DB name and what's its password. The files that you are looking for:
  - docker-compose.yml
  - development.py (under configs/settings, in order to work with development settings, you may need to change production to development under configs/settings/base.py  

```
os.environ.setdefault('DJANGO_SETTINGS_MODULE',  
'config.settings.production'))
```

Because after so many tears, I have separated my development's and production's DBs also :)

```
psycopg2==2.9.5  
psycopg2-binary==2.9.5  
pymysql==1.0.2  
cryptography==38.0.4  
cffi==1.15.1  
pycparser==2.21
```

7. Create your own .env file in BASE\_DIR. To generate a new secret key, you may use <https://djecrety.ir/>.

```
MY_SECRET_KEY=GENERATE YOUR OWN SECRET KEY, I DO NOT SHARE  
MINE AS MY INSTRUCTOR TOLD ME 😊  
SENTRY_DSN=YOUR SENTRY DSN (OPTIONAL, IF YOU DO NOT WANT ,  
YOU MAY COMMENT THIS LINE)  
MY_PASSWORD=YOUR DB PASSWORD
```

## 8. Now it's time to migrate

- `python manage.py makemigrations`
- `python manage.py migrate`
- `python manage.py runserver`

*(If you will face any issue, you may use Chat GPT, it was a hero for me.)*

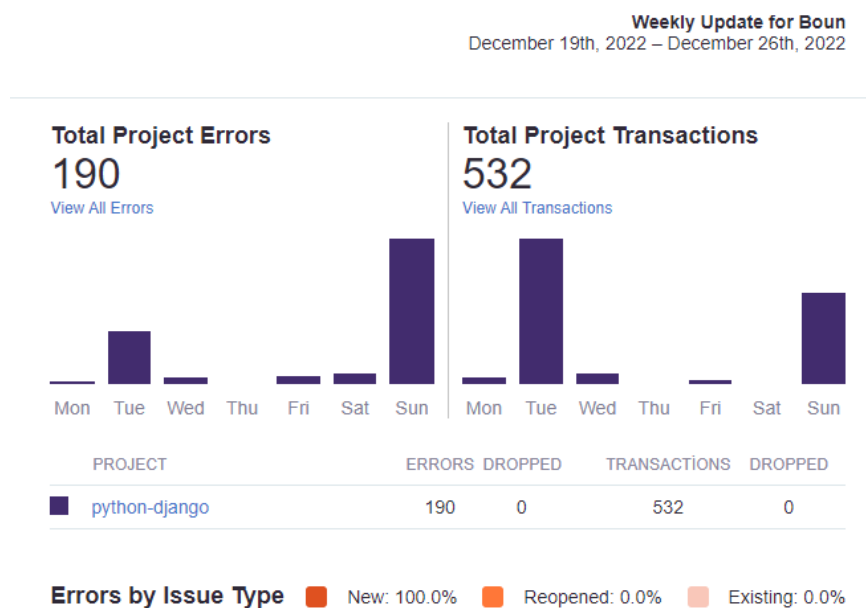
## 9. Final step, run with docker

- `docker-compose up --build --force-recreate`

**Hint:** In order to run your project locally, you may need to change the port “80:8000” to “8000:8000” inside the “docker-compose.yml” file before docker-compose up .

- ★ Additionally I have created a log file just to log simple logs such as
- ★ Also I have implemented sentry to keep error logs, you need to create Sentry DSN and enter inside the env. file.

([https://sentry.io/organizations/boun/performance/?project=4504357362860032&referrer=weekly\\_email\\_view\\_all](https://sentry.io/organizations/boun/performance/?project=4504357362860032&referrer=weekly_email_view_all))




## User manual

### Authentication

#### 1. Registration (<http://18.184.51.118/account/login>)

- In order to login and create/comment the contents, first you need to sign up the system with the link down below the page name of “Register” as shown below.


Gotya  Search



[Best place to visit in Ankara](#) by [omrorhn](#)

Posted at 6 hours, 2 minutes

[Link](#)



[Watch Wednesday](#) by [miray.iyidogan](#)

Addams Family (my favirote movie by the way) has a new series, plus its producer is Tim Burton!

Posted at 6 hours, 4 minutes

[Link](#)

[Previous](#) [2](#) [Next](#)

All rights reserved. [Login](#) | [Register](#)

- After that, you will see a “Registration Page” in order to register the system with required information. You need to provide each field in order to complete the registration.

Gotya  Search

Username\*

Required: 150 characters or fewer. Letters, digits and @/./+/-/\_ only.

Email address

First name

Last name

Password\*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation\*

Enter the same password as before, for verification.

[Register](#)

All rights reserved. [Login](#) | [Register](#)

After registering, the system will automatically authenticate your user and log in.

## 2. Login (<http://18.184.51.118/account/login>)

- You may now log in anytime with your username and password to the system. In order to do that, you can use the link “Login” nearby the “Register” button down below the page if there is no logged in user already.



All rights reserved. [Login](#) | [Register](#)

- You can use your credentials to log in.

Gotya

Username\*

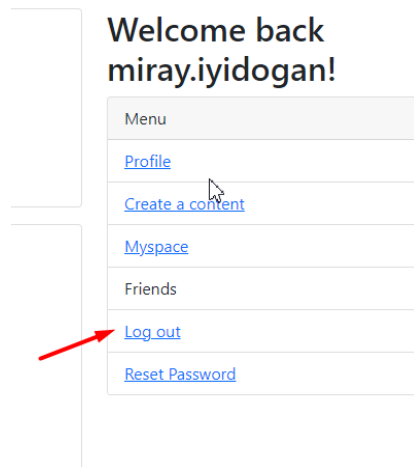
Password\*

All rights reserved. [Login](#) | [Register](#)

- Now, you are in 😊

### 3. Logout (<http://18.184.51.118/account/logout>)

- If you want to change your user or log out, you may use the “Logout” button inside the sidebar.



### Create a content (<http://18.184.51.118/create-content>)

- If you want to create a new content, you should click the button. On the screen that opens, header information about the content is entered in the <Header> field. Details about the content can be written in the <Text> field. If you want to share a photo, the <Dosya seç> button should be clicked. In the URL field, the URL information of the relevant content is entered and is clicked on the <Gotya> button.

Gotya
Search
Search

Header\*

Text

Styles
Normal
B
I
U
S

body p

Picture\*

Dosya Seç
Dosya seçilmedi

Url

Gotya

Welcome back omrorhn!

Menu

Profile

Create a content

Myspace

Friends

Log out

Reset Password

## Myspace (<http://18.184.51.118/myspace>)

- Every user can see their own posts on the Myspace screen and can take necessary actions regarding these contents.

Gotya
Search
Search

id	Header	Updated Date	Actions
4	Tospik	2 days, 4 hours	Edit Delete
3	Best place to visit in Ankara	2 days, 4 hours	Edit Delete

Previous
1

Welcome back omrorhn!

Menu

Profile

Create a content

Myspace

Friends

Log out

Reset Password

All rights reserved.

- You can edit or delete contents by using the <Edit> button. If you want to delete a content, you can use the <Delete> button.

Gotya
Search
Search

Header\*

Text

Styles
Format
B
I
U
S

Best cat ever!

Picture\*

Currently: content\_pics/WhatsApp\_Image\_2022-12-27\_at\_19.05.10.jpeg

Change:
Dosya Seç
Dosya seçilmedi

Url

Your got , Up to Date!

Welcome back omrorhn!

Menu

Profile

Create a content

Myspace

Friends

Log out

Reset Password

Reset password (<http://18.184.51.118/account/reset-password>)

- You can click on the <Reset password> link when you want to change the password information. You can enter the new password information with the old password information on the screen that opens and click the <Reset password> button.

The image shows two screenshots of the Gotya website. The top screenshot displays a user profile for 'miray.iyidogan!' with a menu containing links for Profile, Create a content, Myspace, Friends, Log out, and Reset Password. The bottom screenshot shows the password reset form with fields for Old password, New password, and New password confirmation. A red arrow points from the 'Reset Password' button in the bottom right to the 'Reset Password' link in the menu.

Gotya Search Search

**New Game: Bankrun** by [hyurek](#)  
Demo for new Spinmatic Crash game  
Posted at 6 hours, 19 minutes  
[Link](#)

**Tospik** by [omrorhn](#)  
Best cat ever!  
Posted at 6 hours, 22 minutes

Previous 1 Next

Old password\*  
New password\*  
New password confirmation\*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

[Reset Password](#)

All rights reserved.

Welcome back **omrorhn!**

Menu


- [Profile](#)
- [Create a content](#)
- [Myspace](#)
- [Friends](#)
- [Log out](#)
- [Reset Password](#)

## Search Bar


- You can use the <Search bar> field to reach the content you want. In this field, you can write different words about the content you want to search and filter the content by clicking the <Search> button. This area makes filtering by checking the title and content texts of the content.



Gotya



[New Game: Bankrun](#) by [hyurek](#)  
Demo for new Spinmatic Crash game  
Posted at 2 days, 8 hours  
[Link](#)



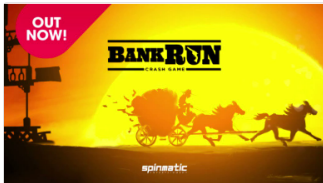
[Tospik](#) by [omrorhn](#)  
Best cat ever!  
Posted at 2 days, 8 hours

Welcome back omrorhn!

Menu
<a href="#">Profile</a>
<a href="#">Create a content</a>
<a href="#">Myspace</a>
Friends
<a href="#">Log out</a>
<a href="#">Reset Password</a>

## Comment

- If you want to comment on a content, first click on the title of the relevant content. After writing a comment in the comment field, you can save your comment by clicking the <Comment> button.

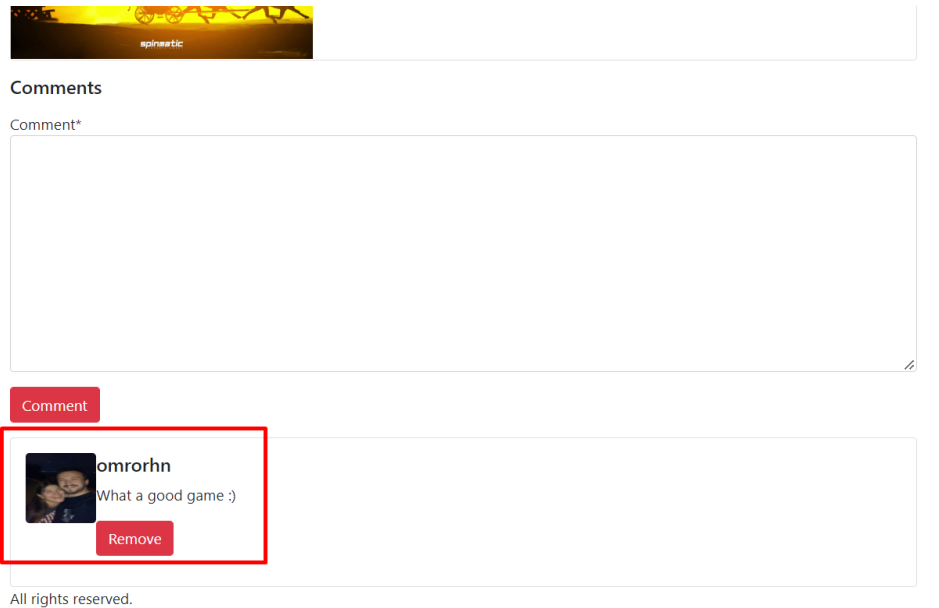


**New Game: Bankrun** by [hyurek](#)  
Demo for new Spinmatic Crash game  
Posted at 2 days, 8 hours

Comments

Comment\*

- After you save your comment, you can see it under the relevant content. If you want to delete your comment, you can click the <Remove> button.



Comments

Comment\*

Comment

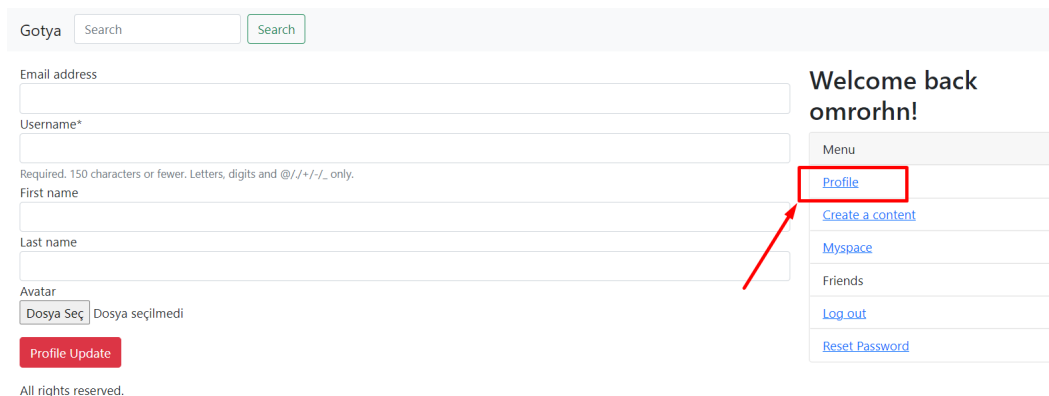
omrorhn  
What a good game :)

Remove

All rights reserved.

## Update Profile (<http://18.184.51.118/account/profile-update>)

- If you want to make changes to your profile information, you can update your information on this page. You can change your e-mail address, username, name and surname and add an avatar for your profile. After completing the changes, you can click the <Profile update> button to complete the update.



Gotya Search Search

Email address

Username\*

Required. 150 characters or fewer. Letters, digits and @/./+/-/\_ only.

First name

Last name

Avatar

Dosya Seç Dosya seçilmedi

Profile Update

All rights reserved.

Welcome back omrorhn!

Menu

Profile

Create a content

Myspace

Friends

Log out

Reset Password






## Test results (unit & user)

- Unit tests cases about authentication
  - True Username and True Password : T
  - Wrong Username and True Password : F
  - True Username and False Password : F

## Demo

- Demo link of the project:  
<https://drive.google.com/drive/folders/1DM9HUX2TA3icUanl6TI1ZsE3-Pd1wqVF?usp=sharing>

## References

- Stackoverflow:
  - There are probably hundreds of pages that I cannot write down all in here unfortunately.
- Youtube:
  -  How to Deploy a Docker App to AWS using Elastic Container Service (E...)
  -  How to connect Django to MySQL in a Docker Container
  -  Django Admin Site Series Introduction - Part 1
  -  Deploying Django with Docker Compose
  -  Create new HTML files in Visual Studio Code
- Udemy:
  - <https://www.udemy.com/course/django-3-profesyonel-web-programlama/>
- Chat GPT
  - Help me to find reason of the bugs.
- MySQL
- Django
- Bootstrap
  - <https://getbootstrap.com/docs/5.3/getting-started/introduction/>