

| Key | | |
|------|--------------|------|
| Pass | Partial Pass | Fail |

| Test ID | Scenario | Steps taken |
|---|--|---|
| E2E-01 | User accessing an available task and submitting an image for that task. Changes are visible in the leaderboard and individual profile. | <ol style="list-style-type: none"> User is able to create an account and log-in. <ol style="list-style-type: none"> User types invalid password. User types valid password. User navigates to tasks and selects a daily task to complete. User submits an image for the specific task. <ol style="list-style-type: none"> Task will a be submitting a vegetarian meal. Submits a text file Task submission gets moderated and accepted. User navigates to leaderboard page. <ol style="list-style-type: none"> Points are visible. User navigates to individual profile. <ol style="list-style-type: none"> Completed task is visible. Calculations on carbon savings are performed and displayed. |
| Task | | Actual Results |
| User is able to create an account and log-in. | | User is able to create a new account and it automatically logs then into their account. |
| User types invalid password and denied access. | | Information inputted by the user is erased from the input boxes and the user is not granted access to their account. |
| User types valid password and is granted access. | | After the login button is pressed, the user accesses their account. |
| User navigates to task and selects task. | | Task tab is visible on the left hand side and their able to navigate to it and expand a task to reveal all the information. |
| User submits an image of a vegetarian meal. | | The user receives a message and their are sent back to the task screen. They have successfully submitted the evidence. |
| User submits a text file and it denies the submission with a message. | | Submission is denied but message is not abstracted and returns a log-like message. |
| Task gets moderated and accepted. | | User with moderator privileges sees the submitted tasks and accepts them. The task disappears. There is no immediate feedback for approving. |
| Task gets moderated and denied. | | User with moderator privileges sees the submitted tasks and denies them. The task disappears. There is no immediate feedback for denying. |

| | |
|---|---|
| User navigates to leaderboard page. | User is able to see the leaderboard tab on the left and is able to navigate to it. |
| User and total points are visible on the leaderboard page. | User Davi is able to see their name on the leaderboard and see that they have gained the points from the accepted task. |
| User navigates to individual profile. | User is able to see and navigate to the profile tab on the left. |
| Completed tasks are visible on user profile. | Profile tab does not show the user's completed tasks. |
| Calculations of carbon savings are performed and displayed. | Carbon savings are displayed on each individual task, but no calculations are displayed. Travel tab shows calculations for points based on distance travelled and mode of transport but does not display carbon savings. |

- 1. Sign up and login
 - a. Screenshot:

When user and password are empty, the information is logged:

```
2026-02-18T17:15:32.692Z INFO 194422 --- [nio-8080-exec-9] com.carbon.controller.LoginController : Username or password cannot be empty.
```

User signs up:



Redirected into the main page:

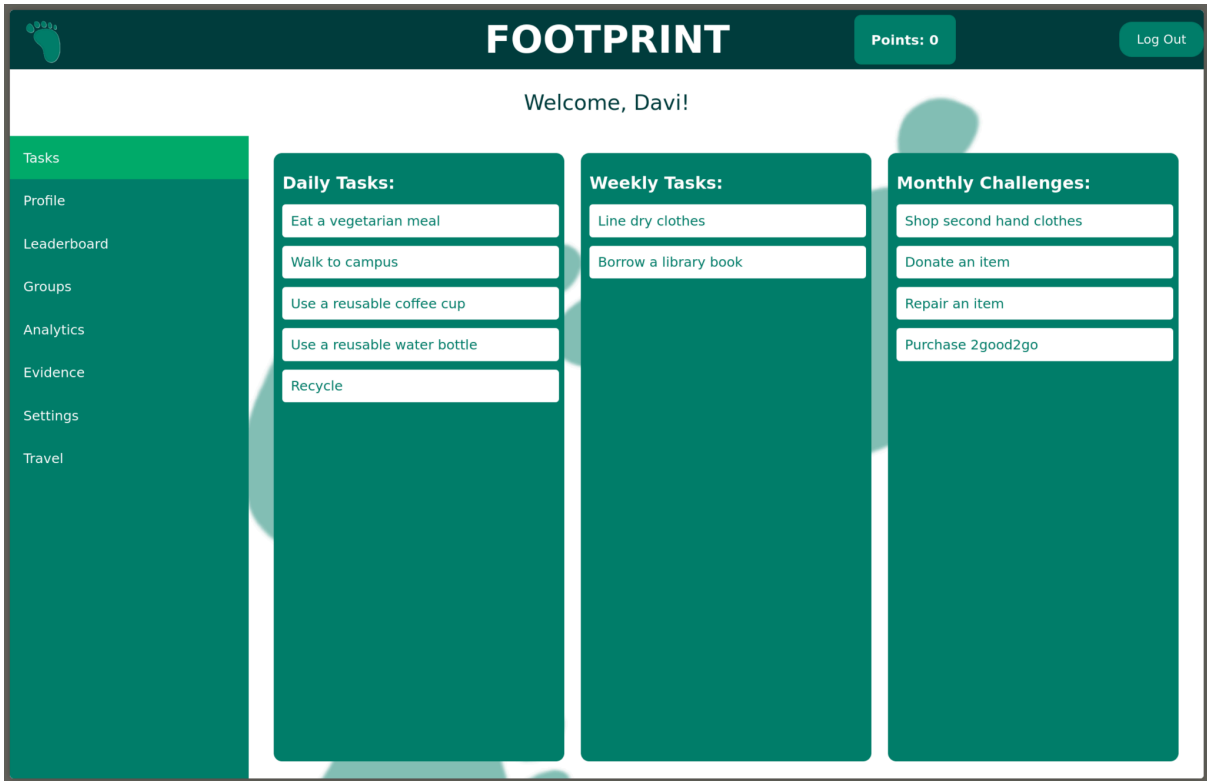
The screenshot shows the main interface of the 'FOOTPRINT' application. At the top, a dark green header contains the 'FOOTPRINT' logo, a 'Points: 0' indicator, and a 'Log Out' button. Below the header, a white banner displays 'Welcome, TestUser!'. A left-hand sidebar lists navigation options: Tasks, Profile, Leaderboard, Groups, Analytics, Evidence, Settings, and Travel. The main content area is divided into three columns: 'Daily Tasks' with five items (Eat a vegetarian meal, Walk to campus, Use a reusable coffee cup, Use a reusable water bottle, Recycle), 'Weekly Tasks' with two items (Line dry clothes, Borrow a library book), and 'Monthly Challenges' with four items (Shop second hand clothes, Donate an item, Repair an item, Purchase 2good2go).

b. Screenshot:

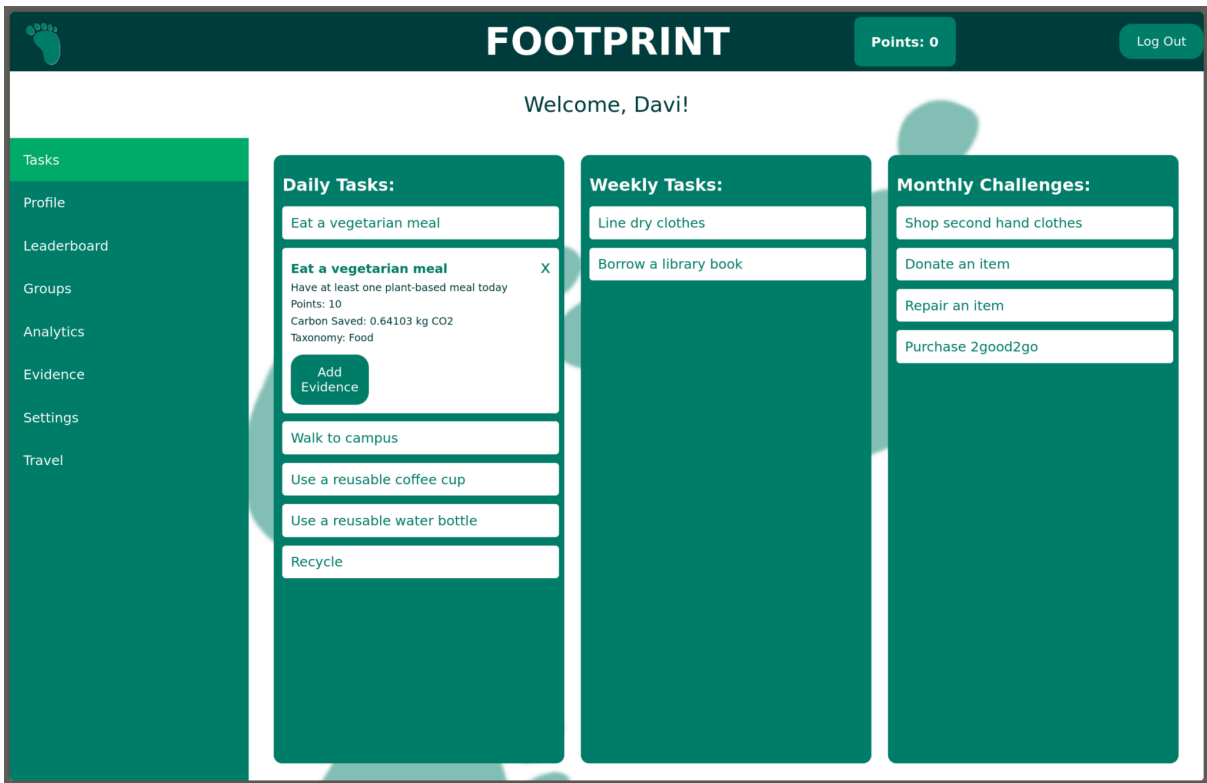
User enters their login details:

This screenshot shows the login and sign-up page of the 'FOOTPRINT' application. The header is identical to the previous page. On the left, a vertical sidebar contains a sign-up form with fields for 'Username...', 'Password...', 'First Year' (a dropdown menu), and 'Streatham' (a dropdown menu). Below these fields is a checkbox for 'I consent to data collection following guidelines outlined in legal documents', followed by a 'SIGN UP' button. At the bottom of the sidebar are fields for 'Davi' and a masked password field, with a 'LOG IN' button below them. The main content area features the title 'Our Purpose' and two paragraphs of text explaining the application's goal to reduce carbon footprints through daily tasks and monthly challenges, with a leaderboard to encourage participation.

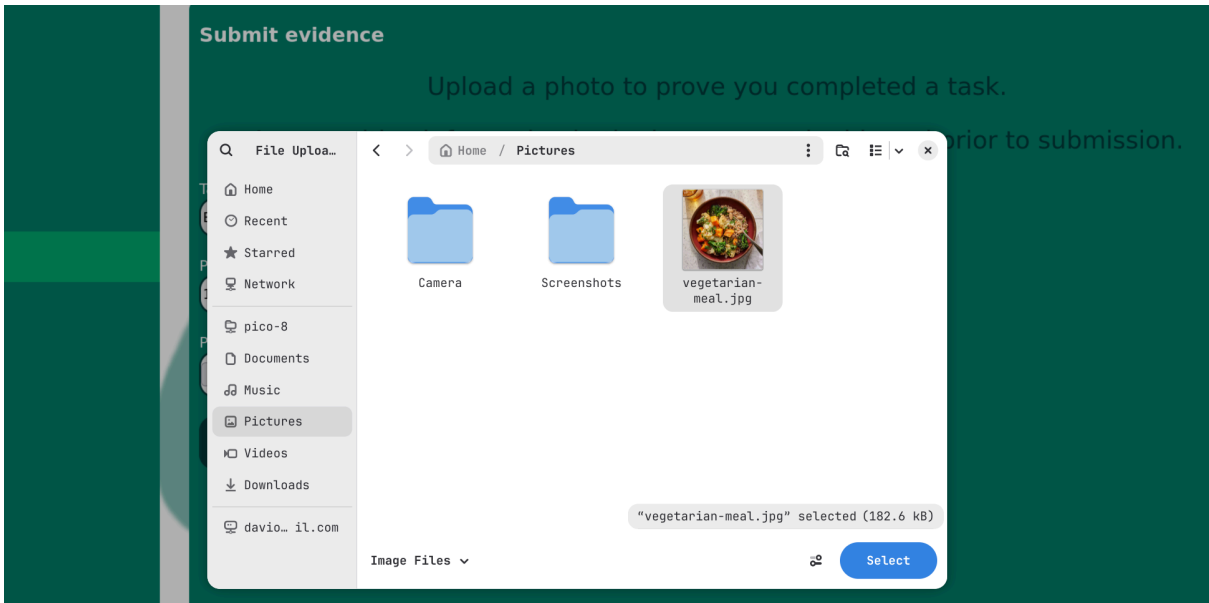
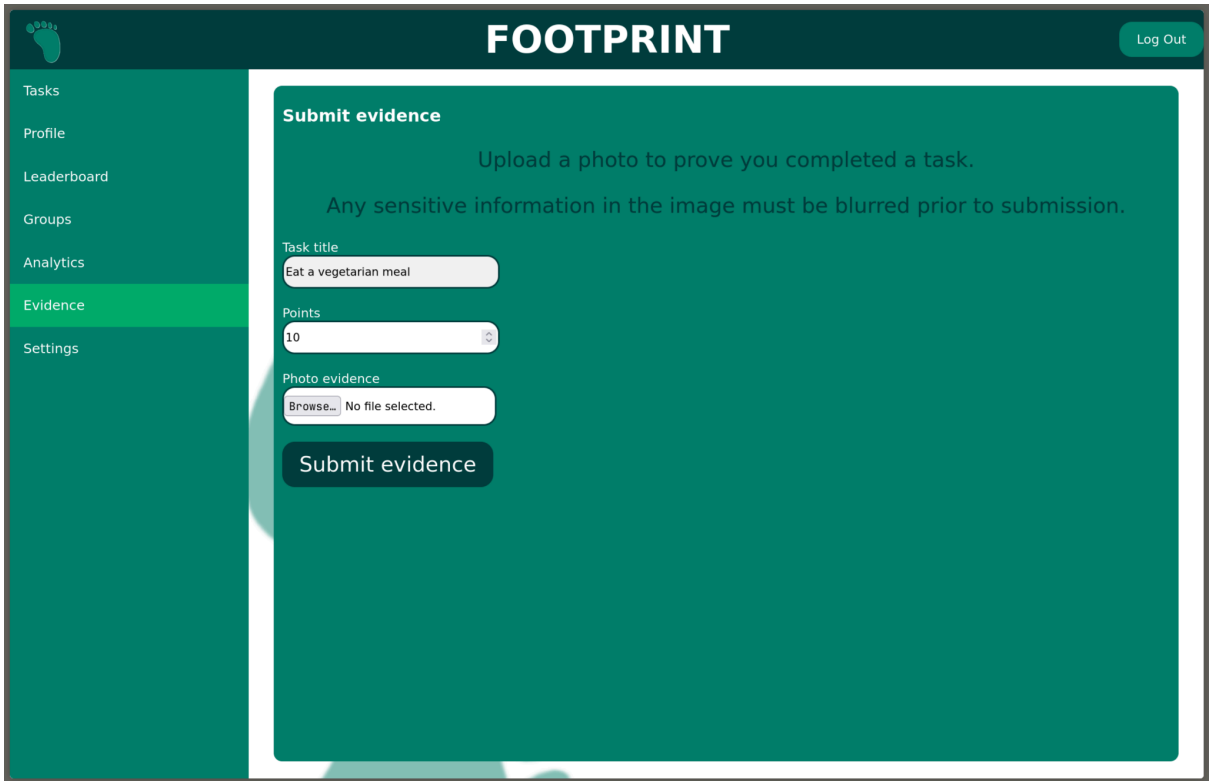
User redirected:



2. Navigates to tasks page and selects task to complete
The task “Eat a vegetarian meal” is selected




User redirected:



Screenshot of moderator accessing hidden tab for the submissions:

3. Submitting

a. Picture



Tasks

Profile

Leaderboard

Groups

Analytics

Evidence

Settings

FOOTPRINT

Log Out

Submit evidence

Upload a photo to prove you completed a task.

Any sensitive information in the image must be blurred prior to submission.

Task title

Please select a task from the Tasks page

Points

Points


Photo evidence

Browse... No file selected.

Submit evidence

Evidence submitted and pending review.

b. Text file:



Tasks

Profile

Leaderboard

Groups

Analytics

Evidence

Settings

FOOTPRINT

Log Out

Submit evidence

Upload a photo to prove you completed a task.

Any sensitive information in the image must be blurred prior to submission.

Task title

Eat a vegetarian meal

Points

10

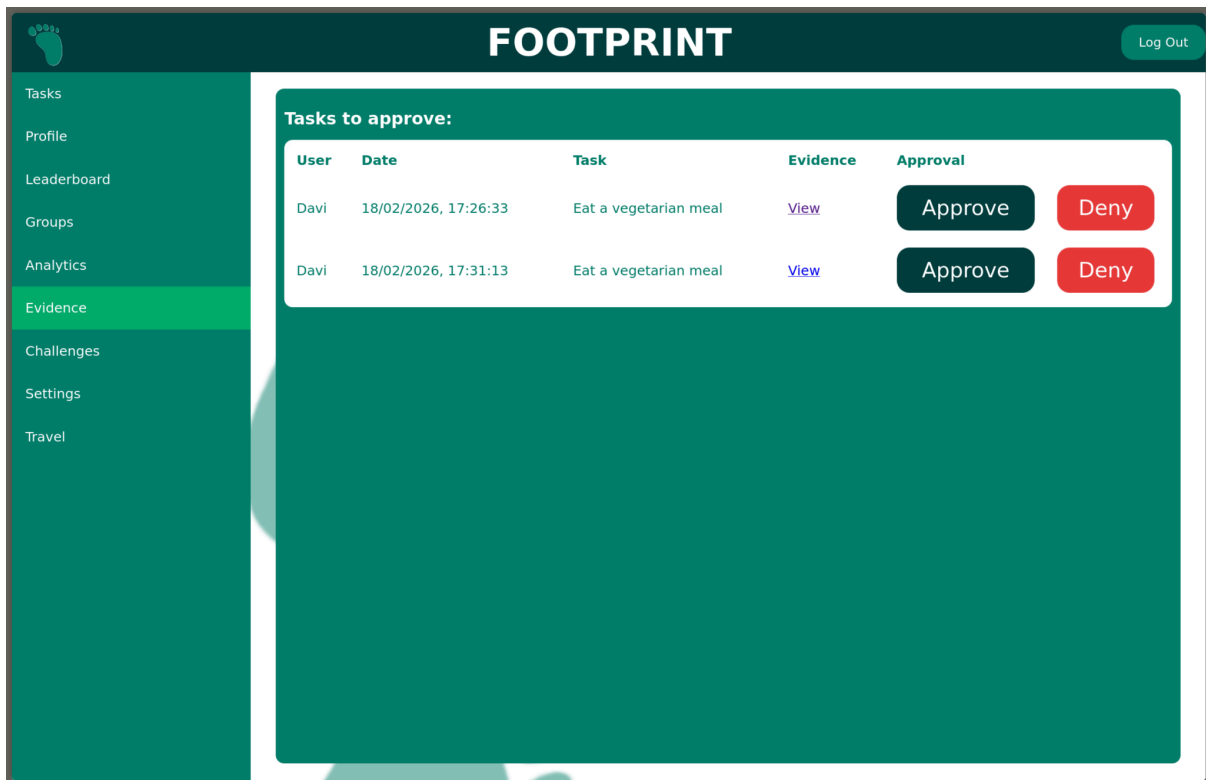
Photo evidence

Browse... test.txt

Submit evidence

```
{"timestamp": "2026-02-18T17:29:26.469+00:00", "status": 500, "error": "Internal Server Error", "path": "/api/evidence"}
```

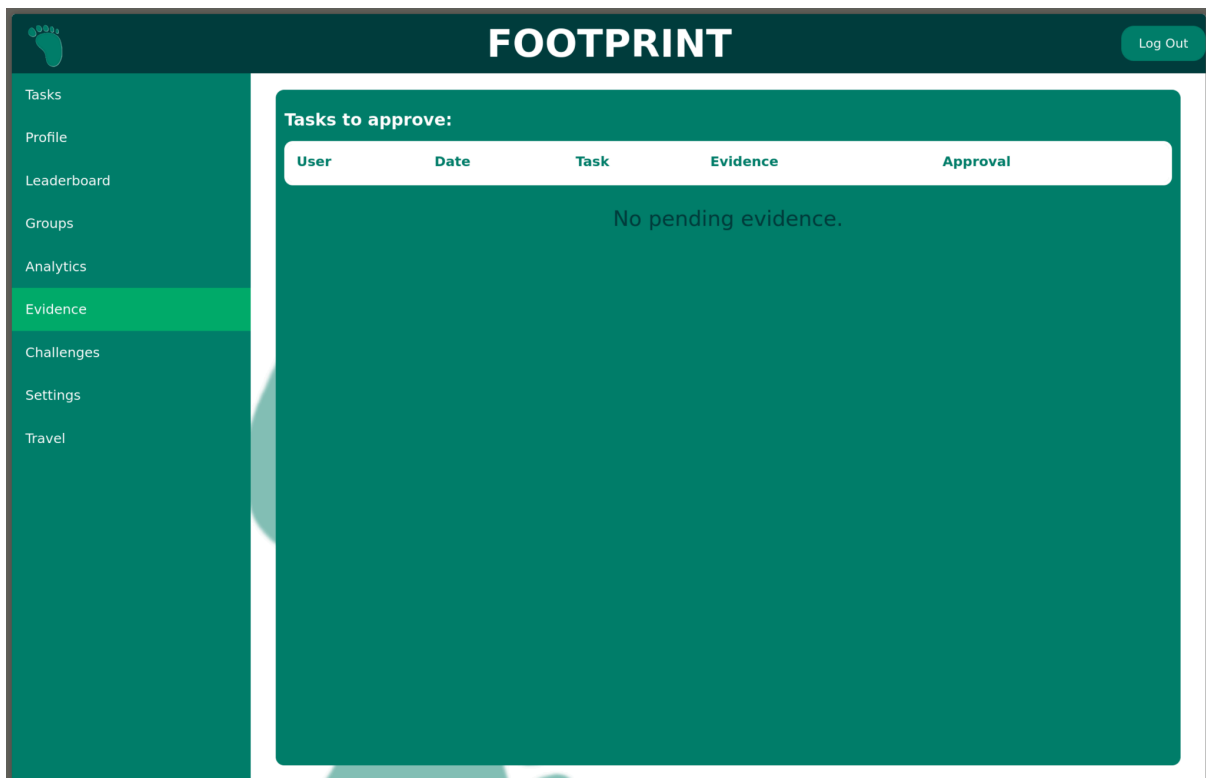
4. Tasks gets moderated and, approved and denied
On moderator account with credentials (Username: Ben, Password: 123):



The screenshot shows the FOOTPRINT application interface. The left sidebar contains a menu with the following items: Tasks, Profile, Leaderboard, Groups, Analytics, Evidence (highlighted in green), Challenges, Settings, and Travel. The main content area is titled 'Tasks to approve:' and displays a table with two rows of tasks. Each row includes a 'User' column, a 'Date' column, a 'Task' column, an 'Evidence' column with a 'View' link, and an 'Approval' column with 'Approve' and 'Deny' buttons.

| User | Date | Task | Evidence | Approval |
|------|----------------------|-----------------------|----------------------|--|
| Davi | 18/02/2026, 17:26:33 | Eat a vegetarian meal | View | <button>Approve</button> <button>Deny</button> |
| Davi | 18/02/2026, 17:31:13 | Eat a vegetarian meal | View | <button>Approve</button> <button>Deny</button> |


Moderator approves one submissions and denies one submission.



The screenshot shows the FOOTPRINT application interface after the moderator has approved one submission and denied one submission. The left sidebar remains the same, with 'Evidence' highlighted. The main content area is titled 'Tasks to approve:' and displays a table with the same headers as the previous screenshot. However, the table is empty, and the text 'No pending evidence.' is displayed in the center of the table area.

| User | Date | Task | Evidence | Approval |
|----------------------|------|------|----------|----------|
| No pending evidence. | | | | |

5. Leaderboard display
User Davi has 10 points:



Tasks

Profile

Leaderboard

Groups

Analytics

Evidence

Settings

Travel


FOOTPRINT

Log Out

Leaderboard

| User | Points |
|--------|--------|
| Bob | 85 |
| Ben | 80 |
| Abon | 50 |
| Casper | 50 |
| Steve | 30 |
| Abot | 25 |
| Mark | 25 |
| Steve | 20 |
| Davi | 20 |
| marko | 15 |

6. Individual profile is displayed
Tasks and points are not displayed for the specific user



Tasks

Profile

Leaderboard

Groups

Analytics

Evidence

Settings

Travel


FOOTPRINT

Log Out

Tasks Completed:

| Task name | Date | Points | Approval |
|--------------|--------------|----------------|------------------|
| example name | example date | example points | example approval |
| example name | example date | example points | example approval |
| example name | example date | example points | example approval |

7. Calculations displayed

 **FOOTPRINT** [Log Out](#)


[Tasks](#)
[Profile](#)
[Leaderboard](#)
[Groups](#)
[Analytics](#)
[Evidence](#)
[Settings](#)
[Travel](#)

Enter Travel Info

Travel Method
Walk

Distance (km)
5

Enter Distance

 **FOOTPRINT** [Log Out](#)

[Tasks](#)
[Profile](#)
[Leaderboard](#)
[Groups](#)
[Analytics](#)
[Evidence](#)
[Settings](#)
[Travel](#)

Enter Travel Info

Travel Method
Walk

Distance (km)
5

Enter Distance

Points Calculation

| | |
|---|--------|
| Travel Type: | walk |
| Distance: | 5.0 km |
| Points per km: | 5 |
| Calculation: 5.0 km × 5 points/km = 25 points | |
| Points Earned: 25 | |
| Total Points: 35 | |