

# Submission Worksheet

**CLICK TO GRADE**

<https://learn.ethereallab.app/assignment/IT202-450-M2024/it202-module-6-milestone-1-2024/grade/jed56>

IT202-450-M2024 - [IT202] Module 6 Milestone 1 2024

## Submissions:

Submission Selection

1 Submission [active] 7/9/2024 12:08:08 AM

## Instructions

[^ COLLAPSE ^](#)

Overview Video: <https://youtu.be/V7oHa8KKtss>

## Prereqs:

- Go through each lesson from "Project Setup and SQL" to "User Login Enhancement" and follow the branching names while gathering the code
- Merge each into Milestone1 branch
- Create a Project board on GitHub (if you haven't yet)
  - Add each major item from the proposal doc as an Issue item
  - Invite the grader(s) and myself as collaborators on the board (they're separate from your repository)
    - See Canvas announcements for the Usernames or check your collab list on your repo
- Mark the related GitHub Issues items as "done"
- Implement your own custom CSS (something much different than the default "ugly" CSS given as an example)
- Consider styling all forms/inputs, data output, navigation, etc
- Implement JavaScript validation on Register, Login, and Profile (include "[Client]" in the output messages to differentiate between server-side validations)

## Instructions:

1. Make sure you're in Milestone1 with the latest changes pulled
2. Ensure Milestone1 has been deployed to heroku dev
3. Gather the requested evidence and fill in the explanations per each prompt
4. Save the submission and generate the output PDF
5. Put the output PDF into your local repository folder

6. add/commit/push it to GitHub
  7. Merge Milestone1 into dev
  8. Locally checkout dev and pull the changes
  9. Create and merge a pull request from dev to prod to deploy Milestone1 to prod
  10. Upload this output PDF to Canvas

**Branch name:** Milestone1

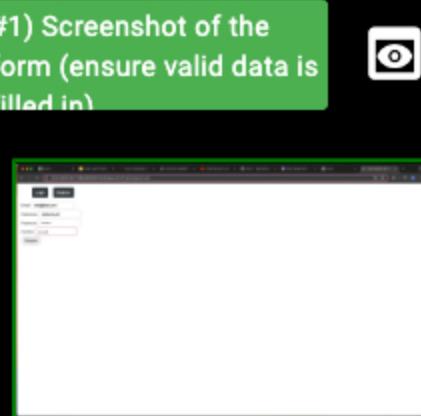
**Tasks: 25 Points: 10.00**

● **User Registration (2 pts.)**

COLLAPSE

### Task #1 - Points: 1

**Text: Screenshot of form on website page**



**Caption (required) ✓**

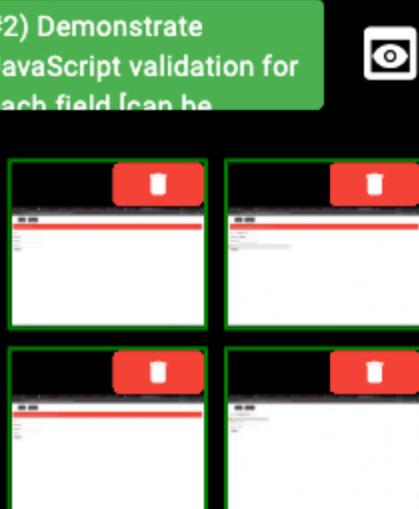
*Describe/highlight what's being shown*

showing screenshot of the form  
for registration

**URL (required) ✓**

*Prod link to the registration page*

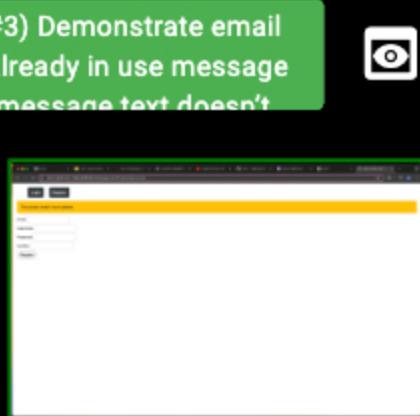
<https://it202-ied56->



**Caption (required) ✓**

*Describe/highlight what's being shown*

showing all error messages from  
javascript validation for email  
format, password format,  
username format, and passwords



**Caption (required) ✓**

*Describe/highlight what's being shown*

showing email already in use  
message

#4) Demonstrate username already in use message (message text)



**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing username already in use message

#5) Demonstrate user-friendly message of new account being created



**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing new account created message

### Task #2 - Points: 1

Text: Screenshot of the form code

#### ● Details:

Should have the appropriate type attributes for the fields.  
Include uid/date code comments in all screenshots (one per screenshot is sufficient)

#1) Show the html of the form



```
// jed56 07/09/2024
?>
<form onsubmit="return validate(this)" method="POST">
  <div>    You, 5 hours ago + user registration ...
    <label for="email">Email</label>
    <input type="email" name="email" required />
  </div>
  <div>
    <label for="username">Username</label>
    <input type="text" name="username" required maxlength="30" />
  </div>
  <div>
    <label for="pw">Password</label>
    <input type="password" id="pw" name="password" required minlength="8" />
  </div>
  <div>
    <label for="confirm">Confirm</label>
    <input type="password" name="confirm" required minlength="8" />
  </div>
  <input type="submit" value="Register" />
</form>
```

**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing html form code

### Explanation (required) ✓

Briefly explain the html for each field including the chosen attributes

 PREVIEW RESPONSE

The email field collects the users email address and ensures it is in an email format, and makes it required. The username field gets the username, limits it to 30 characters and also makes it required. The password field gets the password and makes sure it is at least 8 characters and it is also required. Then the confirm password field gets the password again to confirm it, gives it a minimum length of 8 and makes it required as well. Finally the submit button submits the form data to our server.

### Task #3 - Points: 1

Text: Screenshot of the client-side and server-side validation code

#### Details:

Include ucid/date code comments in all screenshots (one per screenshot is sufficient)

#1) Show the JavaScript validations of the form (include any extra files related if you made separate files)



### Caption (required) ✓

Describe/highlight what's being shown showing javascript validations of the form

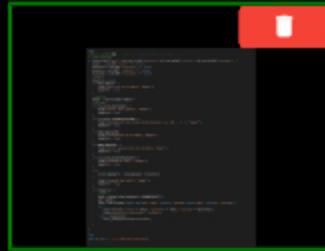
### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

The validate functions gets the values for email, username, password, and confirm password from the form and then it checks if the email is not empty and is

#2) Show the PHP validations (include any lib content)



### Caption (required) ✓

Describe/highlight what's being shown showing php validations of the form

### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

This PHP code takes the input values from the post request and goes through a function to sanitize the email. Then it validates the email, username, password, and confirm password fields. If any validation fails, it returns an error message. Otherwise, it returns a success message.

in a valid email format. It does the exact same thing for the username and that it is also in appropriate format. It also makes sure the password field is not empty and has at least 8 characters. It also ensures that the password field and confirm password field are matching. If any of these things do not pass, then the flash functions displays an error on the screen and the function returns false to prevent the form from being submitted.

and confirm password using the helper functions. If any of these things do not pass, then the flash functions displays an error message, and the hasError flag is set to true. If all of these things pass however, then the password is hashed and the users information is set into our database. If there are any duplicates in the database it also handles that correctly by showing an error message.

#### Task #4 - Points: 1

Text: Screenshot of the Users table with a valid user entry

##### Checklist

\*The checkboxes are for your own tracking

#	Points	Details
<input type="checkbox"/> #1	1	Password should be hashed
<input type="checkbox"/> #2	1	Should have email, password, username (unique), created, modified, and id fields
<input type="checkbox"/> #3	1	Ensure left panel or database name is present (should contain your ucid)

#1) Show valid data per the checklist



Caption (required) ✓

*Describe/highlight what's being shown showing valid data in SQL table*

#### Task #5 - Points: 1

Text: Explain the registration logic in a step-by-step manner from when the page loads to when the data is saved to the DB

**i** Details:

Don't just show code, translate things to plain English in concise steps.

May be worthwhile using a list.

Response:

1. The PHP requires all necessary files for external functions we use. When the form is submitted it takes all data using the "se" function for safe extraction.
2. The email is sanitized using the "sanitize\_email" function and each field is validated. Email is validated using the "is\_valid\_email" function, username uses "is\_valid\_username", and password uses "is\_valid\_password". If any of these fail then the flash function is called to display an error message.
3. If there are no errors then the password is hashed using "password\_hash" function. The database then gets connected by using getDB() function. The code then writes a SQL statement to insert the user's information into the Users table. The SQL statement gets executed inside of a try-catch block. If it is inserted successfully then a success message is displayed. If a duplicate is found then the code checks which field is duplicated and displays an error message.
4. After processing the data from the form, the code will show any flash messages that were set during the entering of the data and when the page reloads and registration was successful then the user can go to login page and log in.

**i** Task #6 - Points: 1

Text: Include pull request links related to this feature

**i** Details:

Should end in /pull/#

URL #1

<https://github.com/jordand2003/jed56-it202-450/pull/34>

**i** User Login (2 pts.)

[^COLLAPSE ^](#)

**i** Task #1 - Points: 1

Text: Screenshot of form on website page

**i** Details:

Thoughtful CSS should be applied to all parts (must differ from the "ugly" CSS given via the lessons).

The Heroku dev URL must be present in all screenshots of the site.

#1) Two  
Screenshot of  
the form (one)



**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing screenshots of  
the login page*

**URL (required) ✓**  
*Prod link to the login  
page  
[https://it202-jed56-  
prod-553fb5e41cd0.herokuapp.com](https://it202-jed56-prod-553fb5e41cd0.herokuapp.com)*

#2)  
Demonstrate  
JavaScript



**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing javascript  
validation for each field*

#3)  
Demonstrate  
user-friendly



**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing user friendly  
message of when an  
account doesn't exist*

#4)  
Demonstrate  
user-friendly



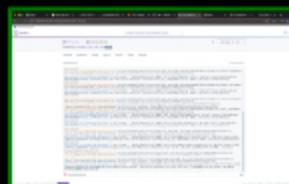
**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing user friendly  
message of when  
password is incorrect*

#5)  
Demonstrate  
successful



**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing successful  
login message*

#6)  
Demonstrate  
session data



**Caption (required) ✓**  
*Describe/highlight  
what's being shown  
showing server logs*

#### Task #2 - Points: 1

Text: Screenshot of the form code

#### Details:

Should have the appropriate type attributes for the fields.  
Include uid/date code comments in all screenshots (one per screenshot is sufficient)

#1) Show the

#2) Show the

#3) Show PHP

html of the form



JavaScript validations of



validations  
(include any lib)



### Caption (required) ✓

*Describe/highlight what's being shown showing the html code for the form*

### Explanation (required)



*Briefly explain the html for each field including the chosen attributes*

PREVIEW RESPONSE

The email/username field takes in text to allow both emails and usernames as input. The name attribute is used to submit the form and server side processing. It is also a required field. The password field takes a type of password to make sure the input is hidden, and the id is given as "pw" to give it a unique identifier. The name attribute is set to password for form submission and server processing and it is also a required field. The minlength attribute also makes it so that the password cannot be less than 8 characters.

### Caption (required) ✓

*Describe/highlight what's being shown showing the javascript validation code*

### Explanation (required)



*Explain in concise steps how this logically works*

PREVIEW RESPONSE

When the form is submitted the validate function is called. It takes in the values. If the email/username field is empty it shows an error. The appropriate pattern for username and email are also defined. It then checks if the input matches the email or username patterns and if they do not then it displays an error. It then checks if password field is empty and if it is it displays an error message. If everything passes then the function returns true.

### Caption (required) ✓

*Describe/highlight what's being shown showing the PHP validation code*

### Explanation (required)



*Explain in concise steps how this logically works*

PREVIEW RESPONSE

The form data is taken from the POST request by using the `se` function. It then checks if the username/email and password fields are not empty. Then it sanitizes the email/username and validates it using the `is_valid` functions for each field. If any field fails, then an error message is displayed using the `flash` function. If there are no errors, then the database is connected and a SQL query is created to get the user details from the users table. The code then goes through with the query and gets the user data and if a user is found then it verifies the password with the hashed password stored in the database by using

the password\_verify function. If the password is correct then the user is logged in. If login does not work for any reason then the appropriate error message is shown.

### Task #3 - Points: 1

**Text:** Explain the login logic step-by-step from when the page loads to when the data is fetched from the DB and stored in the session

#### Details:

Don't just show code, translate things to plain English in concise steps.  
Explain how the session works and why/how it's used

May be worthwhile using a list.

#### Response:

1. The PHP code includes all necessary files with external functions. It then checks if the form is submitted by looking for the POST of email and password. The data from the form is then retrieved from the POST request using the `se` function.
2. The code checks if the email/username is empty and displays an error message if it is. If not, then it sanitizes the email/username using the `santize` function for each.
3. The code then checks if the password is empty and if it is it shows an error message. If not then the code goes on to do the database query by establishing the connection and executing the query. The user data gets fetched from that query and if a user is found then the code verifies the password with the hashed password and if they match the user is logged in and redirected to the home page.
4. If no user is found or the password is wrong then the correct error message is shown.

### Task #4 - Points: 1

**Text:** Include pull request links related to this feature

#### Details:

Should end in /pull/#

#### URL #1

<https://github.com/jordand2003/jed56-it202-450/pull/35>

User Logout (1 pt.)

[COLLAPSE](#)

Task #1 - Points: 1

Text: Capture the following screenshots

#1) Screenshot of the navigation



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
showing screenshot of navigation when logged in

#2) Screenshot of the redirect to login with



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
showing screenshot of user logged out

#3) Screenshot of the logout-related code



**Caption (required)** ✓  
*Describe/highlight what's being shown*  
showing screenshot of log out related code  
showing the session is destroyed

**Explanation (required)**



*Explain in concise steps how this logically works*

PREVIEW RESPONSE

The session is initialized, then it includes the functions.php file which has all necessary functions, the session is then reset using the reset\_session function to clear all the sessions and log the user out. It then displays a flash message saying they were successfully logged out. Lastly they are redirected to the login page.

^COLLAPSE ^

## Task #2 - Points: 1

Text: Include pull request links related to this feature

### Details:

Should end in /pull/#

URL #1

<https://github.com/jordand2003/jed56-it202-450/pull/36>

^COLLAPSE ^

## Basic Security Rules and Roles (2 pts.)

^COLLAPSE ^

## Task #1 - Points: 1

Text: Authentication Screenshots

### Details:

Include ucid/date code comments in all screenshots (one per screenshot is sufficient)

#1) Screenshot of the function that checks if a



Caption (required) ✓

*Describe/highlight what's being shown*  
showing screenshot of function that checks if user is logged in

Explanation (required)



*Explain in concise steps how this logically works*

PREVIEW RESPONSE

This function takes the

#2) Screenshot of the login check function



Caption (required) ✓

*Describe/highlight what's being shown*  
screenshot of is-Logged\_in function being used

Explanation (required)



*Explain in concise steps how this logically works*

PREVIEW RESPONSE

#3) Demonstrate the user-



Caption (required) ✓

*Describe/highlight what's being shown*  
showing screenshot of trying to access login protected page while logged out

PREVIEW RESPONSE

The functions is called

This function takes the parameters \$redirect and \$destination and checks if the user session variable is set or not to check if the user is logged in. If redirect is true then the user is not logged in and the error message is shown. It then redirects the user to the specified destination and terminates the code. Finally the function returns the login status.

The function is called with redirect parameter set to true. If the user is not logged in then they are redirected to the login page, and if they are logged in then their data is logged.

### Task #2 - Points: 1

Text: Authorization Screenshots

#### Details:

Include uid/date code comments in all screenshots (one per screenshot is sufficient)

#1) Screenshot of the function that checks for a specific role



```
//fed56 7/9/24 You, now + Uncommitted changes
function has_role($role)
{
    if (!is_logged_in() && !isset($_SESSION['user']['roles'])) {
        foreach ($_SESSION['user']['roles'] as $r) {
            if ($r['name'] === $role) {
                return true;
            }
        }
    }
    return false;
}
```

#2) Screenshot of the role check function being used. Also, caption what pages it's used on



```
//fed56 7/9/24 You, 1 second ago + Uncommitted changes
if (!has_role('Admin')) {
    flash("You don't have permission to view this page", "warning");
    die(header("Location: $BASE_PATH" . "/home.php"));
}
//attempt to apply
```

#### Caption (required) ✓

Describe/highlight what's being shown showing screenshot of function that checks for a specific role

#### Explanation (required) ✓

Explain in concise steps how this logically works

#### Caption (required) ✓

Describe/highlight what's being shown showing screenshot of the role being checked

#### Explanation (required) ✓

Explain in concise steps how this logically works

Explain in concise steps how this logically works

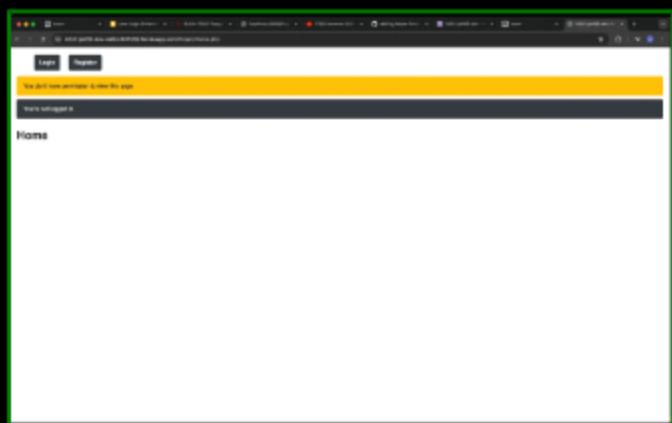
 PREVIEW RESPONSE

The has role function takes one parameter of \$role. It checks if the user is logged in using the is\_logged\_in function and verifies if the roles array is set in the user data. It then iterates over every role in the array and checks if the current role matches the given role and if so it returns true. If no match is found then it returns false.

 PREVIEW RESPONSE

The function is being used here by checking if a user has a role of admin. However it is being negated so we are checking if the user does not have role of admin. If they do not have this role then the message is displayed that they don't have access and they are brought to the home page.

#3) Demonstrate the user-friendly message of trying to manually access a role-protected page while being logged out (must show the



Caption (required) ✓

*Describe/highlight what's being shown*  
showing user friendly message of trying to access role protected page while being logged out

Task #3 - Points: 1

Text: Screenshots of UserRoles and Roles Tables

 COLLAPSE 

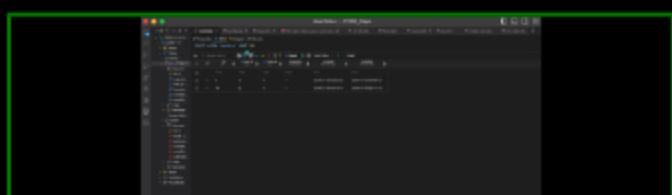
 Details:

Ensure left panel or database name is present in each table screenshot (should contain your ucid)

#1) UserRoles table with at least one valid entry (Table should have id, user\_id, role\_id, is\_active, created and modified columns)



#2) Roles table with at least one valid entry (Table should have id, name, description, is\_active, modified and created columns)



**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing userroles table with one valid entry

**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing roles table with one valid entry

Task #4 - Points: 1

Text: Explain how Roles and UserRoles tables work in conjunction with the Users table

#1) UserRoles



**Explanation (required) ✓**

*What's the purpose of the UserRoles table?*

PREVIEW RESPONSE

The UserRoles table is sort of a join table between Users and Roles. It stores the relationships between a user and whatever role they have and links user id's from the user table and the role\_id from the roles table. the is\_active column in userroles determines whether or not a users role is currently active.

#2) Roles



**Explanation (required) ✓**

*How does Roles.is\_active differ from UserRoles.is\_active?*

PREVIEW RESPONSE

Roles.is\_active and UserRoles.is\_active are different because Roles.is\_active tells us whether or not a role is actually active in the system to be assigned or not, while UserRoles.is\_active tells us whether or not a particular user has that role active rather than if the role itself is active for use in general.

Task #5 - Points: 1

Text: Include pull request links related to this feature

Details:

Should end in /pull/#

URL #1

<https://github.com/jordand2003/jed56-it202-450/pull/37>

URL #2

<https://github.com/jordand2003/jed56-it202-450/pull/39>

User Profile (2 pts.)

**ACOLLAPSE**



**ACOLLAPSE**

### Task #1 - Points: 1

Text: View Profile Website Page

#### ● Details:

Thoughtful CSS should be applied to all parts (must differ from the "ugly" CSS given via the lessons).

The Heroku dev URL must be present in all screenshots of the site.

#1) Show the profile form correctly populated on page load (username, email) Form should have the following fields: username, email, current password, new password, confirm password (or similar)



A screenshot of a web browser window showing a profile editing form. The browser's address bar shows a Heroku URL. The form itself has several input fields: 'Email' (containing 'matt@teamtreehouse.com'), 'Username' (containing 'matt'), and three password fields ('Current Password', 'New Password', 'Confirm Password'). Below these fields is a button labeled 'Update Profile'.

#### Caption (required) ✓

*Describe/highlight what's being shown*

showing profile form correctly populated on page load

**ACOLLAPSE**

### Task #2 - Points: 1

Text: Explain the logic step-by-step of how the data is loaded and populated when the profile page is visited

#### ● Details:

Don't just show code, translate things to plain English in concise steps.

May be worthwhile using a list.

Response:

1. The appropriate functions and nav files are included at the top. The code then checks if the user is logged in and if they are not they are redirected to the login page.
2. The users data is then retrieved using the get user email and get username functions. The users data is then displayed as a pre filled out form with the users username and email and also has some other fields for updating the username, and resetting the password. The client side javascript function validate then checks that the email and username are not empty and meet the requirements. If the user wants to reset their password then their old password must match what's in the database and the new password and confirmed new password have to match.
3. The code then checks if the form has been submitted and retrieves all the updated information and updates it in the database. It displays any appropriate error message if there is any or a success message if everything was updated successfully.

### Task #3 - Points: 1

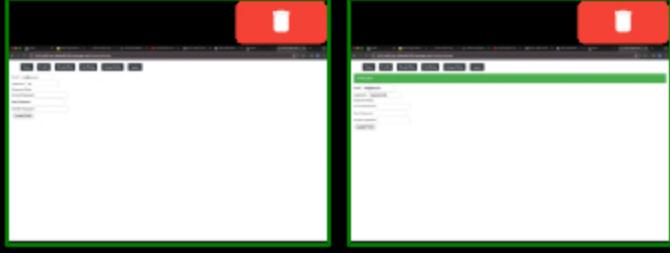
**Text:** Edit Profile Website Page

#### Details:

Thoughtful CSS should be applied to all parts (must differ from the "ugly" CSS given via the lessons).

The Heroku dev URL must be present in all screenshots of the site.

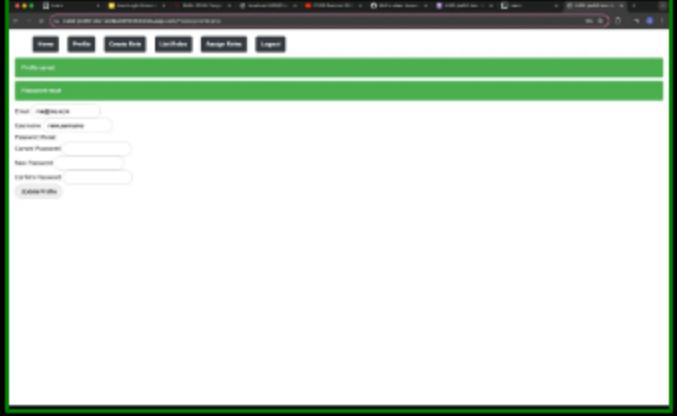
#1) (Two Screenshots) Demonstrate with before and after of a username change (including success message)



#### Caption (required) ✓

*Describe/highlight what's being shown*  
showing screenshots of before and after username change

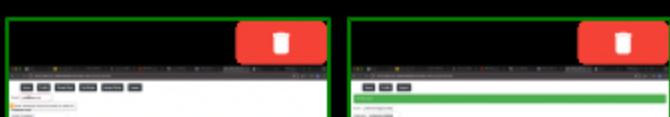
#2) Demonstrate the success message of updating password



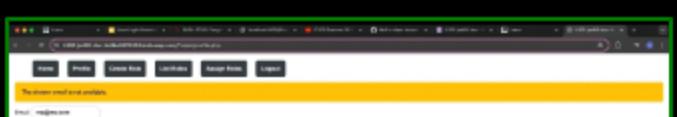
#### Caption (required) ✓

*Describe/highlight what's being shown*  
showing success message after updating password

#3) Demonstrate all JavaScript user-friendly validation messages [can be combined] (email format, username format, password)



#4) Demonstrate PHP user-friendly validation message (desired email is already in use)





**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing javascript user validation messages



#5) Demonstrate PHP user-friendly validation message (Desired username is already in use)



**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing PHP user validation message for username in use



#6) Demonstrate PHP user-friendly validation message (Current password doesn't match what's in the DB)



**Caption (required) ✓**

*Describe/highlight what's being shown*  
showing PHP user validation message for password incorrect



**▲ COLLAPSE ▾**

**Task #4 - Points: 1**

**Text:** Explain the logic step-by-step of how the data is checked and saved for the following scenarios

**● Details:**

Don't just show code, translate things to plain English



**#1) Updating Username/Email**



**#2) Updating password**

### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

The code checks whether or not the form was submitted by checking if the POST request is set. The updated username or email are then taken from the form using the se function and an array of parameters is created including the new email, username, and user id. The database then gets connected and a SQL update query is created wherever the user id's match. The query then gets executed. It handles any duplicate entries by checking if the new email and password are already in use. Finally a new SQL select query is run and gets the updated user information.

### Explanation (required) ✓

Explain in concise steps how this logically works

 PREVIEW RESPONSE

The code checks if the POST request has been set. It then gets the current password, new password, and confirmed new password from the form through the se function. It then checks if all of the password field are filled and verifies that the new password and confirmed new password are matching. Then it has to get the current password from the database through a select query and verify that it is accurate. If the password is correct then the new password is hashed and a SQL update query is run to change the password in the database.

### Task #5 - Points: 1

Text: Include pull request links related to this feature

#### Details:

Should end in /pull/#

### URL #1

<https://github.com/jordand2003/jed56-it202-450/pull/38>

### Misc (1 pt.)



### Task #1 - Points: 1

Text: Screenshot of wakatime

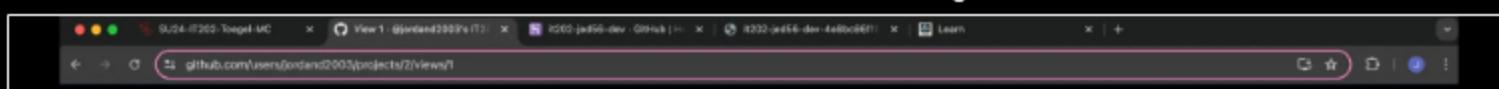
#### Details:

Note: The duration of time isn't directly related to the grade, the goal is to just make sure time is being tracked

### Task Screenshots:

#### Gallery Style: Large View

Small      Medium      Large



jordand2003 | Projects | @jordand2003's IT202 2024 Project 6

Type to search

Add status update

View 1 New view

Filter by keyword or by field

Discard Save

**Todo** This item hasn't been started.

**In Progress** This is actively being worked on.

**Done** This has been completed.

- project and sql setup
- user registration
- navigation and login
- helper function
- flash messages
- username and profile
- Resting on milestone!
- user roles
- user login enhancement

+ Add Item + Add Item + Add Item

This screenshot shows a project board with three columns: Todo, In Progress, and Done. The Todo column contains one item: 'This item hasn't been started.' The In Progress column contains one item: 'This is actively being worked on.' The Done column contains eight items, all of which are currently marked as Draft: 'project and sql setup', 'user registration', 'navigation and login', 'helper function', 'flash messages', 'username and profile', 'Resting on milestone!', and 'user roles'. Below each column is a '+ Add Item' button.

screenshot of WakaTime

### Task #2 - Points: 1

Text: Screenshot of your project board from GitHub (tasks should be in the proper column)

#### Task Screenshots:

##### Gallery Style: Large View

Small      Medium      Large

Learn User Login Enhance IT202-IT202-Todo localhost:3006 IT202 Summer 2024 View 1 - jordan IT202-jet56-dev IT202-jet56-dev IT202\_Repo - W Type to search Add status update

jordand2003 | Projects | @jordand2003's IT202 2024 Project 6

Type to search

Add status update

View 1 New view

Filter by keyword or by field

Discard Save

**Todo** This item hasn't been started.

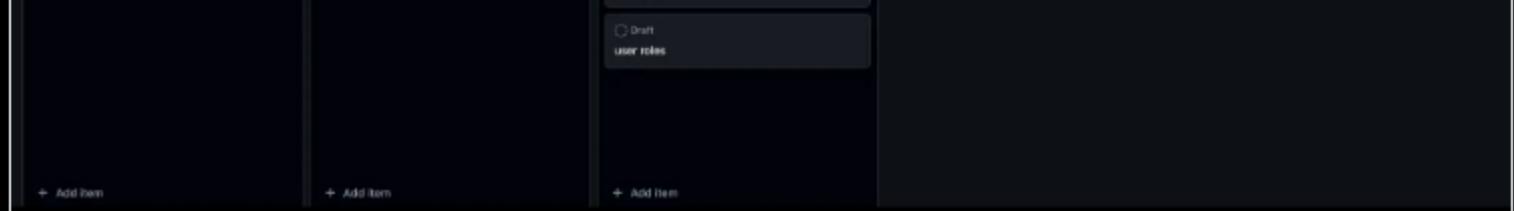
**In Progress** This is actively being worked on.

**Done** This has been completed.

- project and sql setup
- user registration
- navigation and login
- helper function
- flash messages
- username and profile
- Resting on milestone!
- user roles
- user login enhancement

+ Add Item + Add Item + Add Item

This screenshot is identical to the one above, showing a project board with three columns: Todo, In Progress, and Done. The Todo column contains one item: 'This item hasn't been started.' The In Progress column contains one item: 'This is actively being worked on.' The Done column contains eight items, all of which are currently marked as Draft: 'project and sql setup', 'user registration', 'navigation and login', 'helper function', 'flash messages', 'username and profile', 'Resting on milestone!', and 'user roles'. Below each column is a '+ Add Item' button.



screenshot of project board from github

Task #3 - Points: 1

Text: Provide a direct link to the project board on GitHub

URL #1

<https://github.com/users/jordand2003/projects/2/views/1>

End of Assignment