

# **FINAL ASSIGNMENT DOCUMENTATION WEB PROGRAMMING**

## **ConnectFriend – Job Friends**



### **Made by:**

Name : Ivan Adrian

NIM : 2602076323

Class : LC01

**Link Github:** <https://github.com/ivanadriannn/FinalASGWebProg-2602076323-Ivan-Adrian>

**COMPUTER SCIENCE  
BINA NUSANTARA UNIVERSITY JAKARTA  
2025**

## I. Backend Logic

### Models

#### 1. Avatar Model:

The Avatar model represents the customizable avatar images that users can choose, purchase, and set as their profile pictures in the application.

#### 2. FieldOfWork Model:

The FieldOfWork model stores the various job sectors or professions that users can associate with their profile, helping them find connections in the same field.

#### 3. Friend Model:

The Friend model tracks the relationships between users by storing the pairing of user IDs to their respective friends, enabling them to become mutual connections within the app.

#### 4. Message Model:

The Message model handles the storage of text messages exchanged between users, supporting the communication feature in the social network.

#### 5. Notification Model:

The Notification model keeps track of notifications sent to users, such as friend requests or messages, and links them to both the receiving user and the sender.

#### 6. Profession Model:

The Profession model represents a user's specified profession, typically for those searching for job-related connections, helping with filtering and linking users by their professional background.

#### 7. Transaction Model:

The Transaction model records payment-related transactions, such as registration or purchases made by the users, managing and tracking the financial aspect of the platform.

#### 8. User Model:

The User model represents the authenticated users of the application, containing their personal data, relationships, fields, and ensuring secure authentication via Laravel's built-in functionality.

#### 9. UserField Model:

The UserField model connects users to their selected fields of work, allowing for multiple areas of expertise or job interests for a given user to be stored and associated.

### Relationship

#### 1. professions table and users table

- Relationship: *One-to-Many*
- Explanation: The users table has a profession\_id foreign key referring to professions.id. This indicates that each user has one profession, but a single profession can be held by many users.

#### 2. users table and user\_fields table

- Relationship: *One-to-Many* (from Users to UserFields)
- Explanation: The user\_fields table has a user\_id foreign key referring to users.id and a field\_of\_work\_id foreign key referring to field\_of\_works.id.

This implies that a user can have many work fields through the `user_fields` table, and each work field (`field_of_works`) can belong to many users.

### **3. users table and friends table**

- Relationship: *Many-to-Many*
- Explanation: The friends table acts as a junction table with two foreign keys to the users table: `user_id` and `friend_id`. This establishes that users can be friends with one another, and this relationship can exist between multiple user pairs (many-to-many). Additionally, `sender_id` indicates who sent the friend request.

### **4. users table and messages table**

- Relationship: *One-to-Many*
- Explanation: The messages table contains two foreign key columns, `sender_id` and `receiver_id`, which refer to `users.id`. This means that each message is sent by one user (sender) to one other user (receiver), thus forming a one-to-many relationship (many-to-one from the perspective of both the sender and receiver).

### **5. users table and notifications table**

- Relationship: *One-to-Many*
- Explanation: The notifications table has both a `user_id` and `sender_id` foreign key columns, both pointing to `users.id`. This implies that each notification is associated with one recipient user (`user_id`) and one sender user (`sender_id`), meaning that each user can receive multiple notifications.

### **6. users table and transactions table**

- Relationship: *One-to-Many*
- Explanation: The transactions table contains a `user_id` foreign key referring to `users.id` and an `avatar_id` foreign key referring to `avatars.id`. This means that each user can have many transactions related to the avatars they purchase, resulting in a one-to-many relationship from users to transactions.

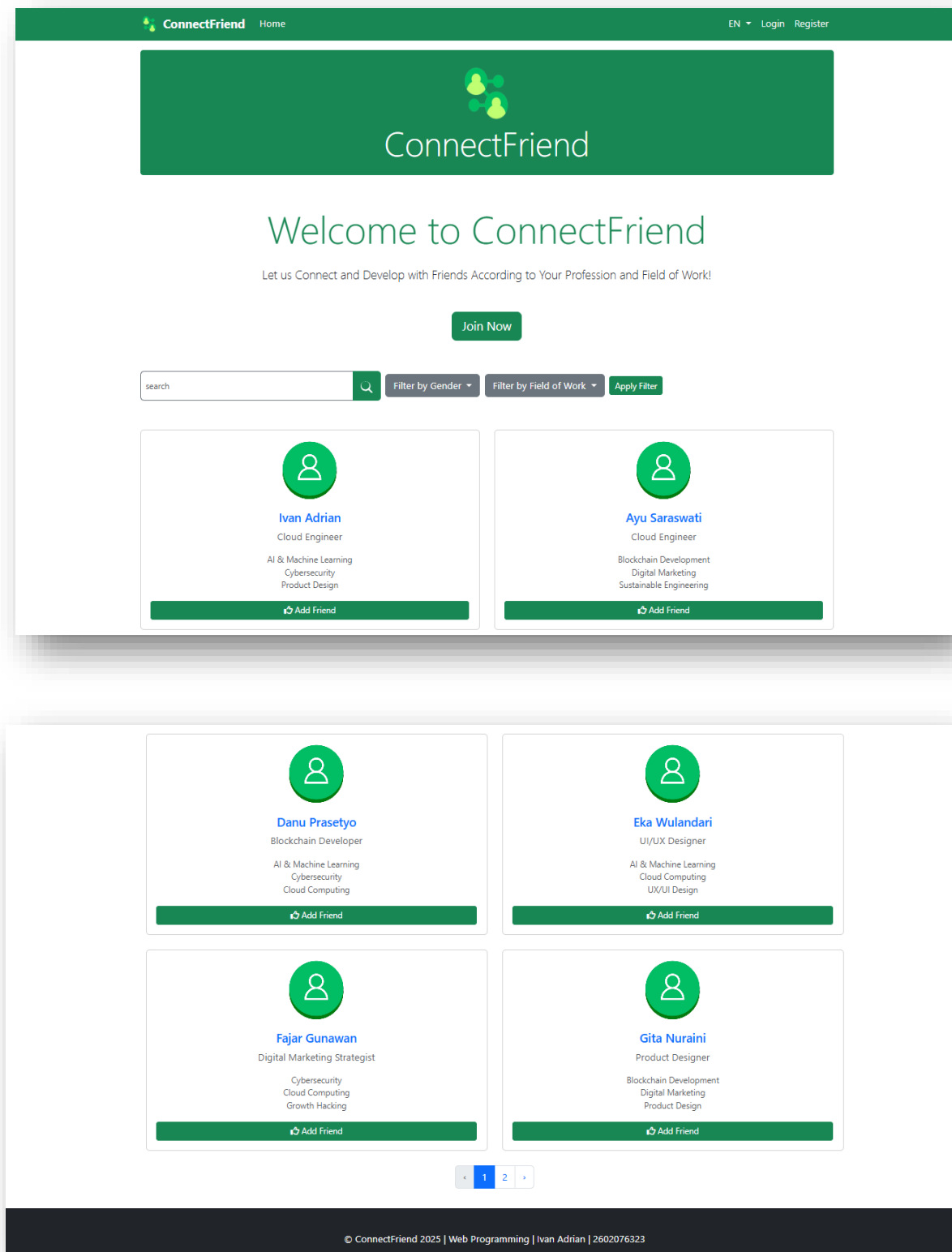
### **7. avatars table and transactions table**

- Relationship: *One-to-Many*
- Explanation: The transactions table also contains an `avatar_id` foreign key referring to `avatars.id`. This suggests that each avatar can be purchased multiple times by different users, creating a one-to-many relationship from avatars to transactions.

### **8. avatars table and users table**

- Relationship: Indirect connection through transactions table
- Explanation: There is no direct relationship between avatars and users without involving the transactions table. The relationship between a user and an avatar is mediated through a purchase recorded in the transactions table.

## Initial Home Page:



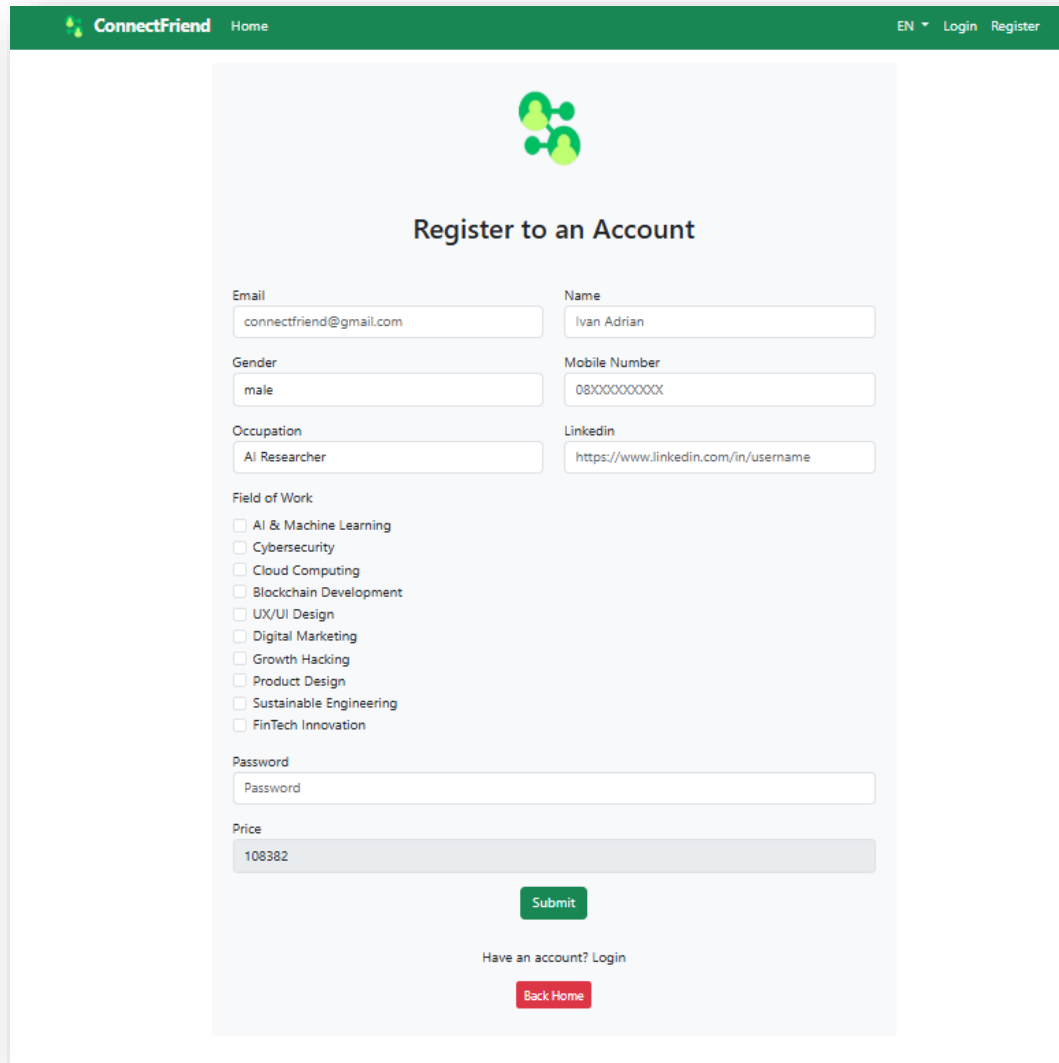
This page is the first display which is the welcome page when the user uses the website. Here the user's access is still limited because as a guest role he uses middleware with a combination of auth middleware and sessions. As guests, they can only log in, register, and also view the list of

available users and search and filter users with the same profession or field of work. If the user clicks one of the lists of users, they will go directly to the login page.

### Main Features:

#### 1. [LO1,LO2,LO3 & LO4, 20 points] User Authentication

### Register



The screenshot shows a web form titled "Register to an Account" on the ConnectFriend website. The form is set against a light gray background with a green header bar. The header bar contains the "ConnectFriend" logo, a "Home" link, and language/interaction options: "EN", "Login", and "Register". The form itself is centered and contains the following fields and sections:

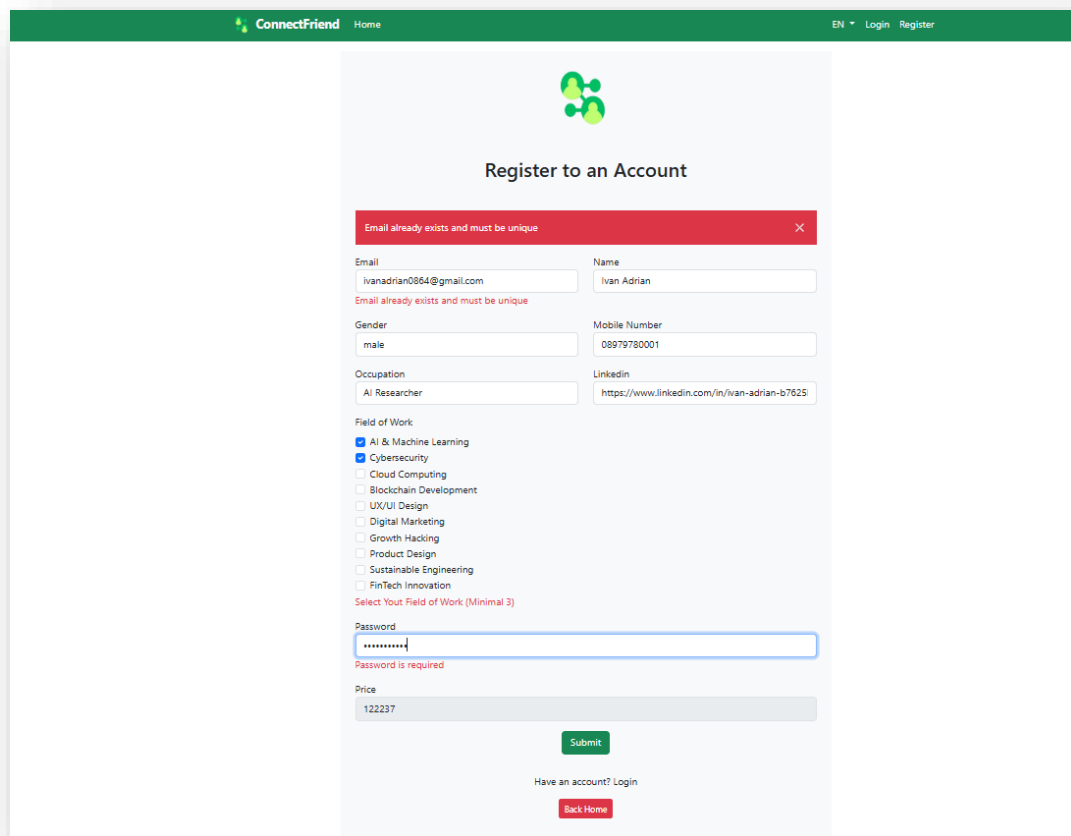
- Email:** A text input field containing "connectfriend@gmail.com".
- Name:** A text input field containing "Ivan Adrian".
- Gender:** A dropdown menu with "male" selected.
- Mobile Number:** A text input field containing "08XXXXXXXX".
- Occupation:** A text input field containing "AI Researcher".
- Linkedin:** A text input field containing "https://www.linkedin.com/in/username".
- Field of Work:** A list of checkboxes for various fields: AI & Machine Learning, Cybersecurity, Cloud Computing, Blockchain Development, UX/UI Design, Digital Marketing, Growth Hacking, Product Design, Sustainable Engineering, and FinTech Innovation. All are currently unchecked.
- Password:** A text input field containing "Password".
- Price:** A text input field containing "108382".
- Submit:** A green button labeled "Submit".
- Footer:** Below the form, there is a link "Have an account? Login" and a red button labeled "Back Home".

On this page, users can register an account by filling in several required things such as

- Email
- Name
- Gender
- Mobile Number
- Field of Work
- LinkedIn
- Password

Each existing field also has its own validation attached in the image below.

## Register Validation



The screenshot shows the 'Register to an Account' page on the ConnectFriend website. The page has a green header with the logo and navigation links. A red error message at the top states 'Email already exists and must be unique'. The registration form includes fields for Email, Name, Gender, Mobile Number, Occupation, and LinkedIn. The 'Field of Work' section has several checkboxes, with 'AI & Machine Learning' and 'Cybersecurity' selected. The Password field is highlighted with a red error message 'Password is required'. The Price field shows '122237'. A green 'Submit' button is at the bottom, along with links for 'Have an account? Login' and 'Back Home'.

ConnectFriend Home EN Login Register

### Register to an Account

Email already exists and must be unique

Email: ivanadrian0864@gmail.com Name: Ivan Adrian

Gender: male Mobile Number: 08979780001

Occupation: AI Researcher LinkedIn: https://www.linkedin.com/in/ivan-adrian-b7625/

Field of Work:

- ☒ AI & Machine Learning
- ☒ Cybersecurity
- ☐ Cloud Computing
- ☐ Blockchain Development
- ☐ UX/UI Design
- ☐ Digital Marketing
- ☐ Growth Hacking
- ☐ Product Design
- ☐ Sustainable Engineering
- ☐ FinTech Innovation

Select Your Field of Work (Minimal 3)

Password: Password is required

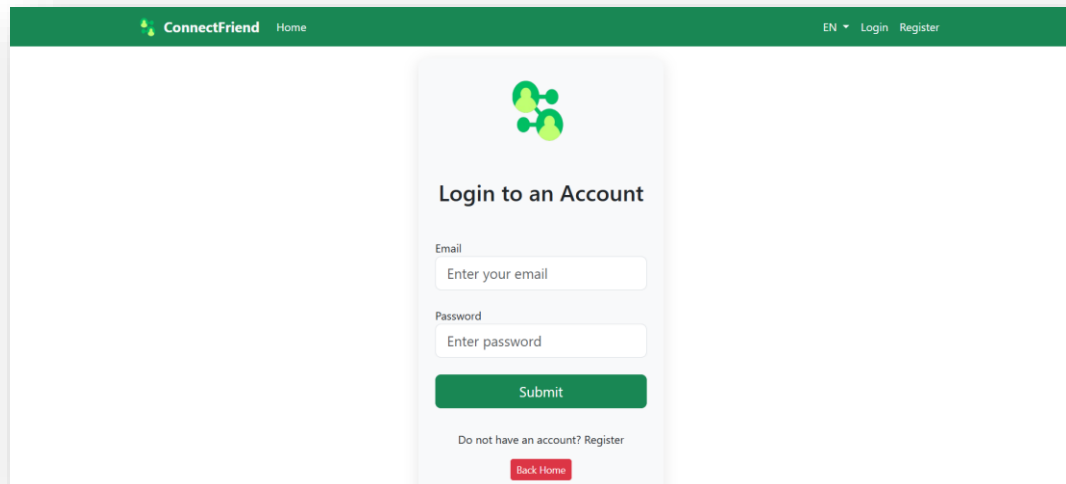
Price: 122237

Submit

Have an account? Login

Back Home

## Login



The screenshot shows the 'Login to an Account' page on the ConnectFriend website. The page has a green header with the logo and navigation links. The login form includes fields for Email and Password. A green 'Submit' button is at the bottom. Below the button, there is a link for 'Do not have an account? Register' and a 'Back Home' button.

ConnectFriend Home EN Login Register

### Login to an Account

Email: Enter your email

Password: Enter password

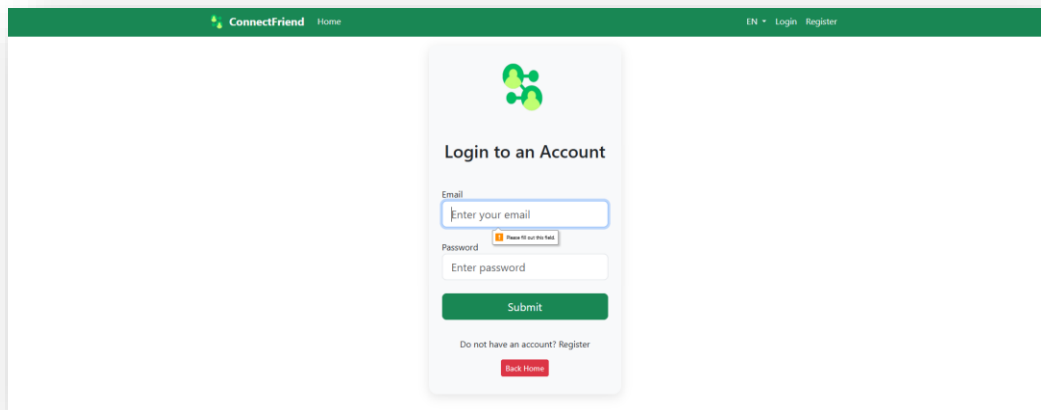
Submit

Do not have an account? Register

Back Home

When the user has finished the registration, they can log in using their email and password. Login also has validation when the fields have not been filled in, the data does not match, or when the login fails.

## Login Validation



The screenshot shows the 'Login to an Account' form on the ConnectFriend website. The form is centered on a white background with a green header. It includes a logo at the top, followed by the title 'Login to an Account'. Below the title are two input fields: 'Email' with the placeholder 'Enter your email' and 'Password' with the placeholder 'Enter password'. A green 'Submit' button is positioned below the password field. At the bottom of the form, there is a link 'Do not have an account? Register' and a red 'Back Home' button.

ConnectFriend Home EN Login Register

**Login to an Account**

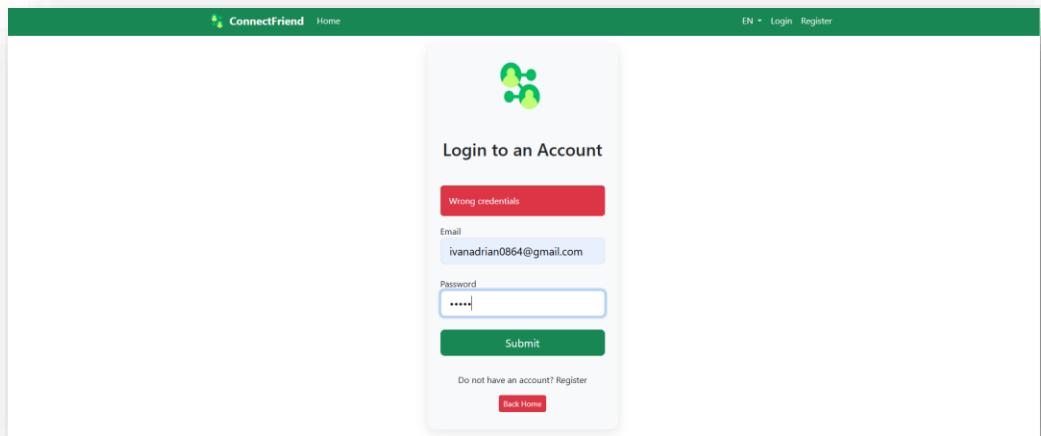
Email  
Enter your email

Password  
Enter password

Submit

Do not have an account? Register

Back Home



This screenshot shows the same login form as above, but with a validation error. A red message box at the top of the form displays 'Wrong credentials'. The 'Email' field now contains the text 'ivanadrian0864@gmail.com' and the 'Password' field contains four dots. The 'Submit' button remains green, and the 'Back Home' button is still red.

ConnectFriend Home EN Login Register

**Login to an Account**

Wrong credentials

Email  
ivanadrian0864@gmail.com

Password  
.....

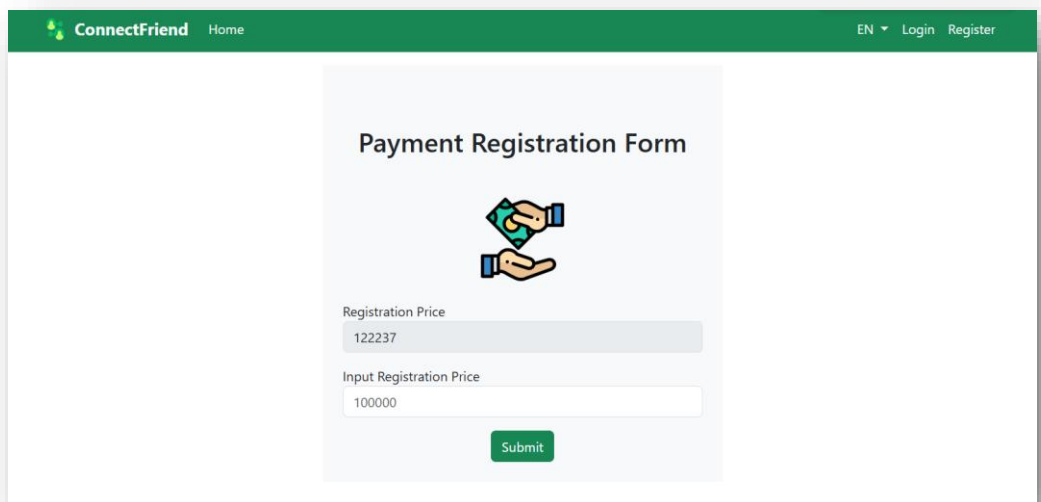
Submit

Do not have an account? Register

Back Home

## 2. [LO1,LO2,LO3 & LO4, 10 points] Payment

### Payment



The screenshot displays the 'Payment Registration Form' on the ConnectFriend website. The form is centered on a white background with a green header. It features a logo at the top, followed by the title 'Payment Registration Form' and an illustration of two hands exchanging money. Below the illustration, there is a 'Registration Price' field showing the value '122237'. An 'Input Registration Price' field contains the value '100000'. A green 'Submit' button is located at the bottom of the form. The header includes the text 'ConnectFriend Home EN Login Register'.

ConnectFriend Home EN Login Register

**Payment Registration Form**

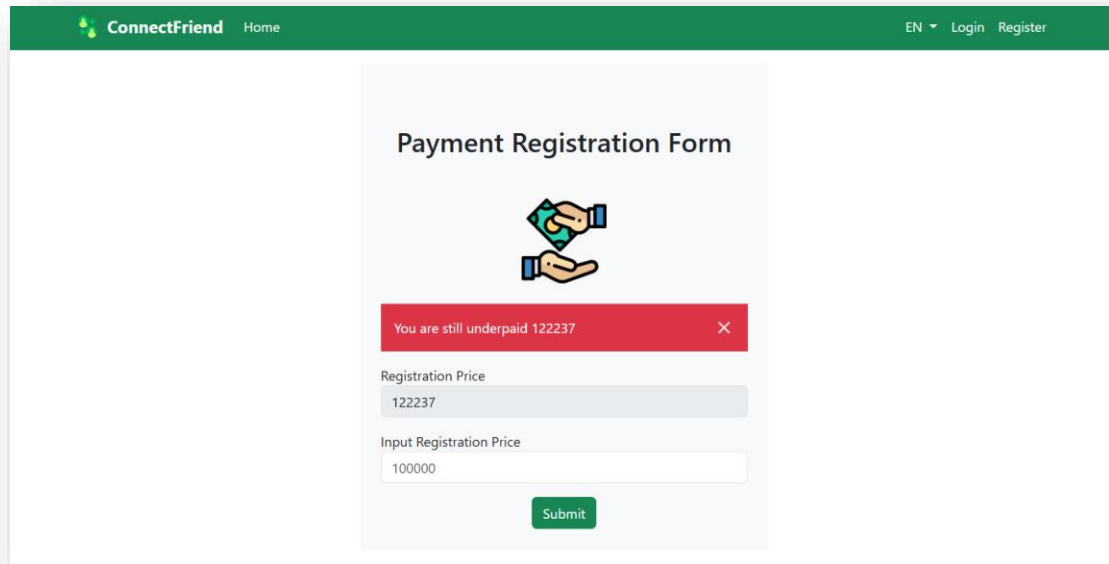
Registration Price  
122237

Input Registration Price  
100000

Submit

When all user data has been filled in during registration, they will be directed to the random registration fee payment page directly from the system.

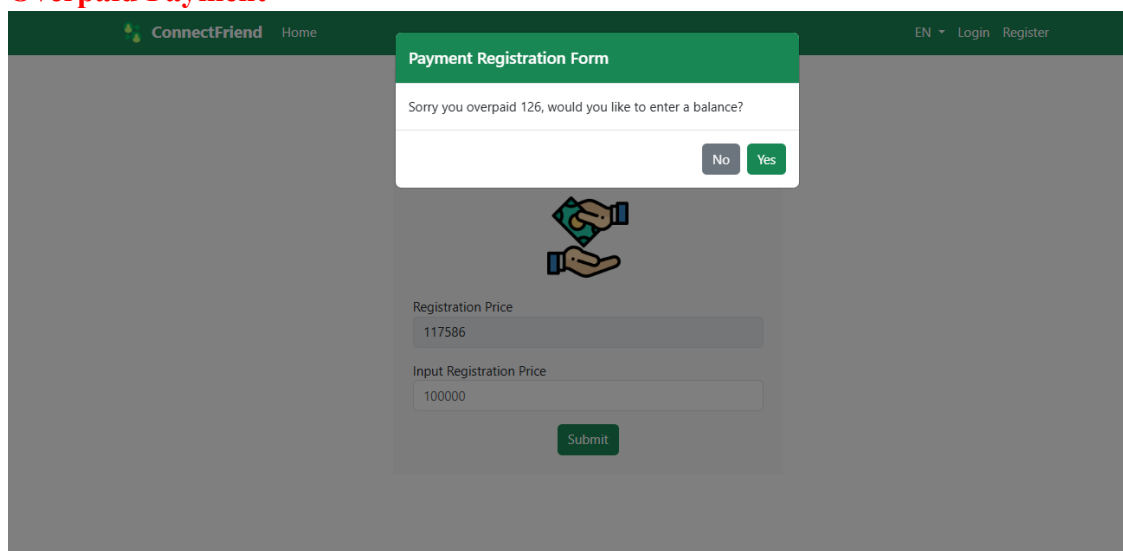
### Underpaid Payment



The screenshot shows the 'Payment Registration Form' on the ConnectFriend website. The form is titled 'Payment Registration Form' and features an illustration of two hands exchanging a coin. A red error message states: 'You are still underpaid 122237'. Below this, the 'Registration Price' is displayed as 122237. The 'Input Registration Price' field contains the value 100000. A green 'Submit' button is located at the bottom of the form.

Popup modal will appear when there is an overpayment, the user has two choices, namely topping up the registration price or adding the excess coins to the user's own coin balance.

### Overpaid Payment

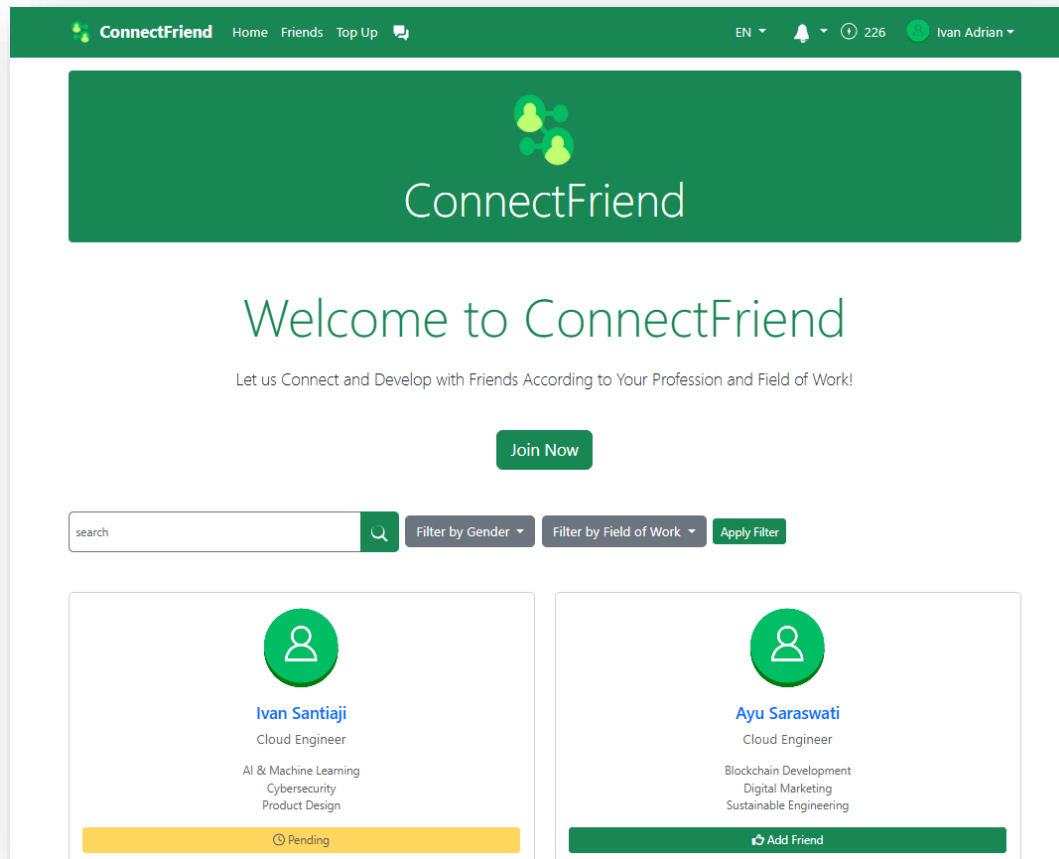


The screenshot shows the 'Payment Registration Form' on the ConnectFriend website. A modal popup is displayed with the message: 'Sorry you overpaid 126, would you like to enter a balance?'. The modal has two buttons: 'No' and 'Yes'. Below the modal, the 'Registration Price' is displayed as 117586. The 'Input Registration Price' field contains the value 100000. A green 'Submit' button is located at the bottom of the form.

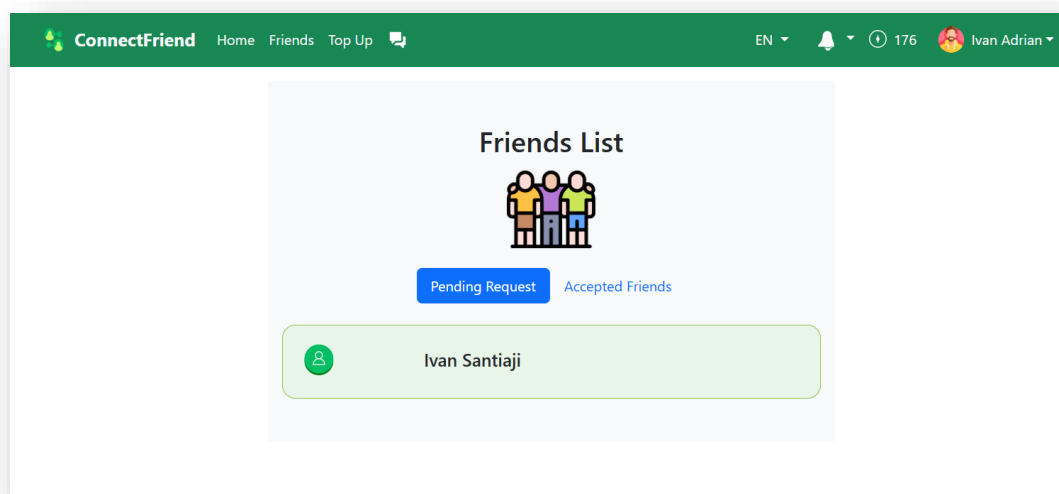


### 3. [LO1,LO2,LO3 & LO4, 30 points] Friends

The following is the first page when finished logging in, the user can see friends who have certain fields of work, and add them to the friends list by clicking the add friend thumb button. If so, the button status will be "Pending" and add the friends into the pending wishlist. If it has been accepted, the button will change to "Remove".

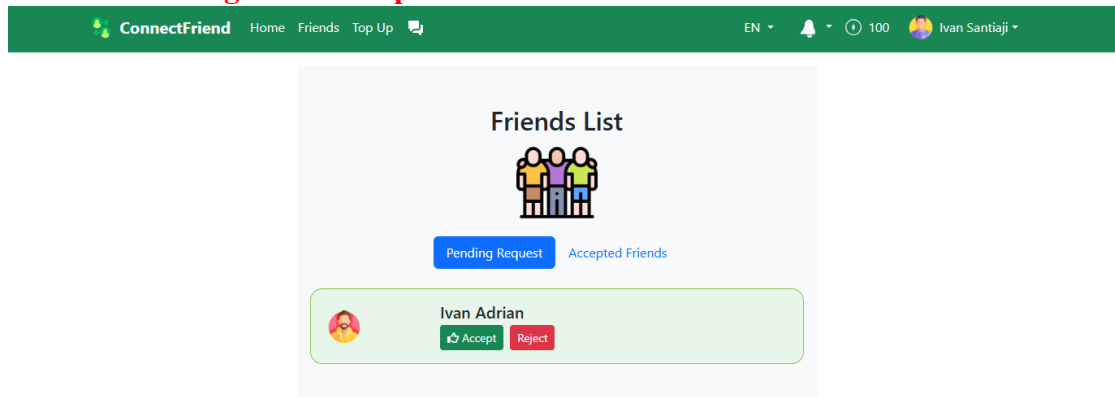


### Friends Request



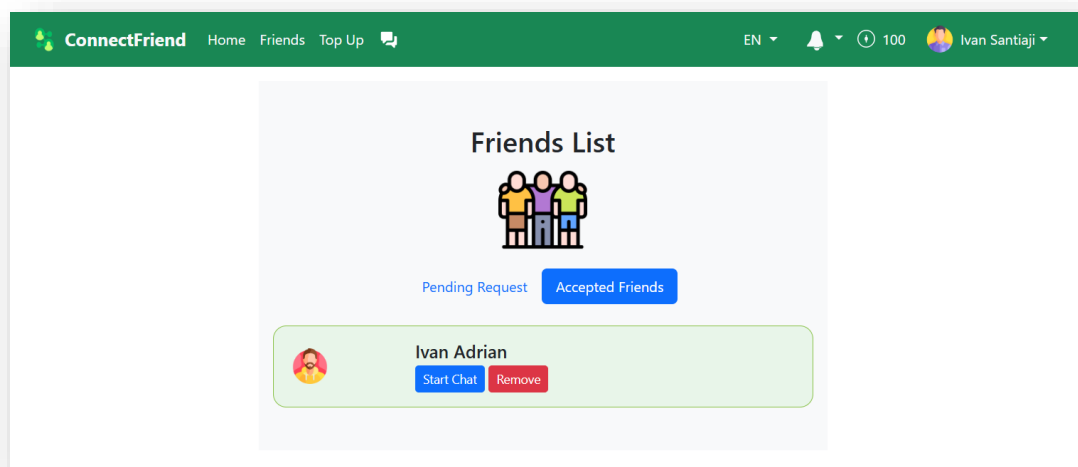
The following is a page for accepting or rejecting friend requests from users who have the same field of work.

### Wishlist Pending Friend Request



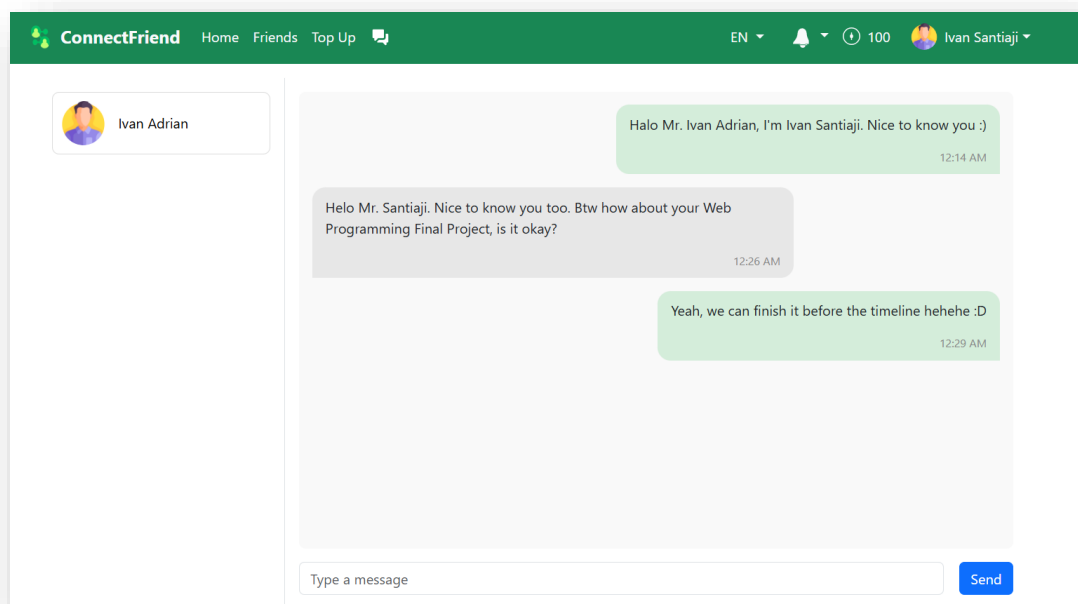
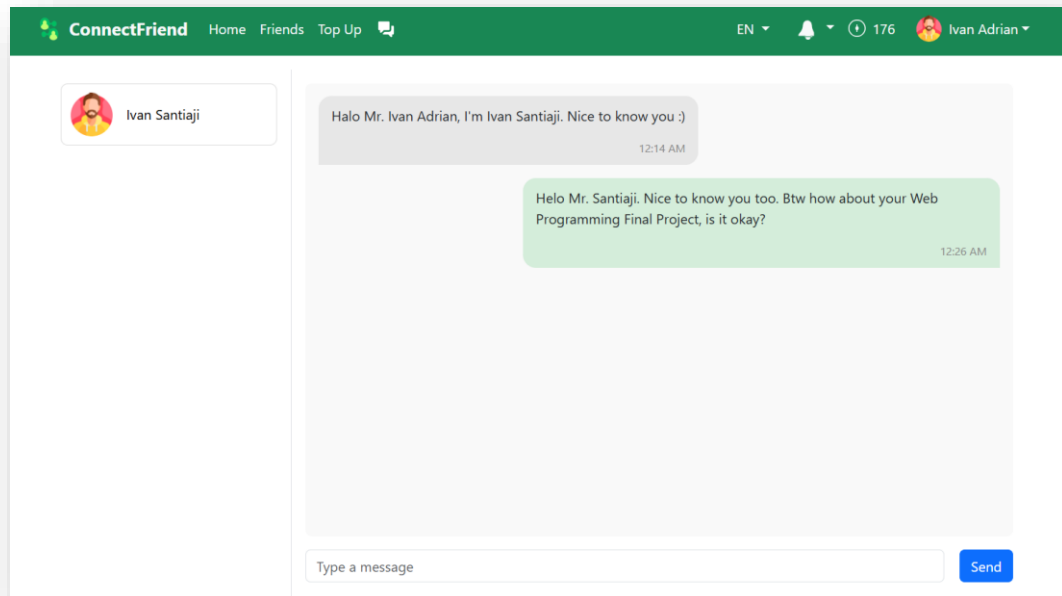
If you have successfully accepted new friends, you will move to the list of accepting friends. Here, users can start conversations or remove friends.

### Accepted Friends



#### 4. [LO1,LO2,LO3 & LO4, 20 points] Messaging/Video Call

##### Chat



5. [LO1,LO2,LO3 & LO4, 10 points] Searching & Filtering

**Searching (Occupation) & Filter (Gender and Field of Work)**

Filter by Gender ▾

☒ male  
☐ female

Filter by Field of Work ▾

Apply Filter

**Hadi Wirawan**  
 Sustainability Engineer  
 AI & Machine Learning  
 Cloud Computing  
 Growth Hacking

Add Friend

**Joko Sutrisno**  
 Sustainability Engineer  
 Cloud Computing  
 Growth Hacking  
 Product Design

Add Friend

## Searching (Field of Work) & Filter (Gender and Field of Work)

Filter by Gender ▾

☐ male  
☒ female

Filter by Field of Work ▾

Apply Filter

**Eka Wulandari**  
 UI/UX Designer  
 AI & Machine Learning  
 Cloud Computing  
 UX/UI Design

Add Friend

**Kartika Sari**  
 Blockchain Developer  
 AI & Machine Learning  
 Cloud Computing  
 Blockchain Development

Add Friend

## Searching (Name) & Filter (Gender and Field of Work)

Filter by Gender ▾

Filter by Field of Work ▾

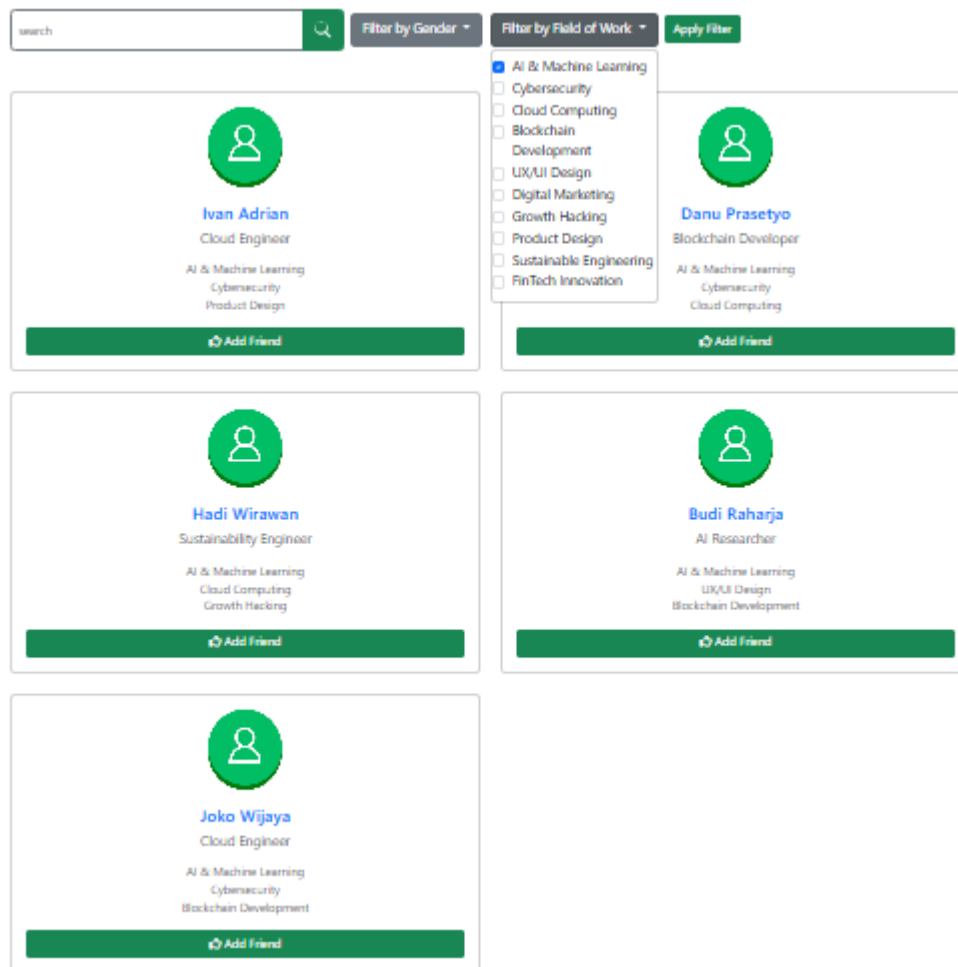
Apply Filter

**Ivan Adrian**  
 Cloud Engineer  
 AI & Machine Learning  
 Cybersecurity  
 Product Design

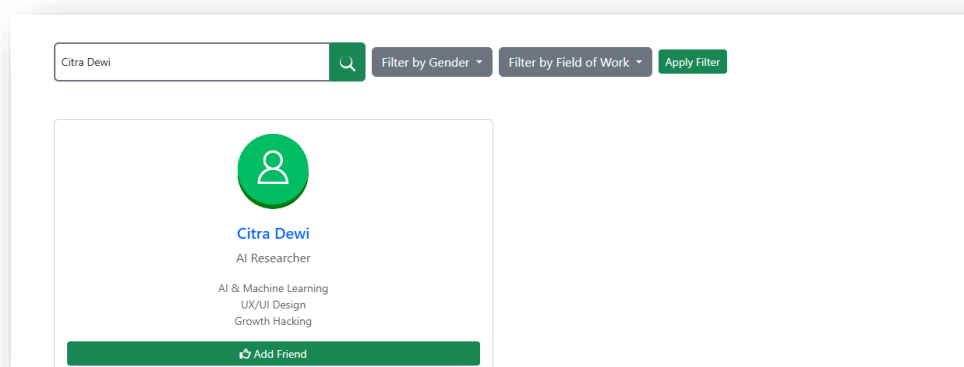
Add Friend

☒ AI & Machine Learning  
☐ Cybersecurity  
☐ Cloud Computing  
☐ Blockchain Development  
☐ UX/UI Design  
☐ Digital Marketing  
☐ Growth Hacking  
☐ Product Design  
☐ Sustainable Engineering  
☐ FinTech Innovation

## Filter (Gender and Field of Work)

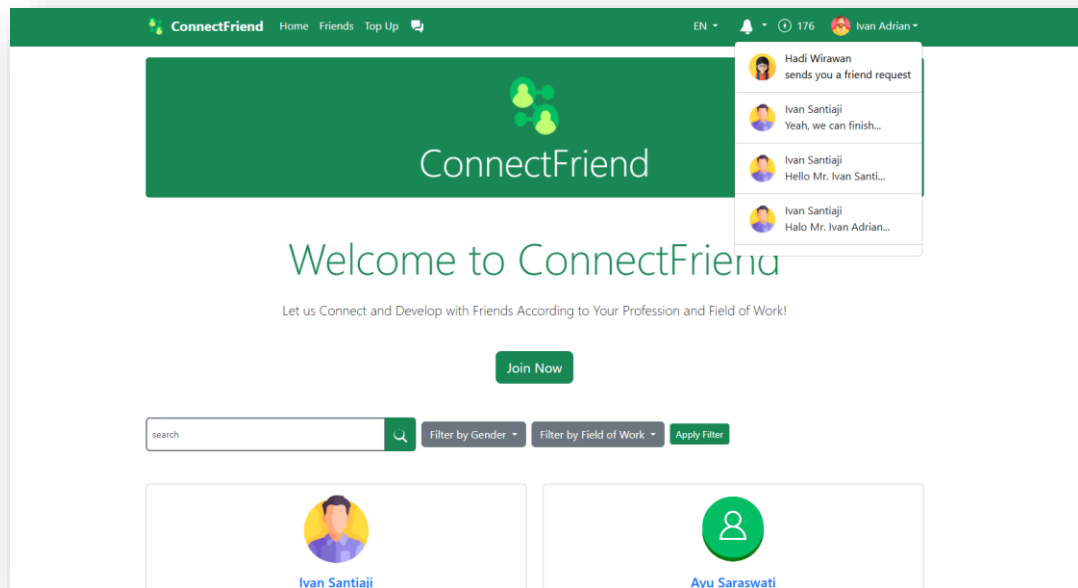


## Searching (Name/Occupation/Field of Work)



## 6. [LO1,LO2,LO3 & LO4,10 points] Notification

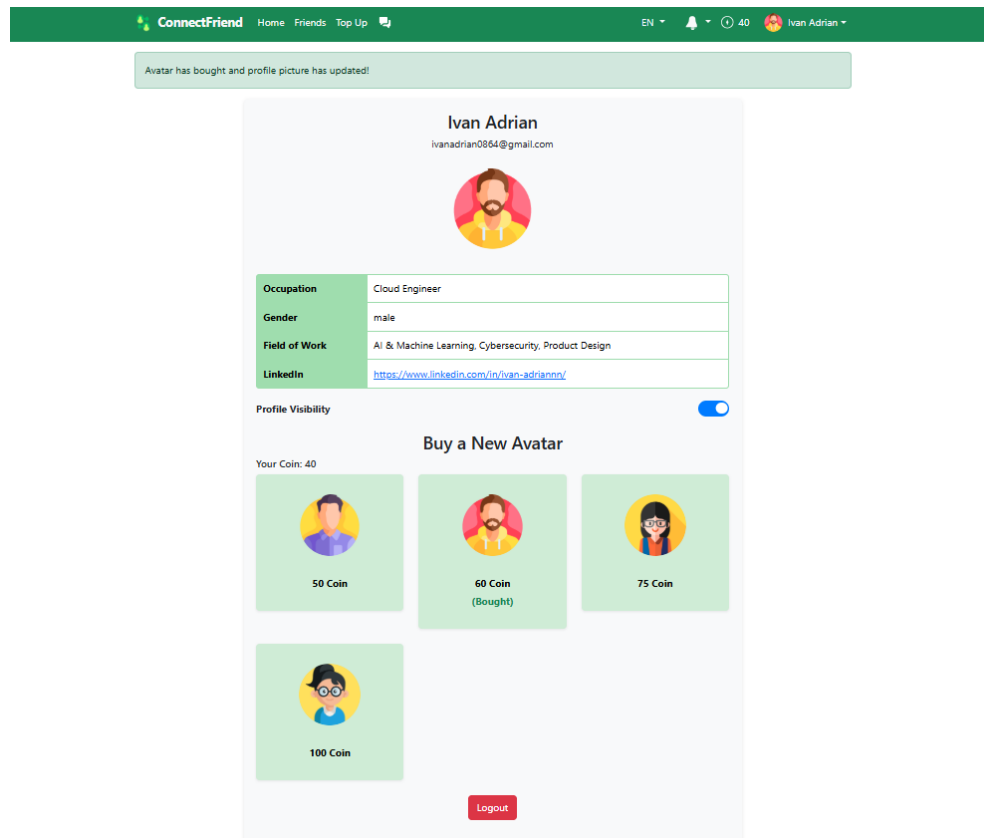
## Notification from chat or friend request



## Additional Features:

### 7. [LO1,LO2,LO3 & LO4, 30 points] Buy Avatar

## Avatar Market

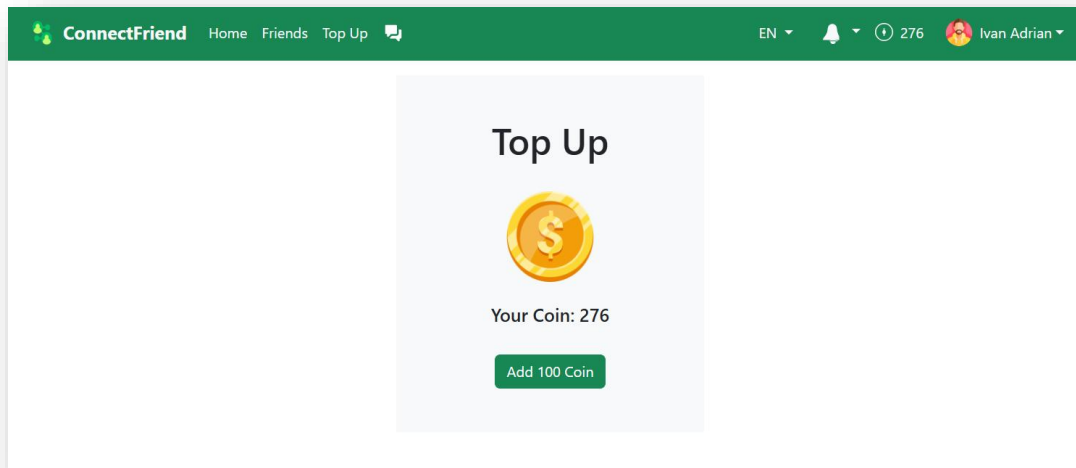


## Inssucucient Coins to Buy Avatar

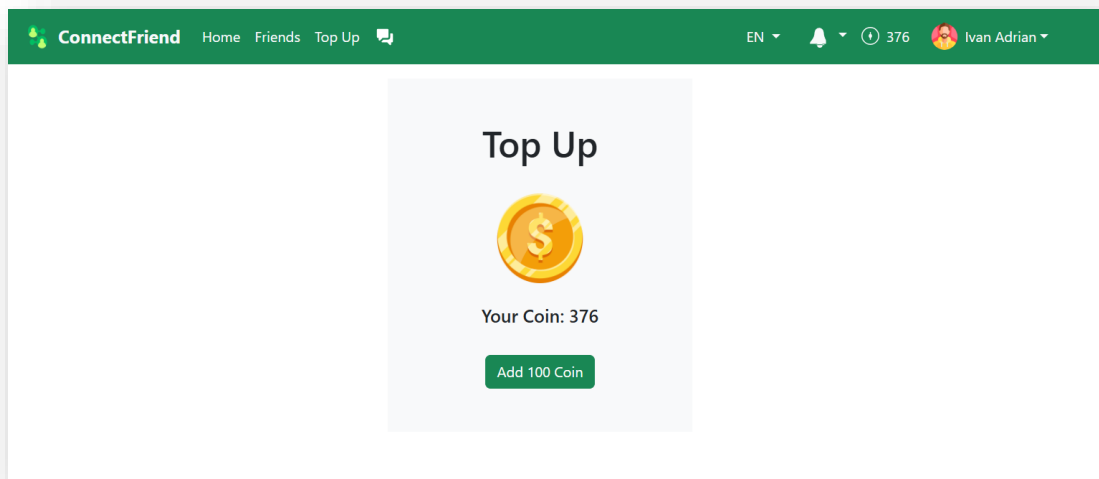


### 8. [LO1,LO2,LO3 & LO4, 15 points] Topup Coins

#### Topup coins

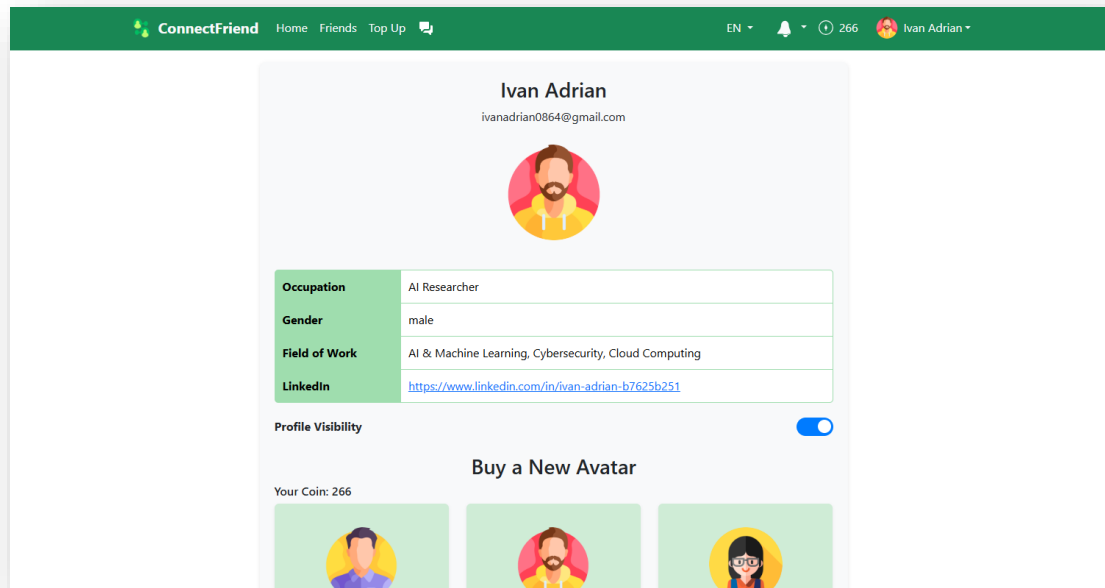


Display if coins added successfully. Every time you click the add coin button, 100 coins will automatically be added.



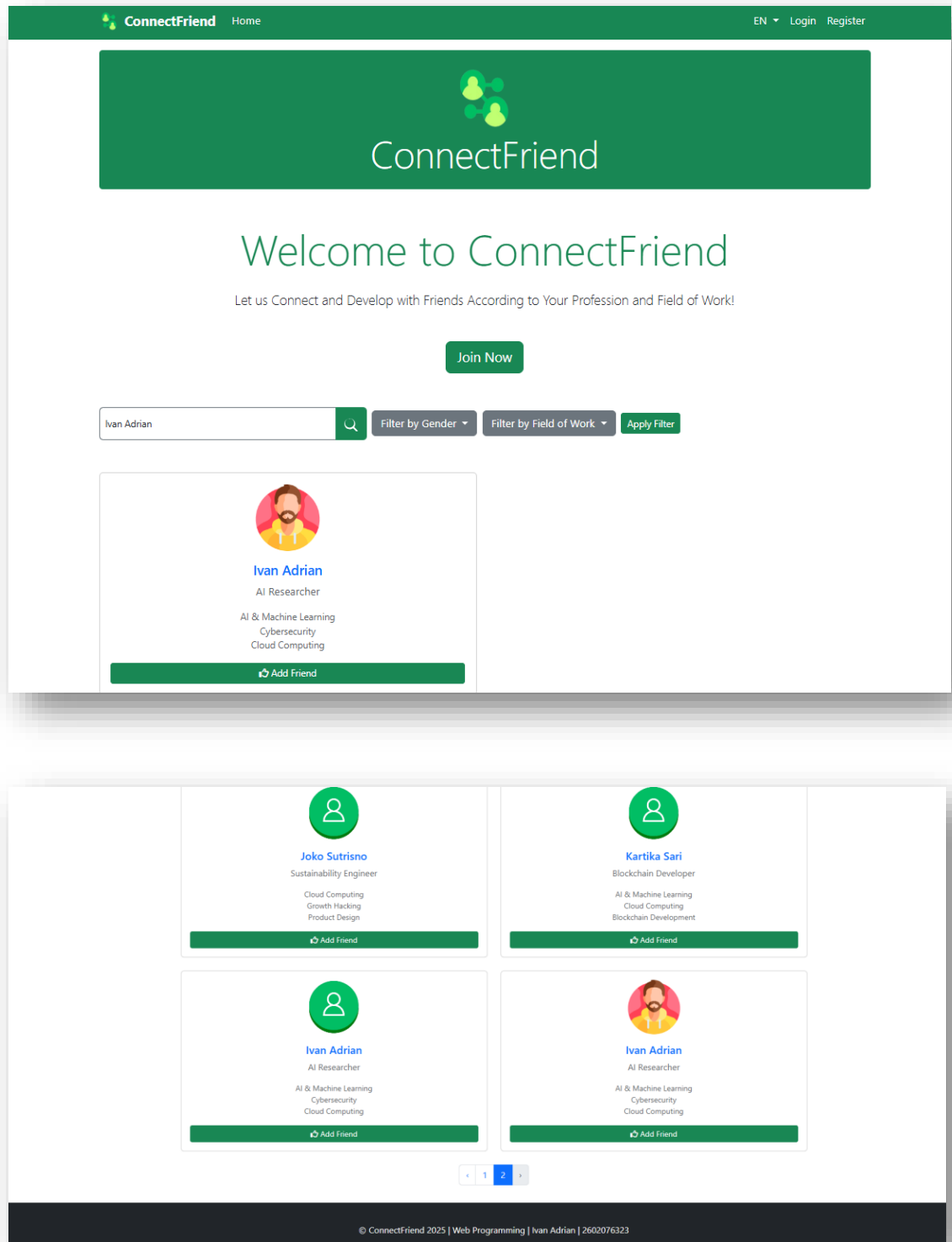
9. [LO1,LO2,LO3 & LO4, 30 points] Visible Profile

**Visible Profile**

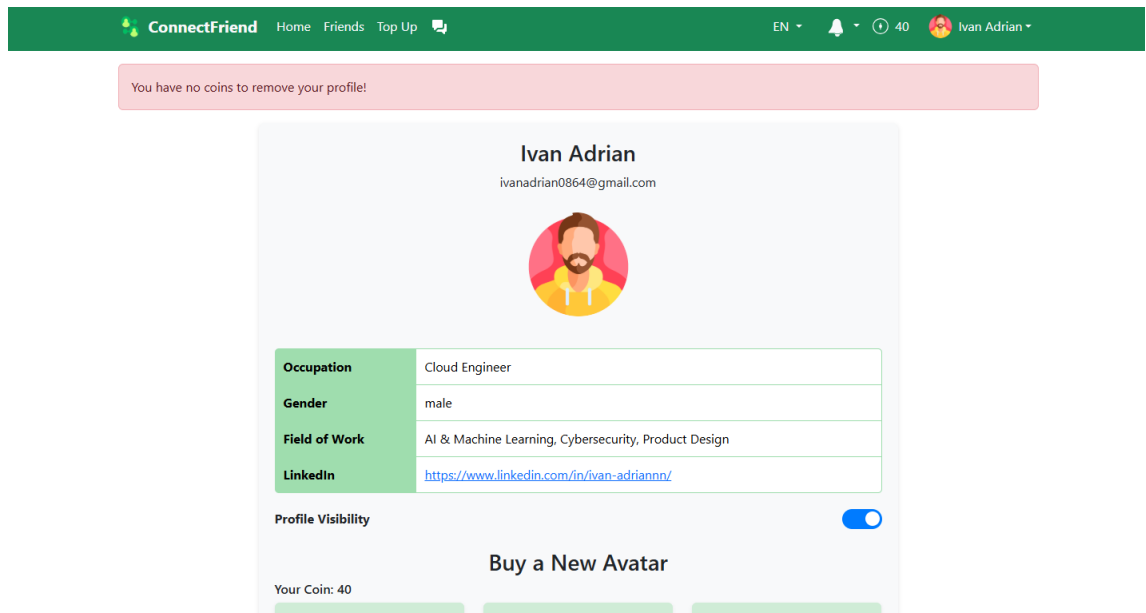


Before going invisible, we check the homepage and search for the username "Ivan Adrian", then we can see that the user profile is still visible.



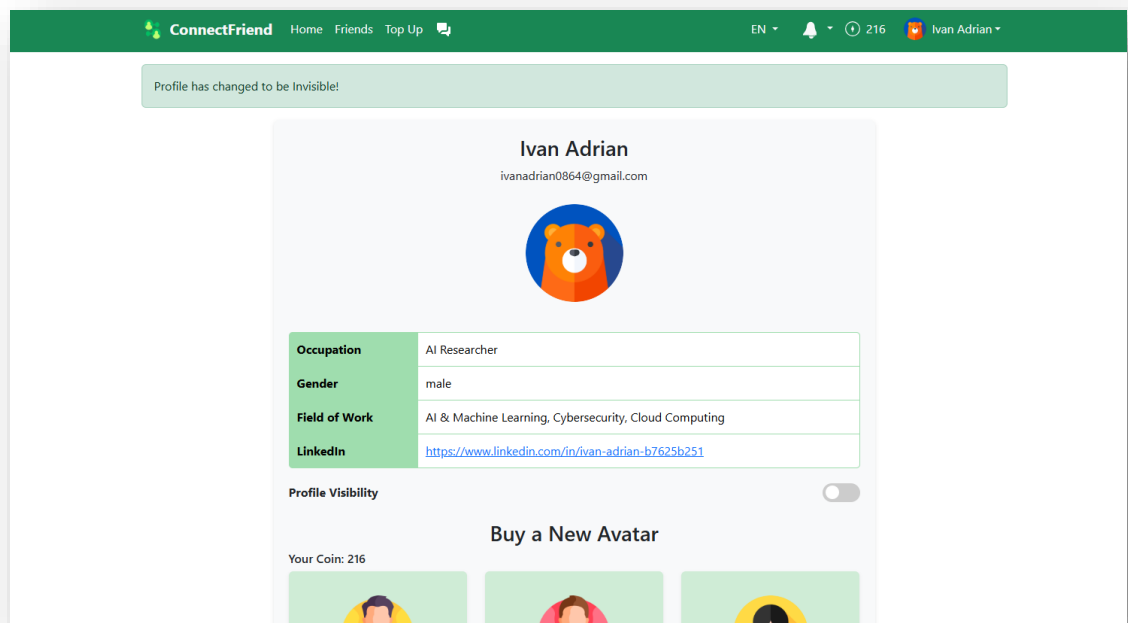


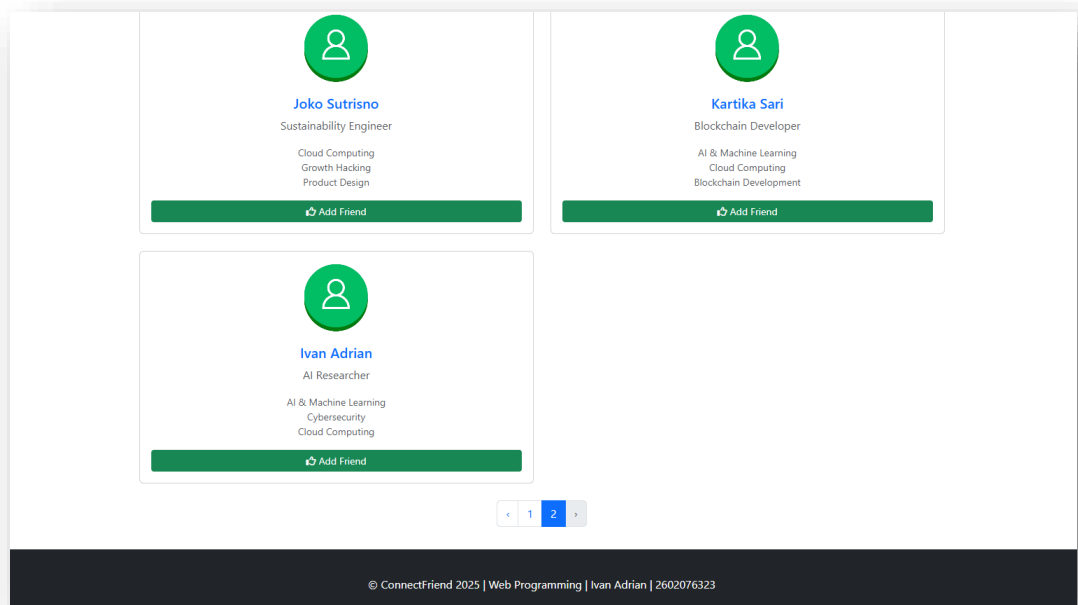
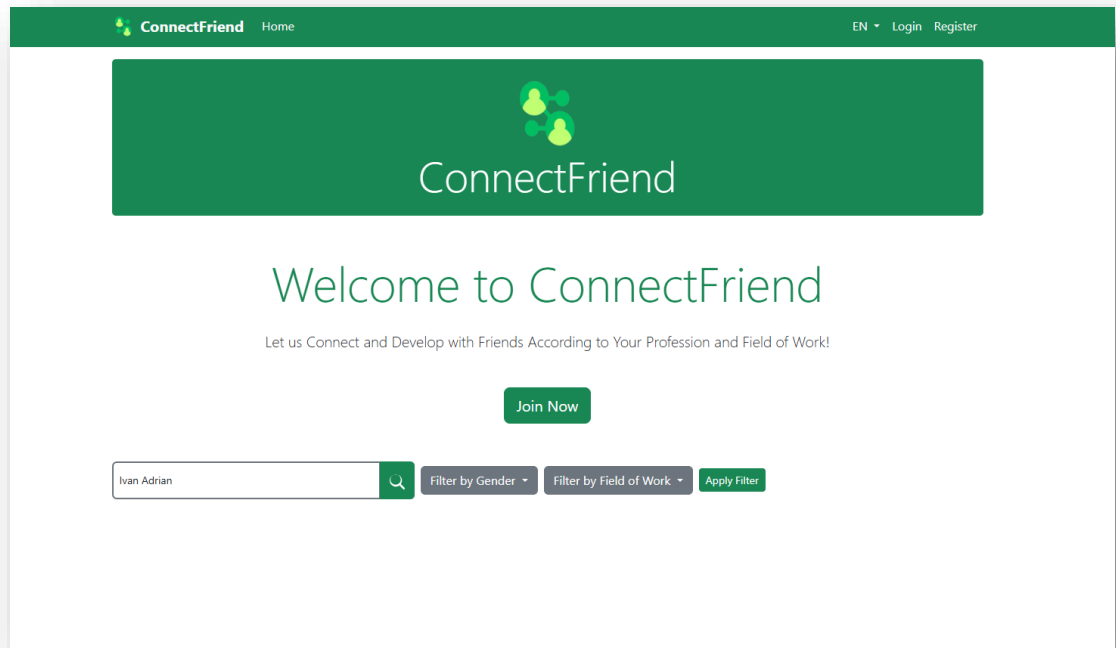
Then to change the profile to invisible, just press the toggle switch, if the balance is sufficient 50 coins, then the profile will become invisible, and vice versa if the balance is less then an error message will appear at the top of the page.



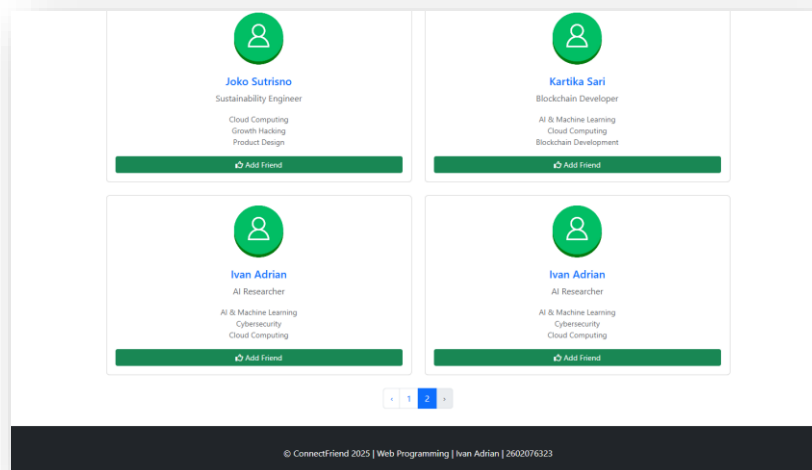
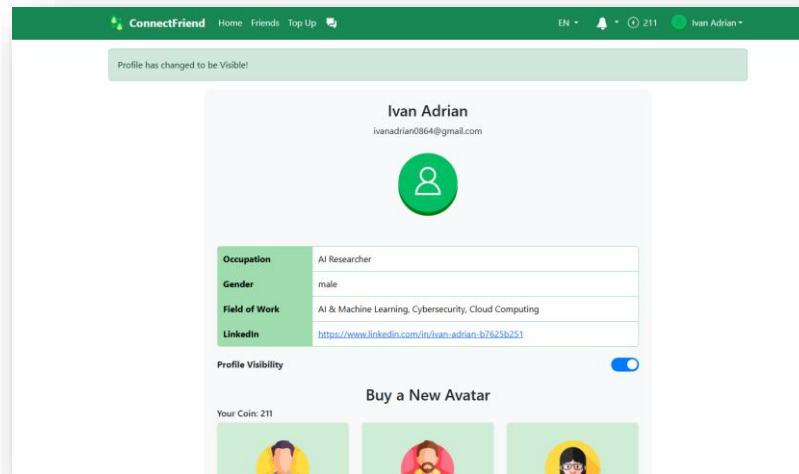
If the user profile "Ivan Adrian" has been successfully made invisible, a message will appear at the top and the profile image is changed to be a random bear. The profile will automatically not be visible to other users who search.

## Invisible Profile

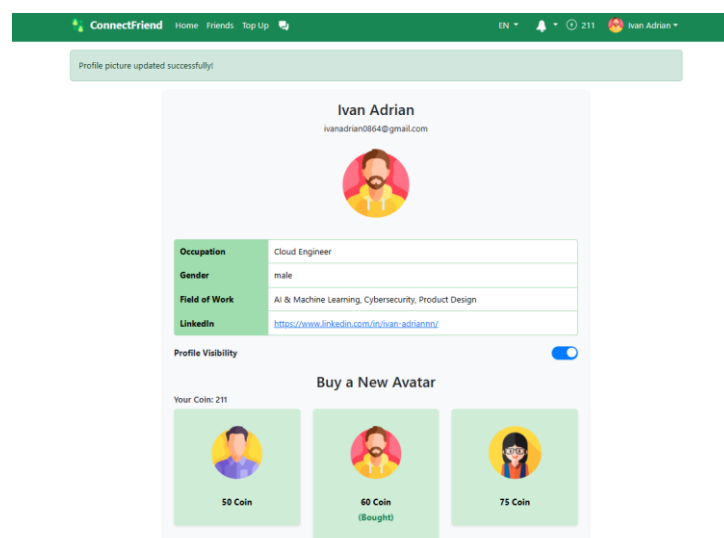




If you want to restore your profile, just log back into your account, then go to the profile page, and click the toggle switch again, this change will cost 5 coins, if there are enough coins then the user's profile image will return to the default and the account will be available again in the profile other users if searched. When it becomes visible again, there will be a success message at the top.



Then we can update the profile image again with the previously purchased avatar.



## Localization

