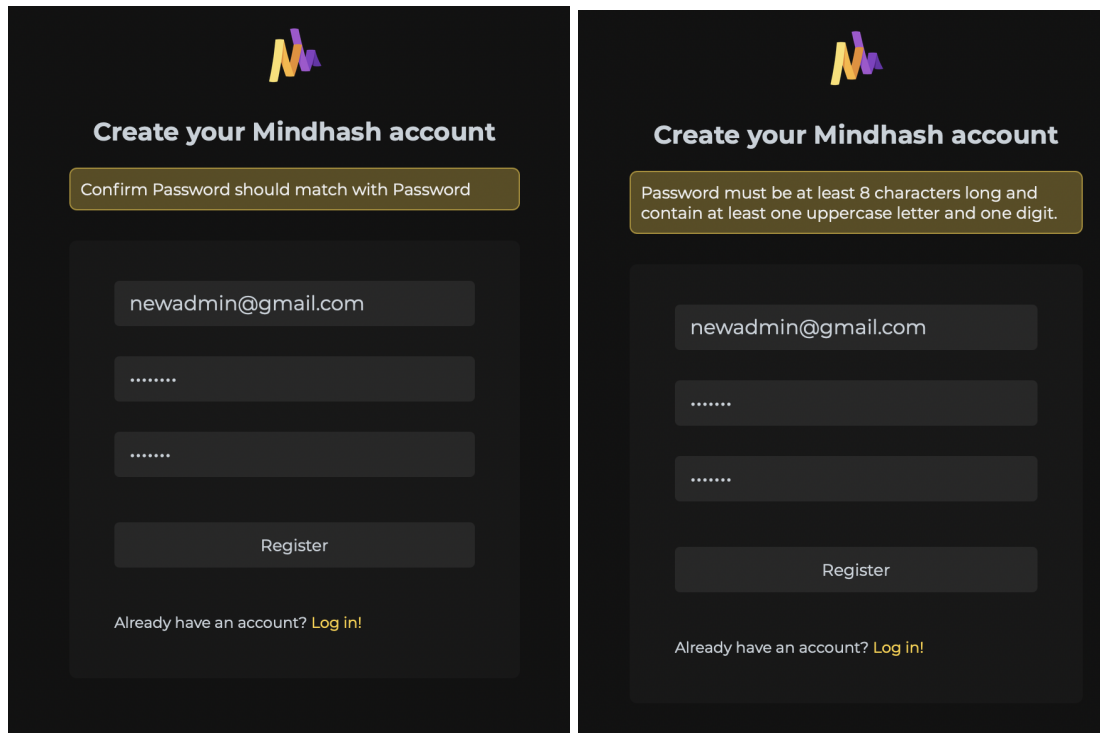# System testing

For system testing, the goal was to evaluate the system from the user's point of view and make sure it meets the requirements. The following test cases were considered:

Test case	Test data	Expected result	Pass/Fail
1.If the website launches properly on the login page	Tested by all team members	Login page is displayed to the user after website launch; Mindhash Logo is displayed above the login form; upon clicking on Mindhash logo, the website switches to dark mode	Pass
If the user can register Requirements: ● Password at least 8 characters long with at least one uppercase letter and one number	**1. Test data meeting the requirements:** Email: newadmin@gmail.com Pass: 1234567A Confirm Pass: 1234567A **2. Test data not meeting the requirements** 2.1 passwords do not match Email: newadmin@gmail.com Password: 1234567A Confirm Password: 1234567 2.2 password does not contain an uppercase letter Email: newadmin@gmail.com Password: 1234567 Confirm Password: 1234567	1. User is redirected to the registration successful page 2. User is displayed an appropriate error message (user is not redirected to the next page)	1. Pass 2.Pass((see Fig.1)
If the user is sent verification email after registration	1. Opening an active verification link 2. Opening an expired verification link/link with token which has already been verified	User's verification email contains a heading "Email Verification required"; body of the email contains a link which redirects the user to the page displaying the results of the verification	1. Pass (see Figure 2) 2. Pass(see Figure 2)
If the user can login	1. **Entering correct login credentials**	1. User is redirected to the recordings page	1. Pass

	2. **Entering incorrect login credentials** 2.1 credentials with existing email, wrong password 2.2 credentials with existing password, wrong email 2.3 completely wrong credentials	2. User is displayed appropriate error message (user is not redirected to the next page)	2. Pass(see Fig.3)
If the user can see a list of recordings upon logging in	1. Logging in under admin account 2. Logging in under non-admin account which has access to some of the recordings 3. Logging in under non-admin account which does not have access to any of the recordings	1. User can see a list of all the recordings 2. User can see a list of recordings he has access to 3. User cannot see any of the recordings	1. Pass (see Fig.4.1) 2. Pass (see Fig.4.2) 3. Pass (see Fig.4.3)
If the user can see the dashboard for each recording	Tested under several accounts	User can click on any of the recordings in the list to be redirected to the page with the dashboard for that particular recording, user can click on the return button to go back to the list, after that, the user can click on another recording and be redirected to a different dashboard	Pass
If the content of the dashboard page is properly displayed and aligned	1. Checking the content is properly displayed upon clicking on the recording for the first time 2. Checking the content is properly displayed after reloading the page 3. Checking the content is properly displayed after going back to a list of all recordings and clicking on the recording again		Pass

If the user can filter and choose an object in the list of objects	1. Filtering vehicles in the list of objects, clicking on a couple of filtered vehicles 2. Filtering pedestrians in the list of objects, clicking on a couple of filtered pedestrians 3. Filtering two-wheelers in the list of objects, clicking on a couple of filtered wheelers	After choosing a certain category, user is displayed a list of objects of that category with their object ids; upon clicking on the object, a speed-time graph is shown for that object	Pass (see filtered lists and graphs for objects of different categories in Fig.5)
If the user can upload a JSON of the recording	1. Logging in under admin account 2. Logging in under non-admin account	1. Profile page contains an option to upload the JSON of the recording 2. Profile page does not contain an option to upload the json	1. Pass (see Fig. 6.1) 2. Pass (see Fig. 6.2)
If the user can grant access of the recording to another user	1. Logging in under admin account 2. Logging in under non-admin account	1. Profile page contains an option to grant access to a recording to a particular user. The admin user can click on the email and RecordingId fields and choose from a list of options 2. Profile page does not contain an option to grant access.	1. Pass (see Fig.7) 2. Pass(see Fig. 6.2)
If the user can log out	Tested under several accounts	1. Profile page contains a logout button. Upon clicking on the button, the user is redirected to the login page.	Pass (see Fig. 6.1 & 6.2 for logout button)
If the user can reset their password If the user can reset their password (continuing)		Login page contains "Forgot password? Click here" button which redirects the user to a page where he is asked to enter his email. After entering his email:	

	1.1 Entering email which exists in the database 1.2. Entering email which does not exist in the database --------------------------------------	1.1. Password reset link is sent to user's email 1.2. "Unable to send password reset link" is displayed (no password reset link is sent) ------------------------------- User's password-reset email contains a heading "Password reset request"; body of the email contains a link which redirects the user to a page where he is asked to enter a new password Upon clicking on "save password" button:	1.1 Pass (see Fig.8) 1.2 Pass -----------------
	2.1 Opening an active password reset link	2.1. User is redirected to the next page displaying that the password reset was successful	2.1. Pass
	2.2 Opening an expired password reset link 2.3 Opening a password reset link with a non-existent token	2.2. User is shown an error message 2.3. User is shown an error message	2.2. Pass(see Figure 8) 2.3. Pass (see Figure 8)

Figure 1. Error messages when registration requirements are not met.
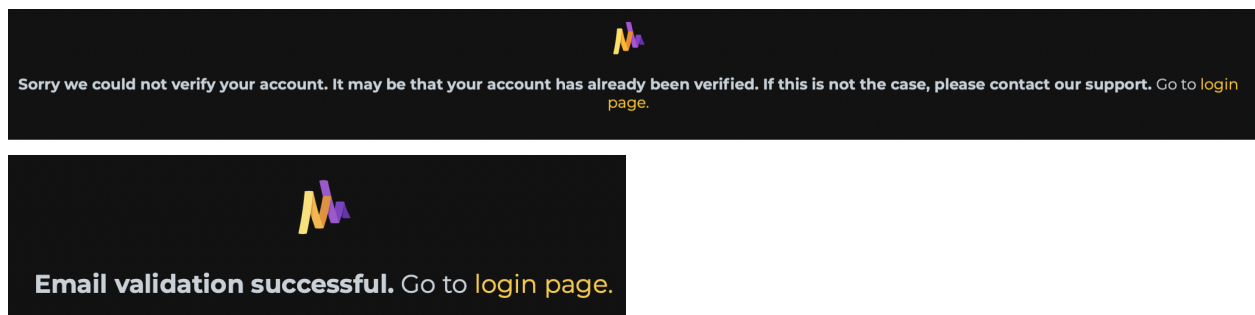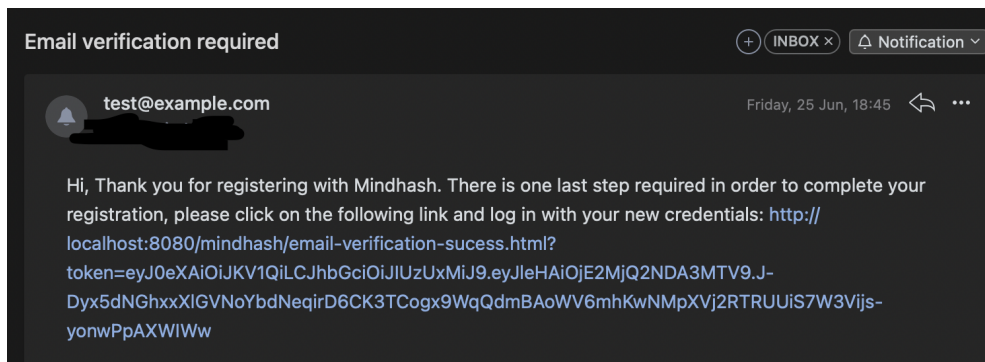
Figure 2. Email verification results.

Figure 3. Error message when login credentials are incorrect

Figure 4.1. Admin account with access to all of the recordings

Figure 4.2 Non-admin account with access to some of the recordings

Figure 4.3 Non-admin account without access to any of the recordings
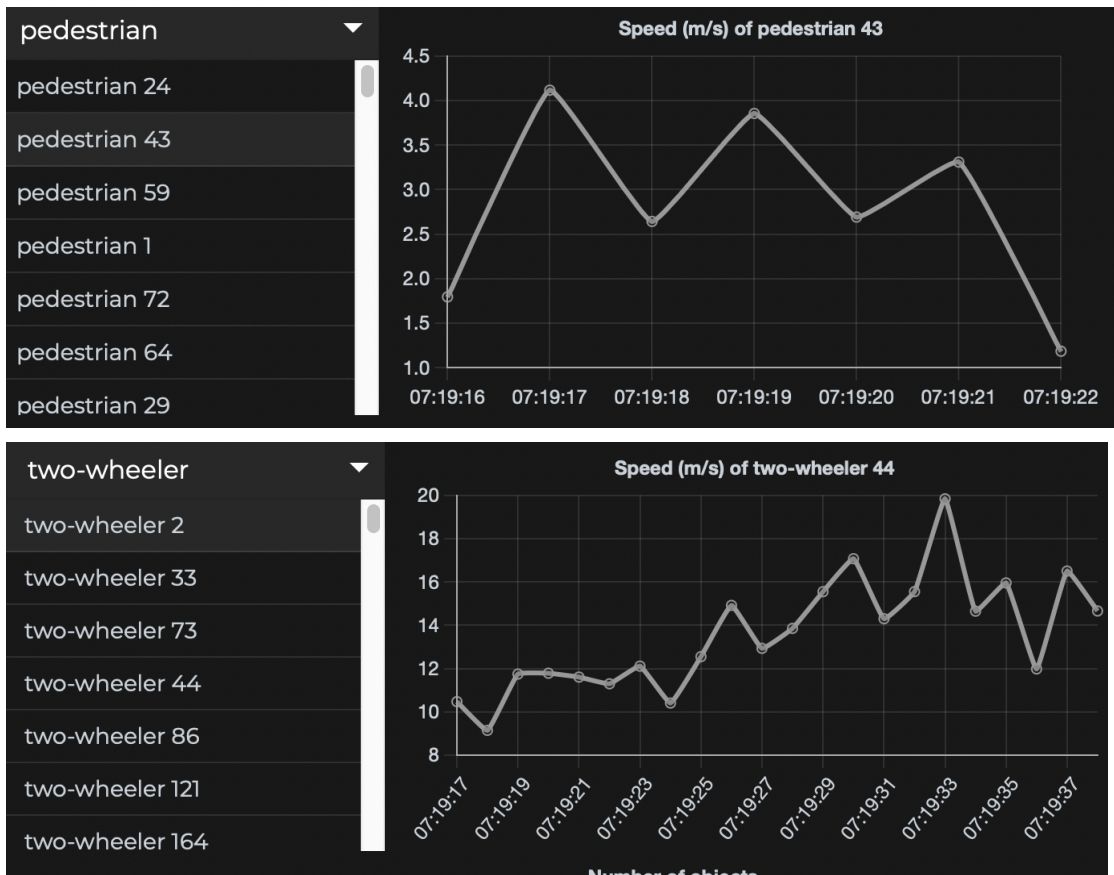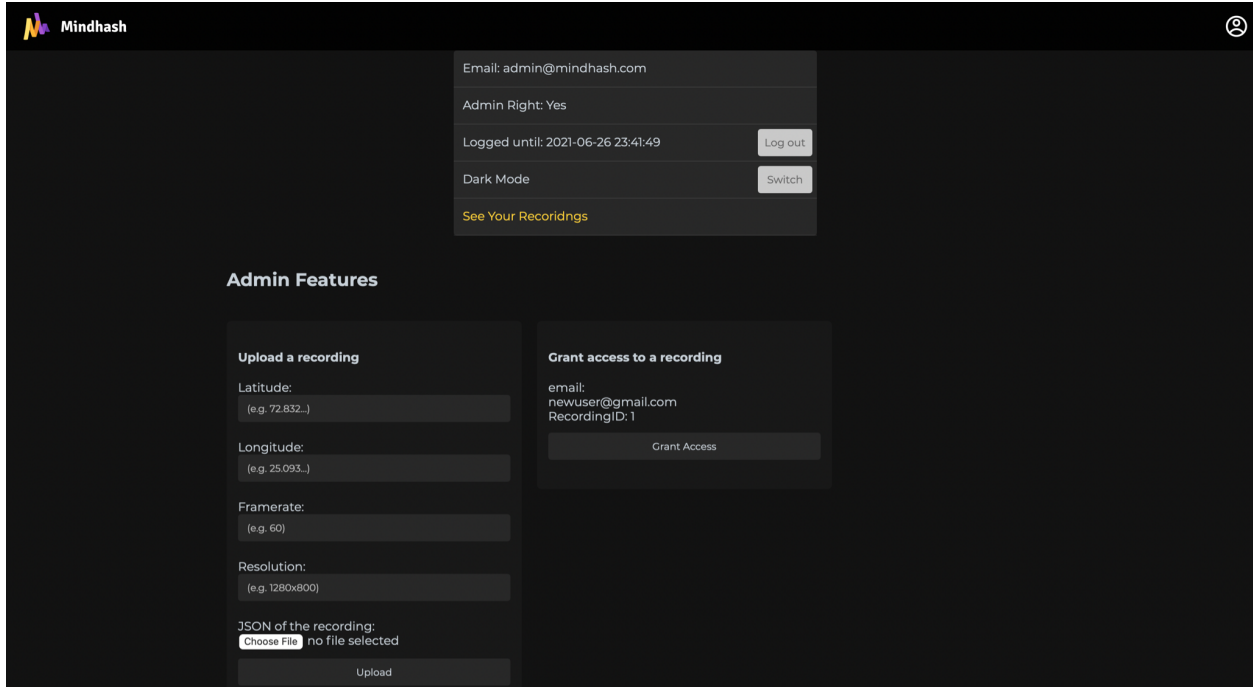

Figure 5. List of objects with speed-time graphs
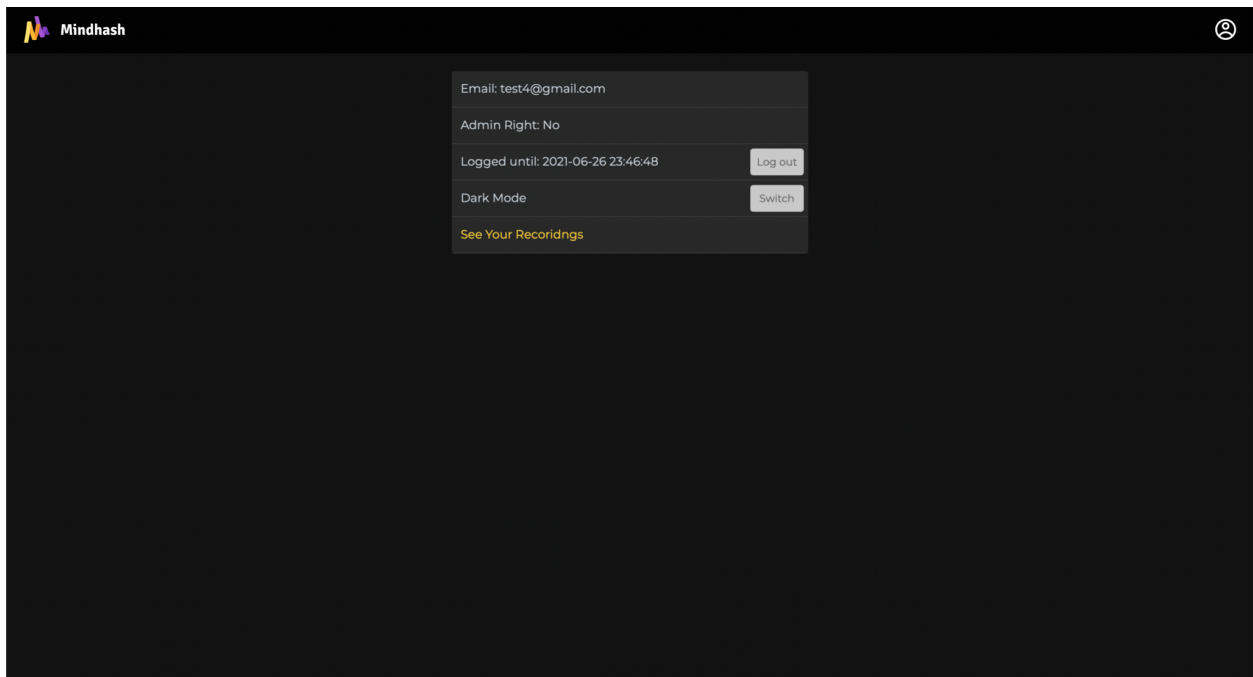
Figure 6.1 Admin profile page with JSON upload option.

Figure 6.2. Non-admin page with non-existent JSON upload option and grant access option
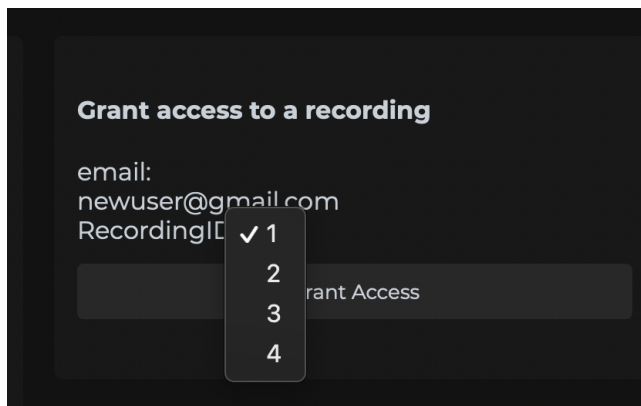
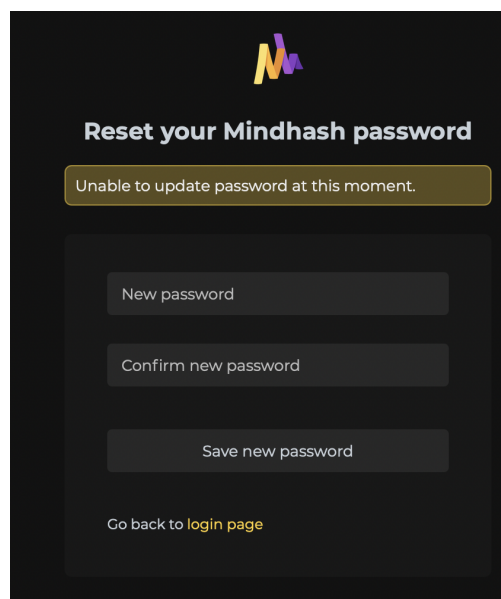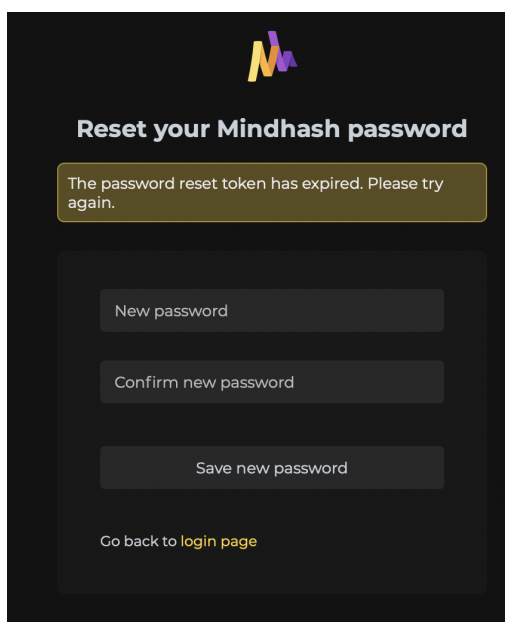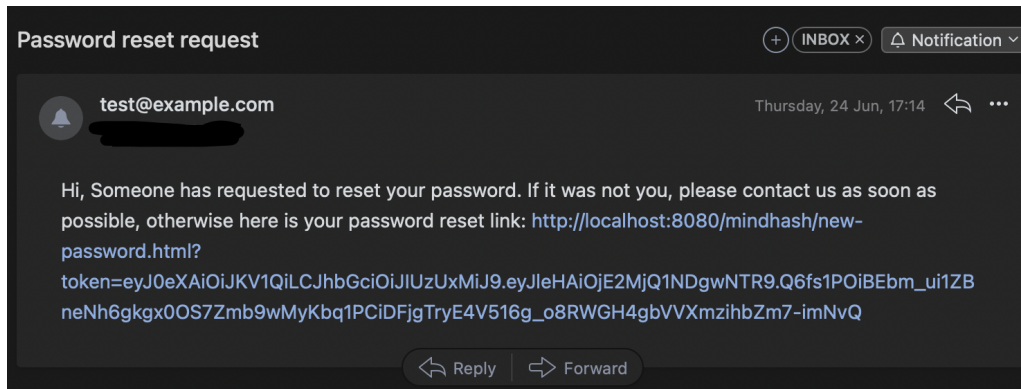*Figure 7.1. Admin page with grant access option.*

Fig.8.Password reset. Err message for expired password reset token(2), non-existent token(3)