

Documentation

NYCEstate

<https://nycestate.000webhostapp.com/>

Web Programming PHP 1

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Major: Internet technologies

Module: Web programming

Subject: Web Programming PHP 1

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1. Introduction

1.1 Technologies used

Primary technologies used for this website are PHP, JavaScript, HTML and CSS with additional styling from bootstrap

1.2 Broad description of functionality

General functionality

- Dynamic menus, only showing users the links they are allowed to access
- Protection from unauthorized access both on the frontend and on the backend
- Frontend error handling
- Success messages
- Checks mentioned throughout the documentation are performed both on the frontend and the backend whenever possible

index.html

- Loads all boroughs with listings into a dropdown field.
- Pressing the search button redirects the user to the listings page, preselecting the borough selected from the dropdown field, if one is selected.

listings.html

- Allows for querying listings based on the text in their title, the borough that they are in as well as the building type of the listing
- Allows for sorting listings based on recency, price, and size in feet
- Displays listings according to the filters and sorting mentioned above
- Initially the title, description, size and price of the listings are displayed.
- On hover, the aforementioned data is superseded by additional information, that being the building type, borough and any rooms provided during listing creation of the listing.
- Listings can be added to favorites by pressing the heart outline icon present on all non-favorite listings, only logged in users can add listings to favorites.
- Listings can be removed from favorites by pressing the heart icon present on all favorite listings.
- Users can open the listing page of the listing they'd like by pressing the read more buttons present on all listings.
- Users' sort and filter selections are saved upon every search

favorites.html

- Displays all listings previously added to favorites
- The listings are displayed in the same format as in listings.html

listing.html

- Displays complete information about a given listing based on URL search parameters
- Users can click on the borough/building type of the listing and be taken back to listings.html with the borough/building type clicked on applied as the appropriate filter

- Users can click on the copy phone number button to copy the phone number of the agency into their clipboard (the phone number is universal and not specific to the listing, loaded from a PHP file)

survey.html

- Allows logged in users to answer well formatted questions provided by the website admins.
- Removes question from view once it is answered.
- Only shows currently active questions/answers.
- Questions have at least two active answers each at all times.

contact.html

- Allows logged in users to send messages to the website admins.
- Users must define the title of the message, between two and five words, before submitting their message.
- Users must choose from message types defined by the admins before submitting their message.
- Users must define the body of the message, between three and fifteen words, before submitting their message.

admin.html

- Allows website admins broad control over all dynamically displayed items on the website, including inserting, editing, deleting, soft deleting, and restoring items.
- Allows website admins to view messages submitted by other users
- Allows website admins to view answer statistics of questions, current and previous ones.

register.html

- Allows users to register to the website, allowing greater use.
- Guarantees strong user passwords with modern regex checks.
- Informs the user if the email they are trying to register with is already taken.
- All passwords are stored in a hashed and salted format.

login.html

- Allows users who have previously registered at register.html to log in with the appropriate credentials.
- Does not allow access for users whose accounts have been deleted or banned

2. Organizational structure

2.1 Organizational diagram

2.2 Sitemap

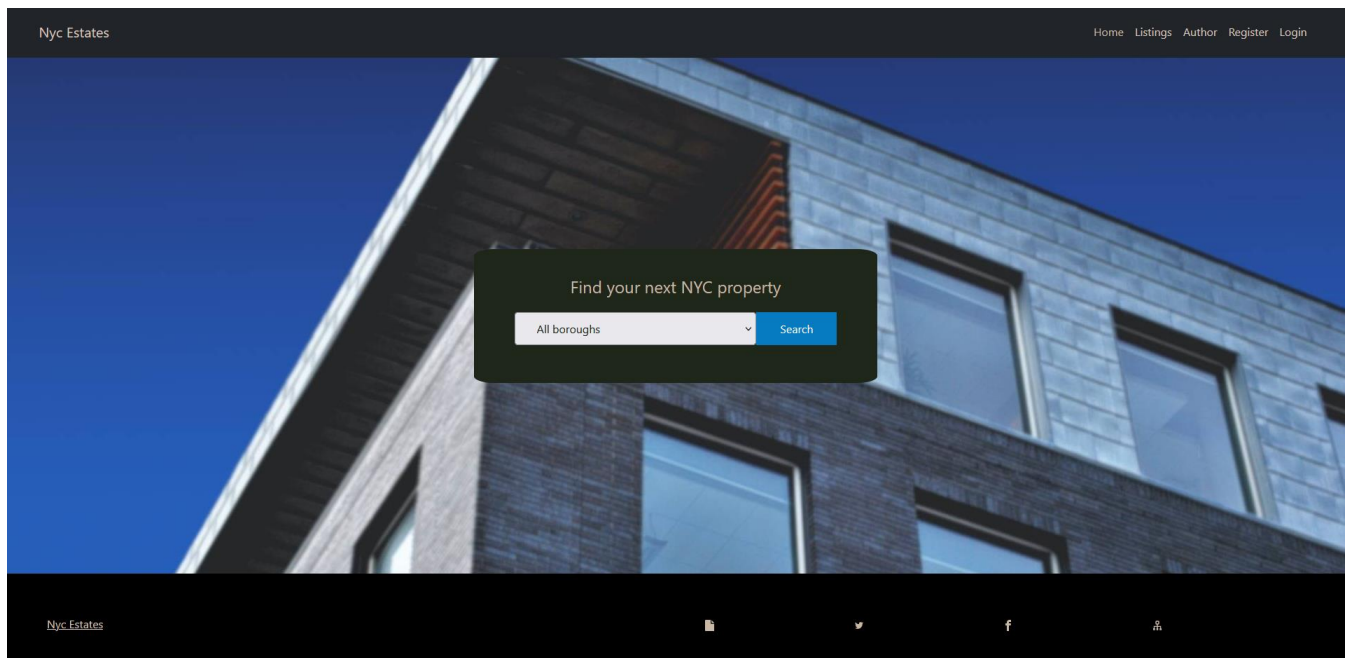
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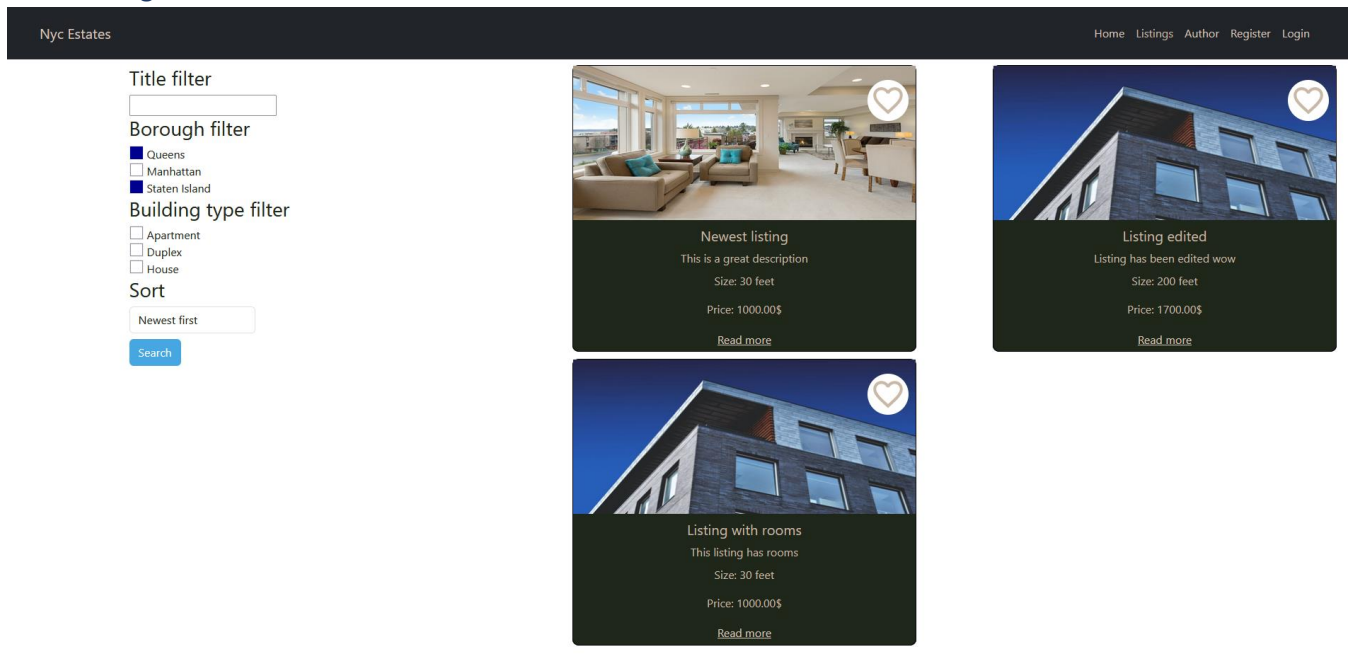
2.3 Images of pages and descriptions of functionality

2.3.1 index.html

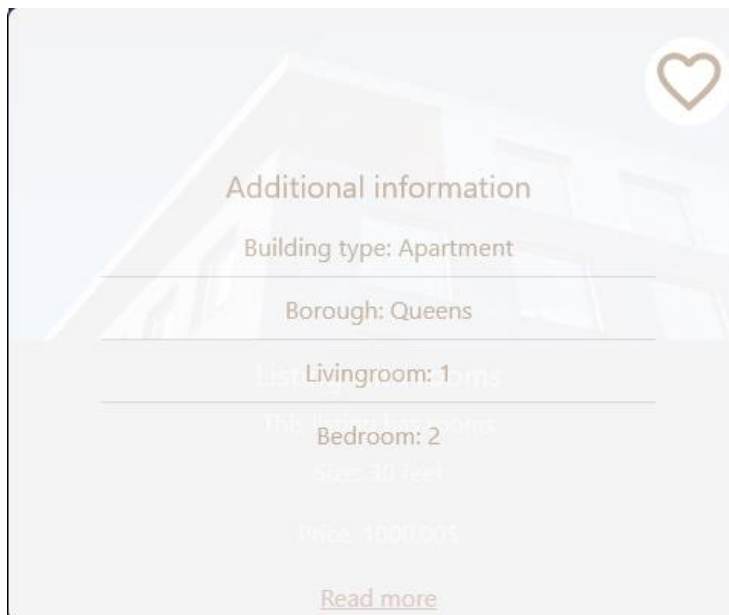


- The landing page of the website
- Allows for immediate searching and querying of listings by taking the user to the listings page with the borough they selected

2.3.2 listings.html



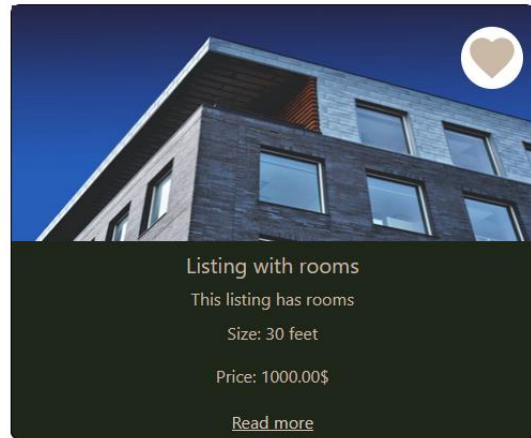
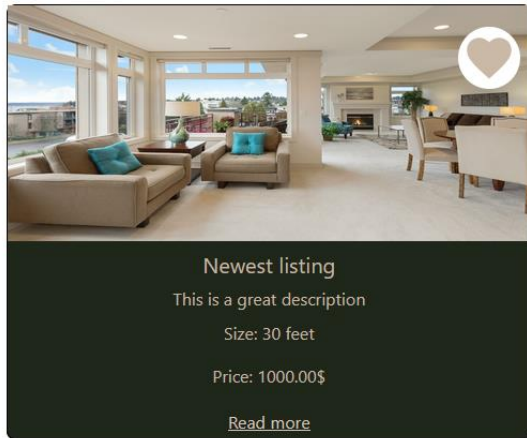
- Allows for searching and previewing of listings based on the filters selected by the user.
- Allows logged in users to add and remove listings from their favorites.
- Only boroughs and building types with active listings are shown.
- Users can sort listings by recency, price, and size in feet.



- Pictured above is additional information provided to the user when a listing is hovered, note that the read more and favorite buttons are still interactable.

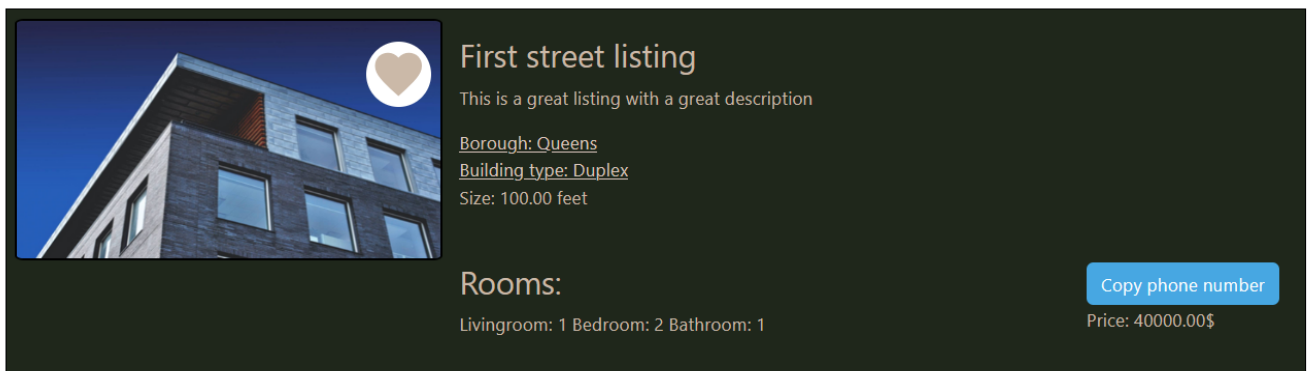
2.3.3 favorites.html

Your favorite listings



- Allows the user to preview listings previously added to favorites

2.3.4 listing.html



- Allows the user to obtain all information available about the select listing.
- Allows the user to search other listings in the borough of the given listing.
- Allows the user to search other listings of the same building type as the given listing.
- Allows the user to copy the phone number of the agency, the phone number is universal and not specific to the listing
- Allows the user to add/remove the listing from their favorites.

2.3.5 survey.html

The image shows two separate survey question forms. Each form has a dark background with light-colored text. The first form asks 'Question: Do you like this website?' and has two radio button options: 'Yes I do' and 'No I don't'. The second form asks 'Question: How do you feel about this website?' and has two radio button options: 'I think it's great' and 'I think it's not that great'. Both forms have a blue 'Submit answer' button at the bottom.

Question: Do you like this website?

☐ Yes I do

☐ No I don't

Submit answer

Question: How do you feel about this website?

☐ I think it's great

☐ I think it's not that great

Submit answer

- Allows logged in users of the website to give input to the admins by responding to questions defined by said admins in the admin panel with answers predefined by the admins.
- Users are only shown questions they have yet to respond to.
- Upon answering a question, it is removed from the user's view and a query is made to check for new questions or changes to existing ones

2.3.6 contact.html

The image shows a contact form with a dark background and light-colored text. It has three input fields: 'Message title' (a text box), 'Message type' (a dropdown menu with 'Select a message type' as the placeholder), and 'Message body' (a text area). A blue 'Submit' button is located at the bottom left of the form.

Message title

Message type

Select a message type

Message body

Submit

- Allows logged in users to send messages to the website admins.
- Users must define the title of the message, between two and five words, before submitting their message.
- Users must choose from message types defined by the admins before submitting their message.
- Users must define the body of the message, between three and fifteen words, before submitting their message.

2.3.7 admin.html

The screenshot shows the 'Admin panel' with a dark header and a light blue navigation bar. The 'Listings' tab is selected. Below the navigation bar is a table with 7 columns: #, Name, Price, Description, Address, Size, and Options. There are 5 rows of listing data. Each row has 'Edit' and 'Delete' buttons in the 'Options' column. At the bottom left of the table is a green 'Insert new' button.

#	Name	Price	Description	Address	Size	Options
1	New listing	2000.00	New description	Kings street 25	35	<button>Edit</button> <button>Delete</button>
2	Newer listing	1500.00	This is the newest listing	King's street 20	30	<button>Edit</button> <button>Delete</button>
3	Listing with rooms	1000.00	This listing has rooms	King's street 50	30	<button>Edit</button> <button>Delete</button>
4	Listing edited	1700.00	Listing has been edited wow	King's street NN	200	<button>Edit</button> <button>Delete</button>
5	Newest listing	1000.00	This is a great description	Newest address 50	30	<button>Edit</button> <button>Delete</button>

Insert new

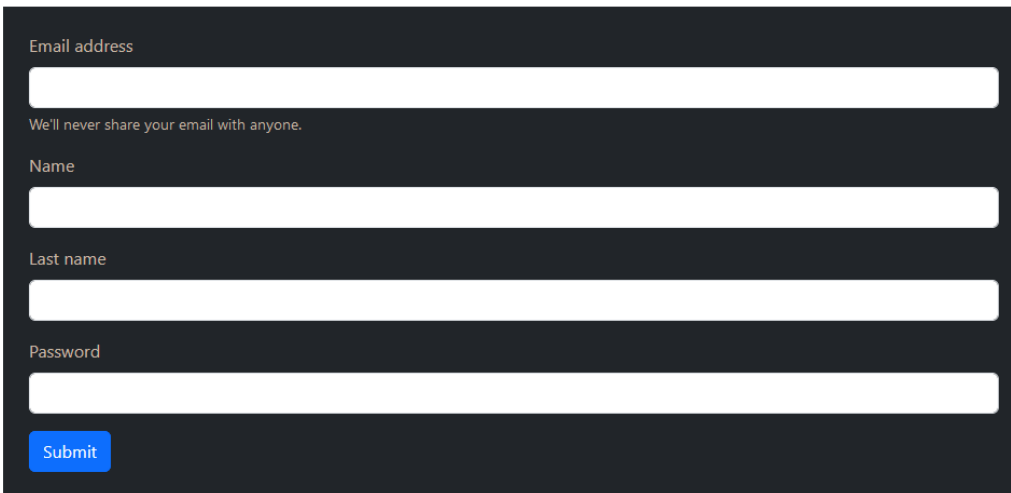
- Pictured above is one of the many tabs of the admin panel, each granting the website admins great control over the content on the website.
- Admins can edit user accounts, message types, listings, links, boroughs, building types, survey questions, deleted survey questions, room types and deleted listings
- Admins can soft delete listings, questions and question answers
- Admins can restore deleted listings and questions
- Admins can ban users
- Admins can delete users, messages, links, boroughs, building types and room types
- Admins can only delete the boroughs, building types and room types that are not referenced in listings
- Admins can create new message types, listings, links, boroughs, building types, survey questions and room types
- Admins can view the responses to the questions (both active and inactive questions as well as active and inactive answers to those questions).
- Any change made is immediately represented.
- New boroughs, building types, and room types are immediately available to admins for listing creation and editing.

The screenshot shows a modal window with a dark background. At the top, it says 'Question: Do you like this website?'. Below this is a table with 2 columns: 'Answer' and 'Number of times selected'. There are 2 rows of data. At the bottom of the modal is a red 'Close' button.

Answer	Number of times selected
I like it a lot	1
I dislike it	0

Close

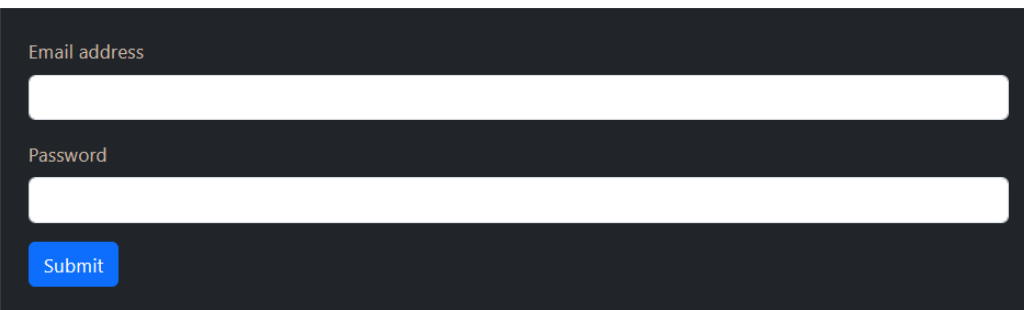
2.3.8 register.html



The screenshot shows a registration form on a dark background. It contains four input fields: 'Email address', 'Name', 'Last name', and 'Password'. Below the email field is a small line of text: 'We'll never share your email with anyone.' At the bottom left is a blue 'Submit' button.

- Allows users to register to the website, allowing greater use.
- Guarantees strong user passwords with modern regex checks.
- Informs the user if the email they are trying to register with is already taken.
- All passwords are stored in a hashed and salted format.

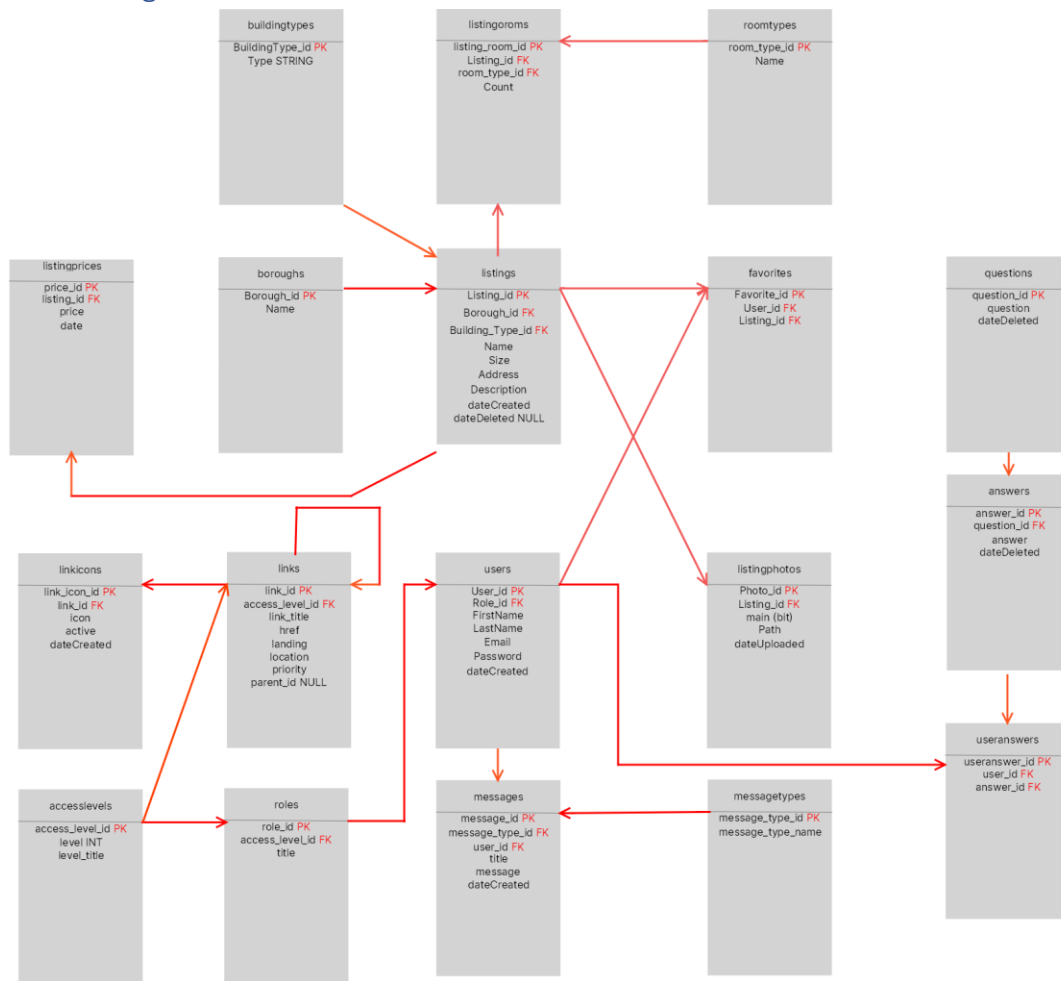
2.3.9 login.html



The screenshot shows a login form on a dark background. It contains two input fields: 'Email address' and 'Password'. At the bottom left is a blue 'Submit' button.

- Allows users who have previously registered at register.html to log in with the appropriate credentials.
- Does not allow access for users whose accounts have been deleted or banned.
- Tells users who enter credentials that do not fit format that their login attempt failed, without sending it to the server. (Two-way checks are done everywhere else as well, the only difference is that here the user has the illusion of communicating with the server, allowing for greater protection from people engaging in malicious activity)

2.4 Database Diagram



3. Code