5 TaskFlow User Manual

5.1 User Prerequisites

- Lubuntu 20.4.1 LTS on VirtualBox 6.1.18 already installed with **root-user** access
- TaskFlow source code

5.2 Site Set-Up

1. Installing dependencies

```
#In a new terminal window navigate to the Task-flow source code such
that
$ ls
requirements.txt, package.json, task_master_site ...
```

2. Download Python to enable pip3 dependencies. Python3.8.10 required.

```
#Enable root mode if you have not
$ sudo su

(root)$ apt install python3-pip

#After if you have installed Python successfully:

(root)$ python3 --version
Python 3.8.10
```

3. Download nodeJS and NPM

```
#Download NodeJS and NPM
(root)$ sudo apt install nodejs
(root)$ sudo apt-get install npm
```

4. Download and install the Python backend framework

```
# Make sure cwd is the 'source' directory
(root)$ pip3 install virtualenv
(root)$ python3 -m virtualenv venv
#You should now have a folder called 'venv'
(root)$ pwd
...path/source
(root)$ ls
… venv ….

#Enable your virtual environment
(root)$ source venv/bin/activate

#If successful your command-line should now state (venv)
#Install the Python libraries such as Django, this may take a while
(venv)(root)$ pip3 install -r requirements.txt
```

5. Download and install the NodeJS frontend framework and libraries

```
#This will download all the JS dependencies in the package.json, this
may also take a while
(venv)(root)$ npm install
#If successful your source folder should now contain a 'node_modules'
(venv)(root)$ ls
… node_modules …


# Compile the source code for the front-end, this may take a few
seconds
# Terminal will tell you when it has finished
(venv)(root)$ npm run build
….
webpack 5.46.0 compiled successfully in 5000 ms
```

6. Initialise the backend

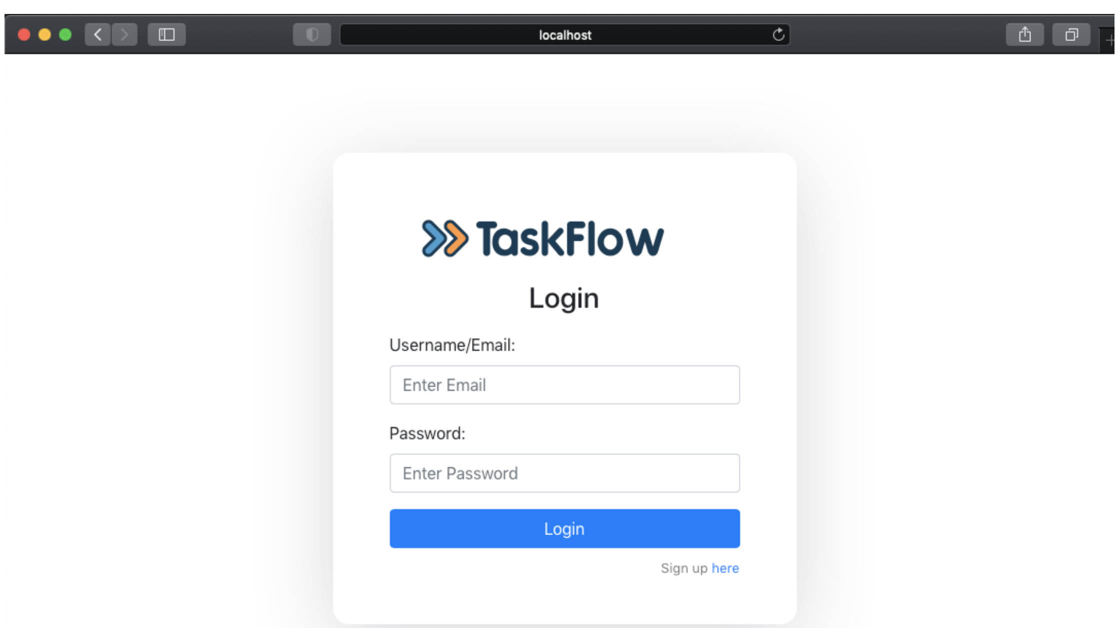
```
(venv)(root)$ cd task_master_site

#This step is crucial as it creates the database for the site
(venv)(root)$ python manage.py migrate
Applying … OK
…
Applying … OK
```

- Please note running this command in root-user mode you will mean you **ALWAYS** have to run the server in root-user mode as the Database is created with 'write' only access for Root.

7. Start the site and server

```
#To start up the server and site
(venv)(root)$ python manage.py runserver
….
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C
```

The site is now ready to go! The home page is just located on http://127.0.0.1:8000/taskflow/



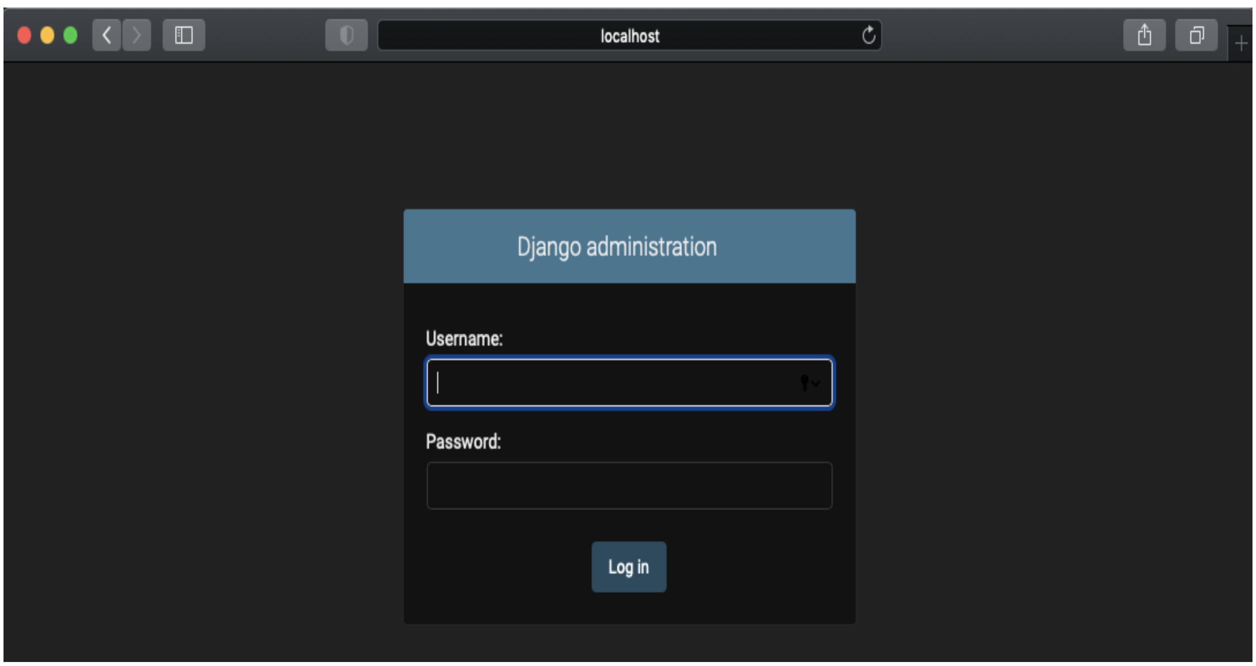
- TaskFlow frontpage

(Optional) Creating an admin account

This step is completely optional as *TaskFlow* is a completely autonomous app and does not require any administrators to perform any explicit work.

```
# First make sure you are on the directory with the 'manage.py' file, then:
(venv)(root)$ python manage.py createsuperuser
# Follow the prompts to register an admin account
```

- This will give you access to **http://127.0.0.1:8000**/admin, which allows you to see all Users, Tasks and Connections in the database.
- **Warning:** In production (the real world) this could be used for testing, or removing any offensive accounts. In production only the most trusted administrators should have a 'superuser' account as it provides access to all User's private information (email and the hash of User's passwords).



- Admin Site for TaskFlow

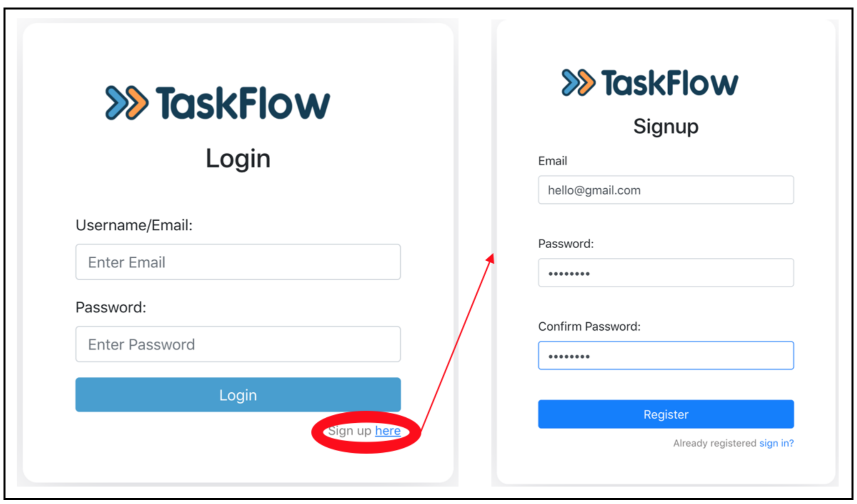
5.3 User Functionality Guide

5.3.1 Accounts and Profiles

5.3.1.1 Signup and Login

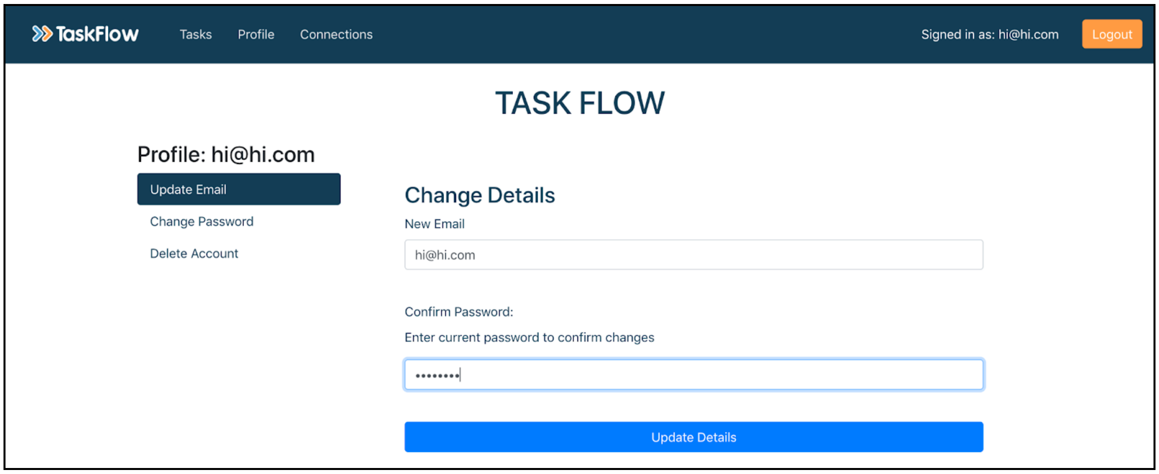
The homepage of localhost:8000/taskflow/ will take the user to the login page. Clicking on the 'signup here' button at the bottom of the box will take you to a signup page to create a new account. An email (to be used as the username) and a password are required. The signup details must pass various error checks for an account to be created successfully.

If a user already has an account, they can just sign in using their details in the Login page.



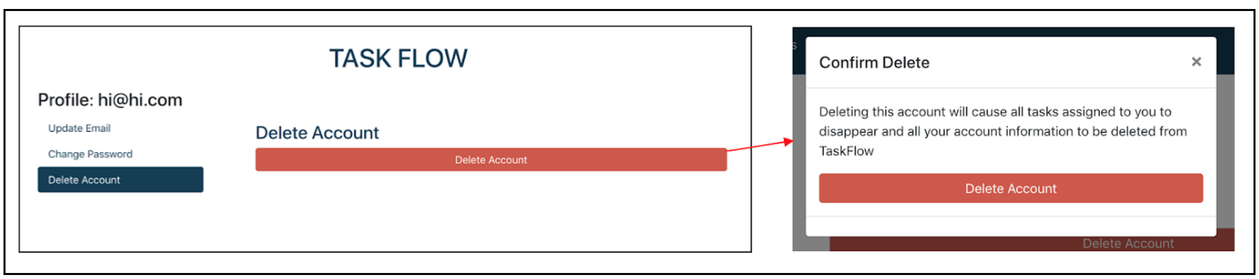
5.3.1.2 Edit User Profile

The edit profile page can be accessed by clicking on the 'Profile' tab in the nav bar. From here the Update email/username and change passwords forms can be accessed. The old password must also be entered for security purposes.



5.3.1.3 Delete User Profile

Using the same page as above, the delete account tab can be accessed. Clicking ‘delete’ will prompt another popup to confirm. This will permanently delete the user’s account and data.

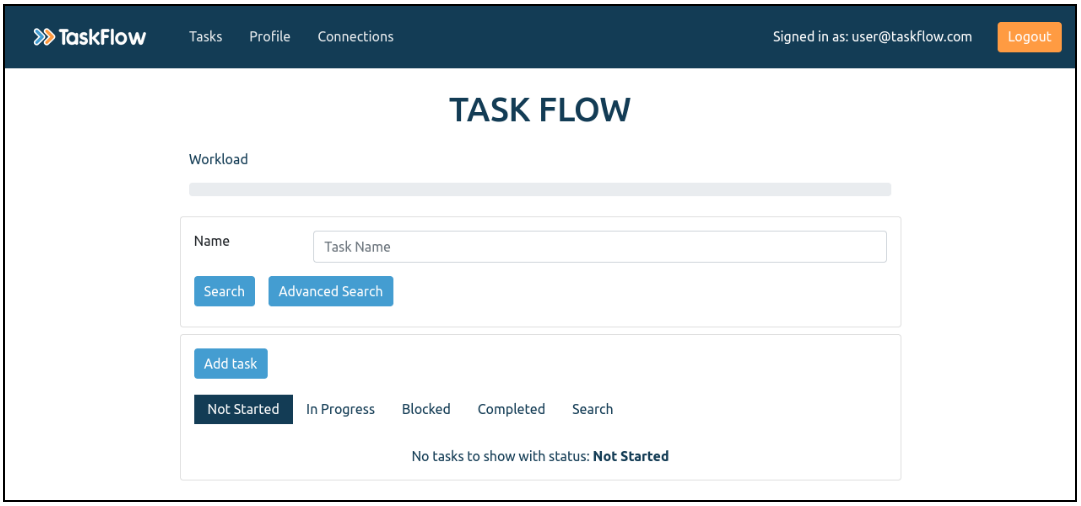


5.3.1.4 Logout

To logout from Task Flow, the ‘Logout’ button on the top right of the navbar can be clicked.

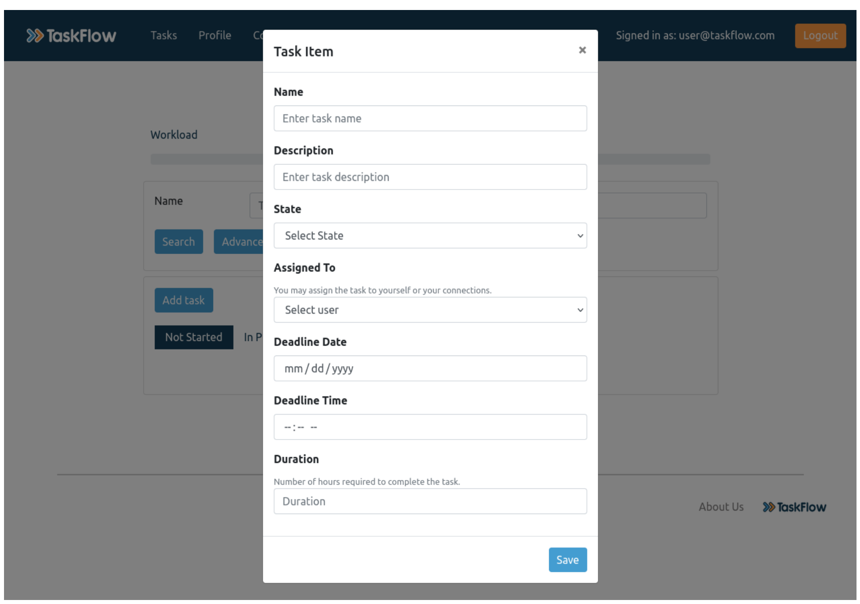
5.3.2 Tasks

This section of the User Manual describes how to use the task functionalities of TaskFlow. The following instructions assume that the user is on the Task page, after logging in to their account. To go to the “Tasks” page, click on “Tasks” on the Navigation bar at the top of the website.

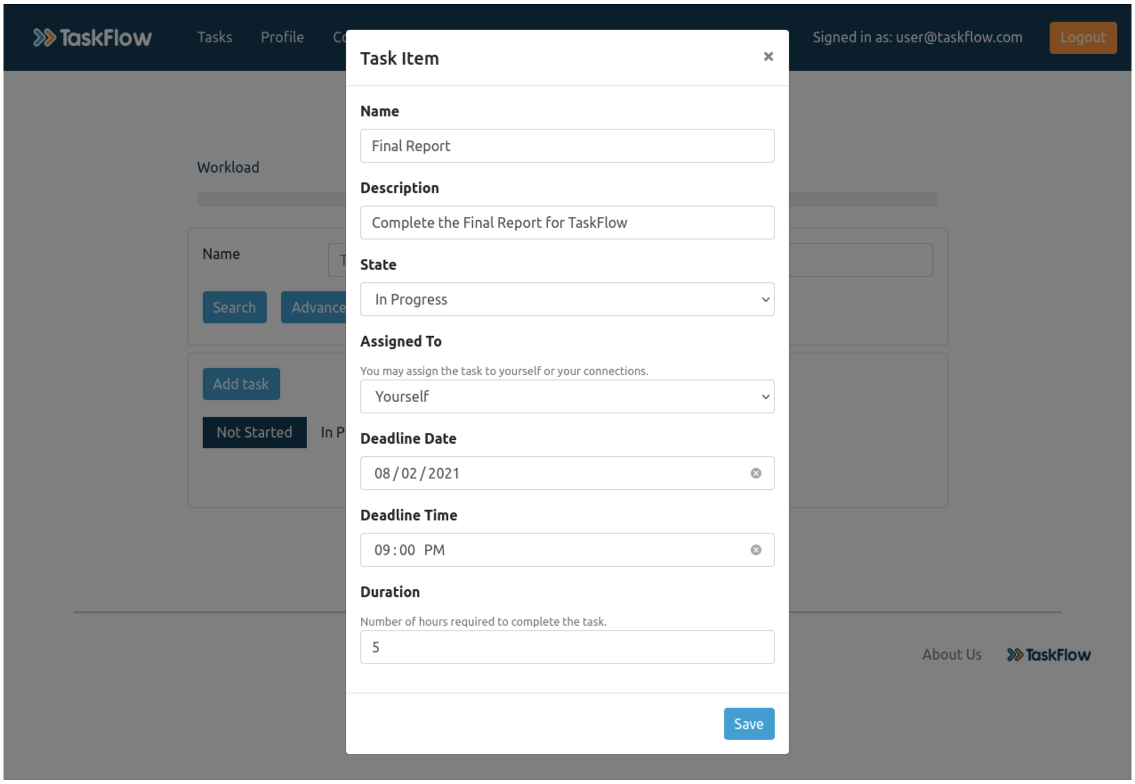


5.3.2.1 Create New Tasks

1. Click on "**Add task**"
2. Enter the relevant fields for the new task.
    a. The task name, description, state, assignee, and duration are required fields.
    b. Duration must be a positive integer which represents the number of hours
    c. Deadline is optional. However, if specified, both the date and time must be specified. Additionally, the date must be before the current date and time.
3. Click "**Save**" to create the new task.



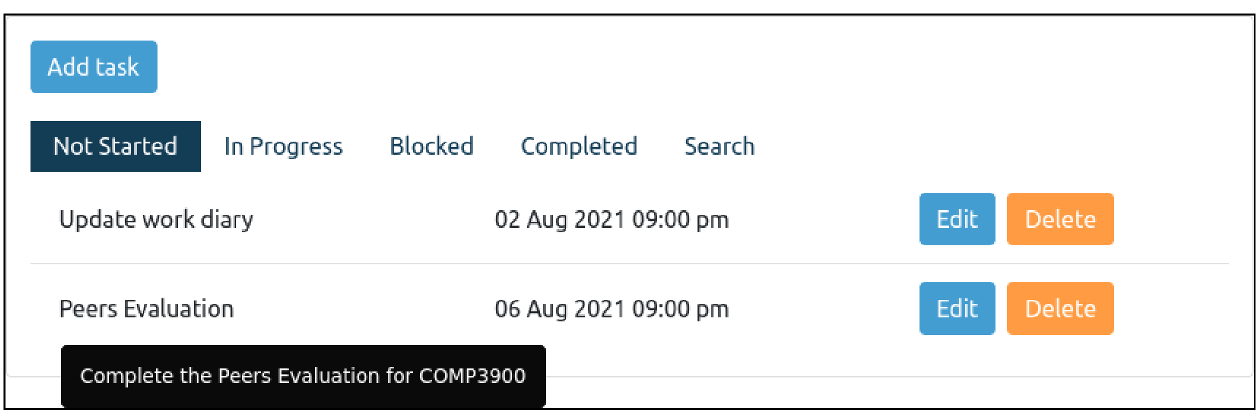
The following is an example of a valid task, assuming that the current time is before the task deadline at 9PM on 2nd August 2021.

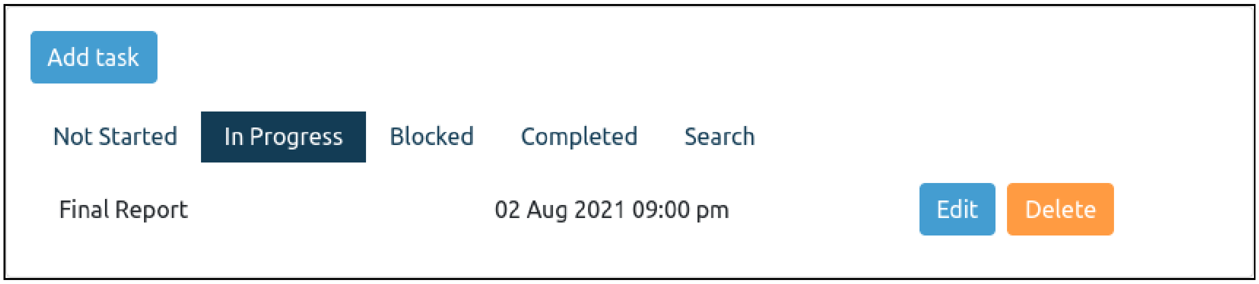


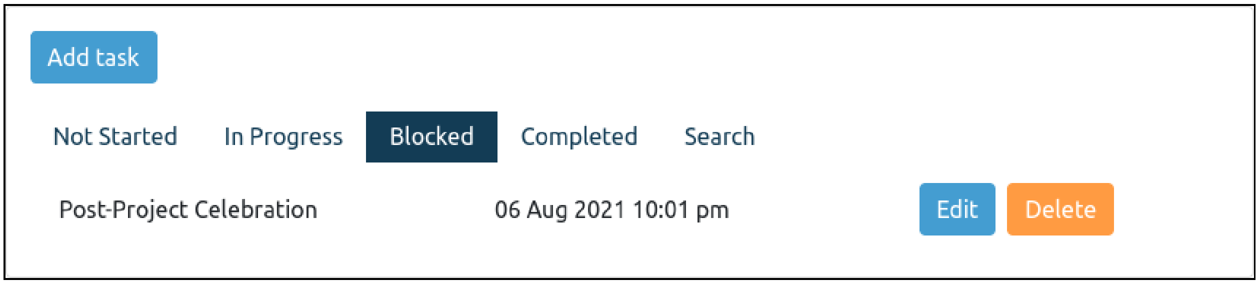
5.3.2.2 View Tasks

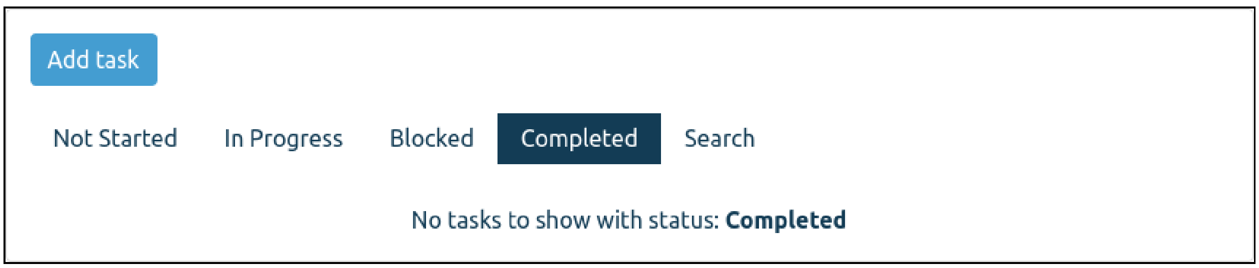
Click on the corresponding tab to view all the user's tasks in that state. For example, click on "Not Started" to view all the user's tasks with the state of "Not Started".

Hover over the task name to display the task description. Click on the "**Edit**" button to view all details.

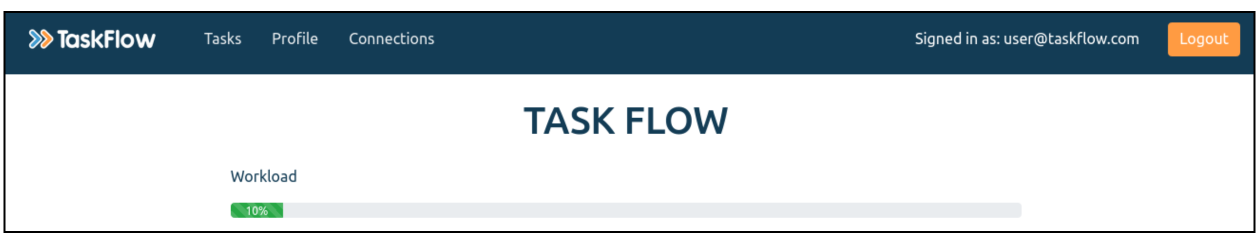








Your own workload can be viewed under "Tasks". Click on "Tasks" in the navigation bar to view your own proposed workload.



5.3.2.3 Edit and Delete Tasks

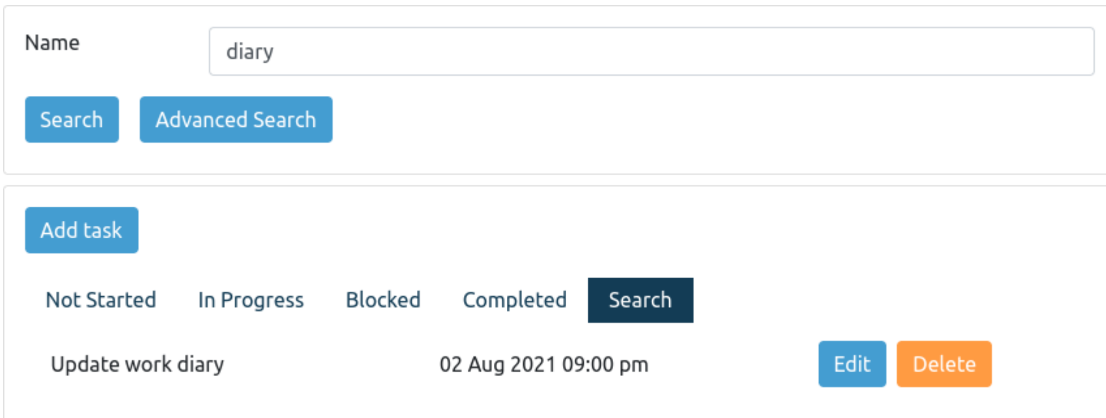
For each task:

- Click the "**Edit**" button to edit the corresponding task.
- Click the "**Delete**" button to delete the corresponding task.

5.3.2.4 Search Tasks

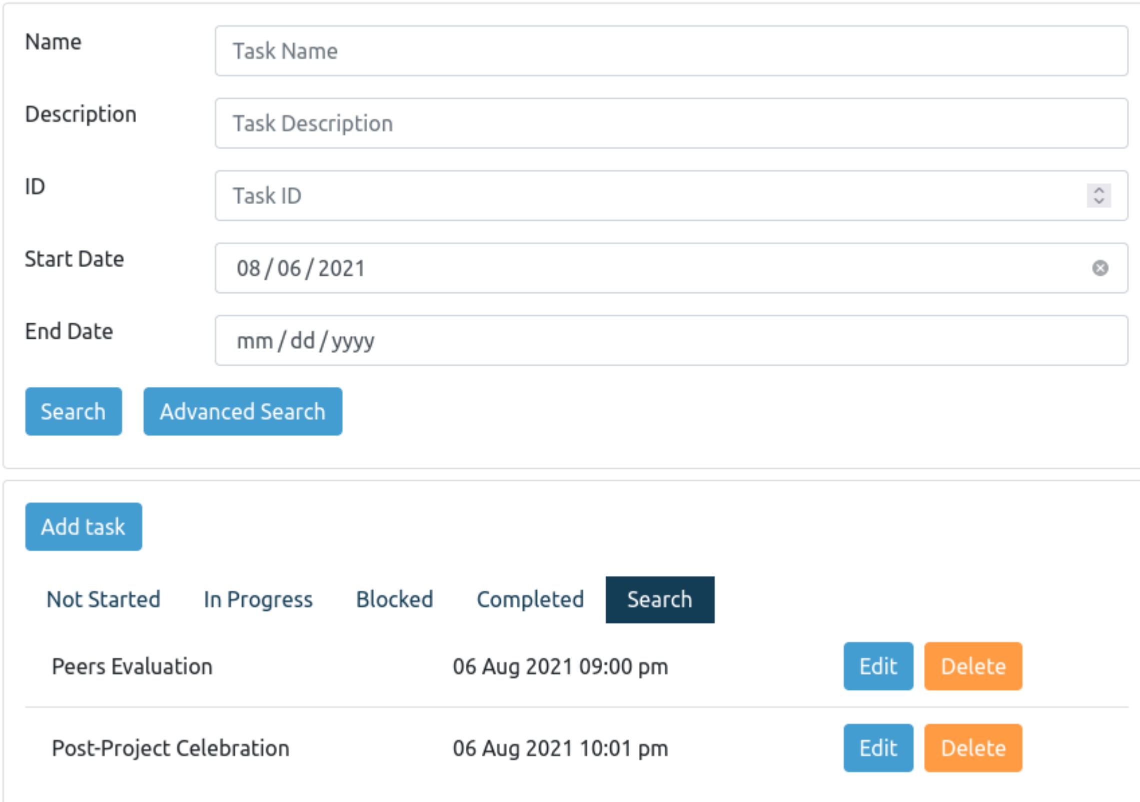
To perform a basic search:

1. Enter the task name to search for. If the name entered appears in a task name, then that task will be matched.
2. Click on the “Search” button. The “Search” tab will automatically be activated.



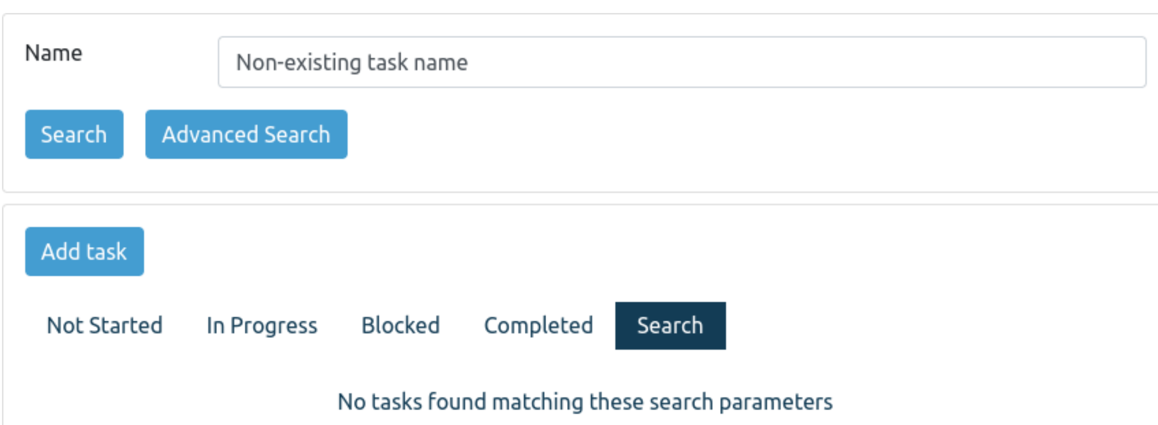
To perform an advanced search:

1. Click on the “Advanced Search” button to expand all the possible search parameters. Click the button again to collapse the advanced search parameters.
2. Enter in the relevant search parameters.
3. Click the “Search” button. The “Search” tab will automatically be activated.



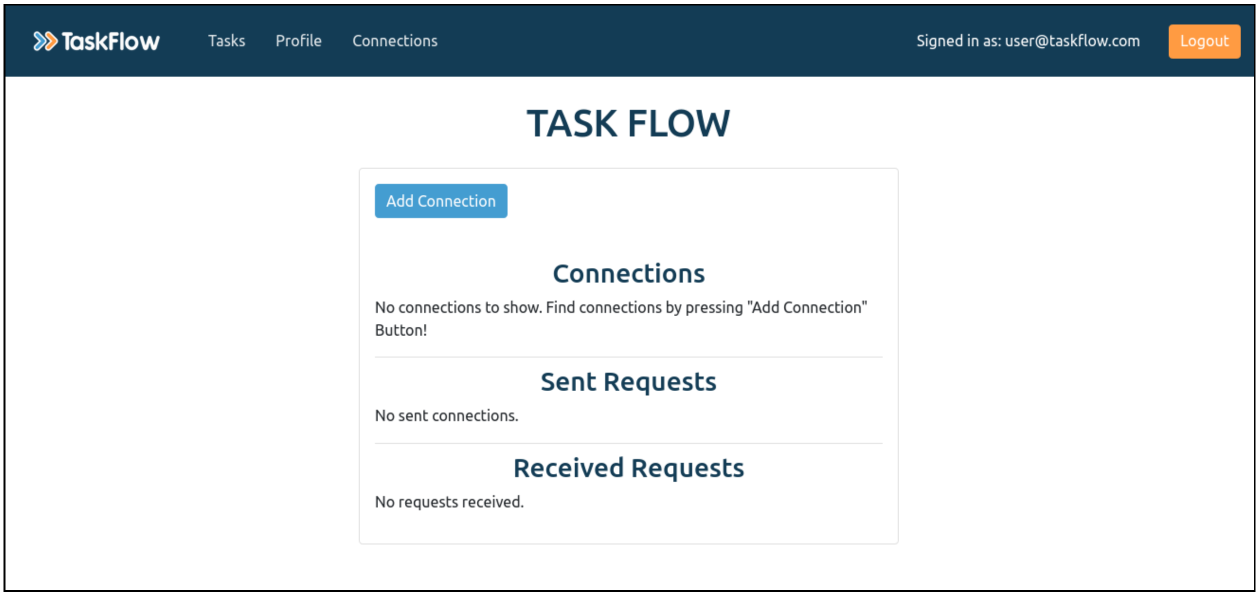
Points to note:

- If a search parameter is left empty, then this parameter will not be considered in the search.
- Matching tasks can always be viewed by clicking on the "Search" tab, until a new search is performed.
- A corresponding message will be displayed if no matching tasks are found.



5.3.3 Connections

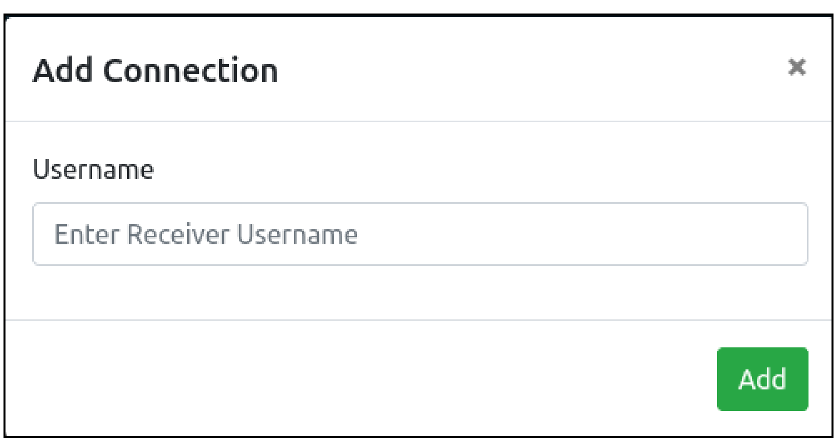
This section of the User Manual covers how to utilise connections subsection. All of the following guides would be on the “Connections” page. Log into the website and click on the connection tab on the top navigation bar, a similar screen would be displayed.



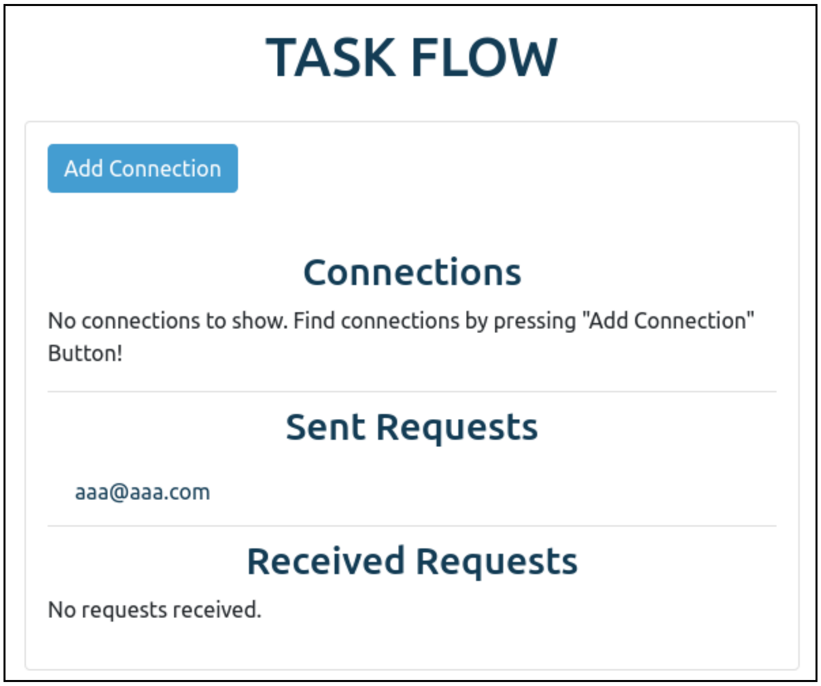
5.3.3.1 Add Connections

Adding Connection can be performed with the following steps:

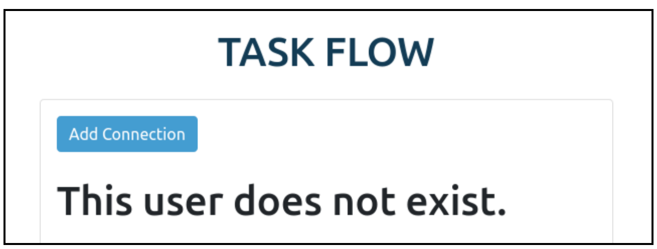
1. Click the “Add Connection Button”.
2. Type in the appropriate username of the Task Master you want to connect to.
3. Click “Add”.

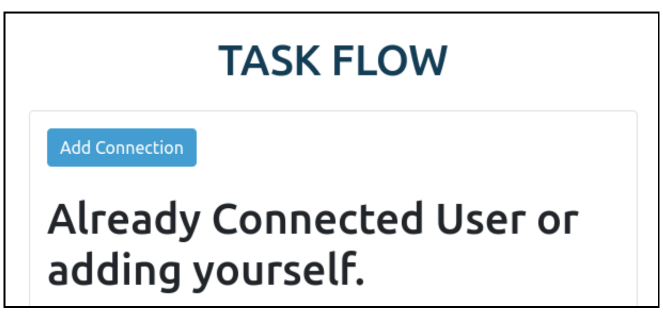


Successful request would update the main page with updated "sent request" details.



If invalid username were displayed, an error message would appear.





5.3.3.2 Respond to Connection Requests

Responding to connection requests can be performed under the "Received Request" section.

Upon getting a connection request, a similar screen would appear:

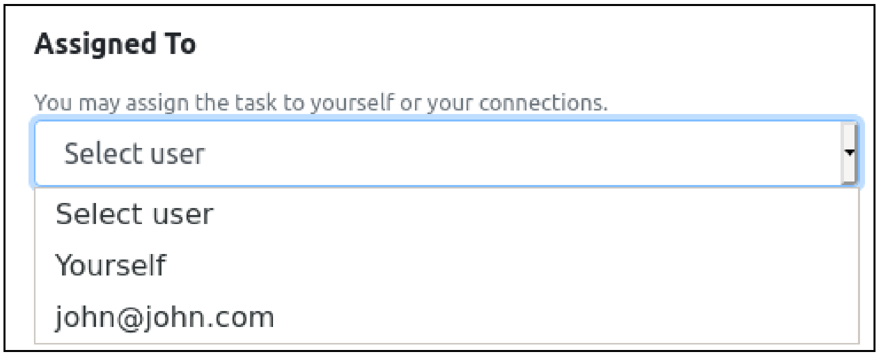
Simply clicking the button would update the connection status. Pressing Accept will move the requesting user to "Connections". When accepted, screen would be updated. Declining would delete the request.

5.3.3.3 View Connections

The list of successful connections are displayed under "Connections". A Task Master can view their connected Task Master's status by clicking on the View button next to their name. By clicking onto view button, similar screen would appear.

5.3.3.4 Assigning Tasks to Connections

Following the "Creating Task" guide in 5.3.2.1, the new "Assigned to" criterion will be updated automatically.


Assigned To
You may assign the task to yourself or your connections.
Select user
Select user
Yourself
john@john.com