# IFB399 Capstone Project
# USER'S GUIDE FOR EDUCATION
# WEB APPLICATION

Team Null Pointer

# Contents

# 1.0    Starting the web application

To access the education web server, the domain address of the website application is
https://ifb399.juntao.life/. In the web application main page, you will be directed to the explore
page where post information and search is presented, on the top right corner is the user account link
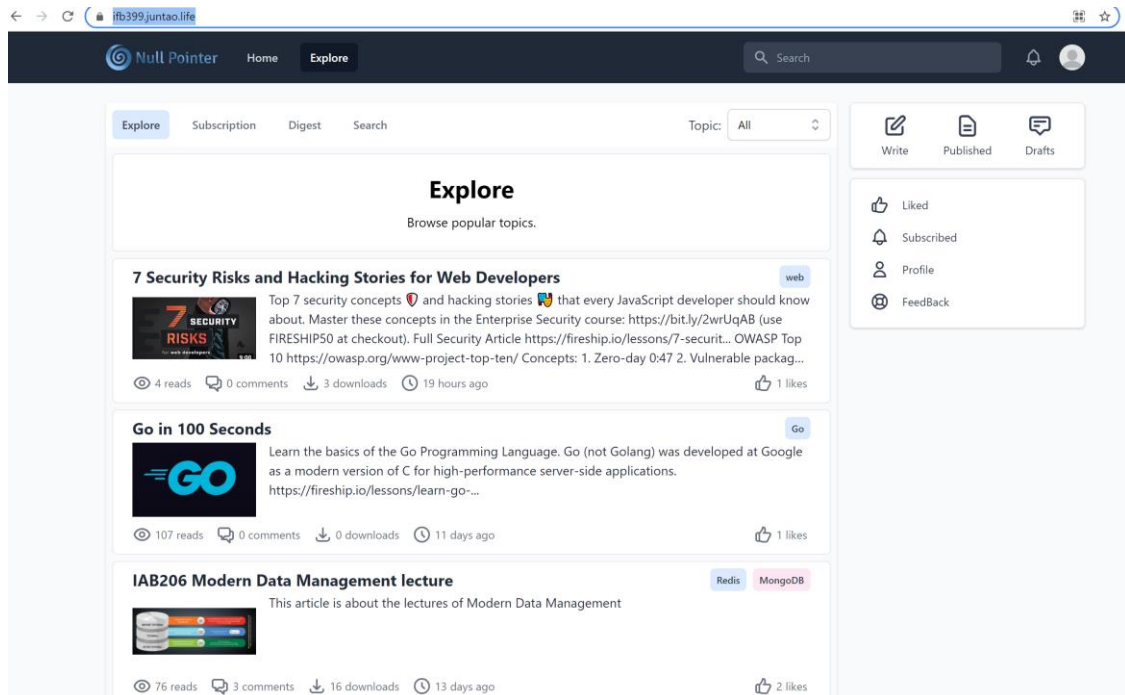for registration and account authentication.



*Figure 1. Web application start up page*

## 2.0 Navigating the web application

The Null Pointer Web application is an educational browser-based interface that you can use to

browse posts and it provides post interaction for signed in users. The interface has the following
parts in the navigation:

- Home
- Explore Page
  - Explore
  - Subscription
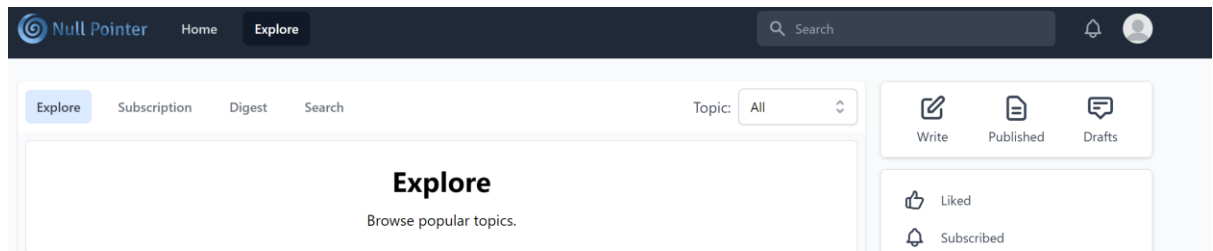  - Digest
  - Search
- Account
- Settings

*Figure 2. Navigation*

## 3.0 Home page

Click on the Home page on the navigation bar to view the landing page for our website, it provides the overview and motto of our website. You can navigate the home page to view the website motto and overview. There is also the sign-up function for new users to create their account, this function is located at the top right corner. Authenticated user can browse and have post interacts.
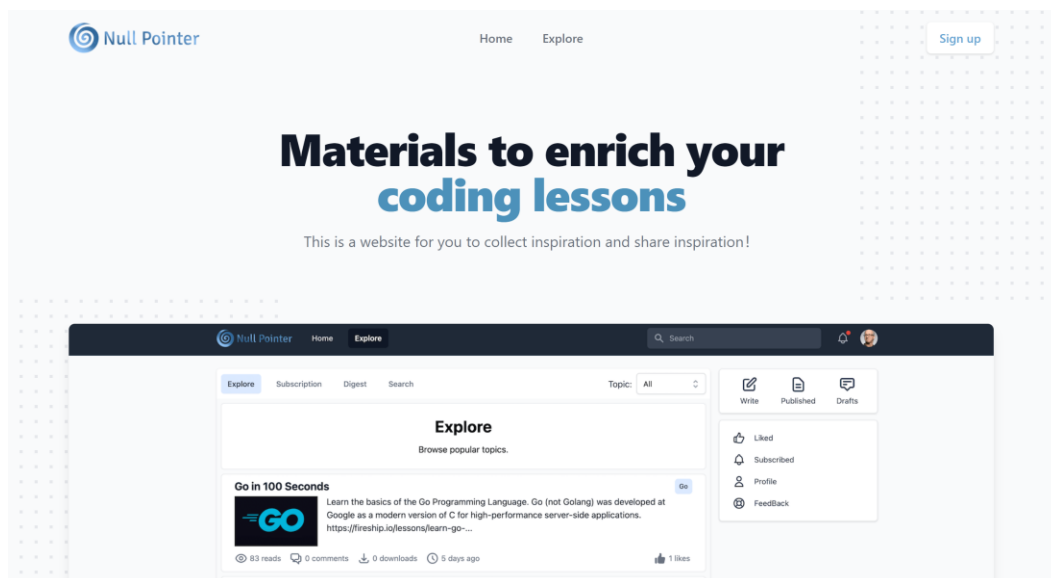


*Figure 3. Home page*

## 4.0 Explore Page

### 4.1 Explore

Click the 'Explore' on the navigation bar to view posts information list, you can browse and read more about posts and their content. When you are authenticated, you will be able to perform Like, Comment and Download in the post itself by clicking onto one of them. This allows you to interact with the content creator and provides support and clarification purposes.

In addition, you can filter content in the topic dropdown list to only view what they are interested in. Every post in the explore page contains the header and summary for you to view, this provides you an overview of what content this post is about. Following, every post has tags labelled on them for you to understand the content it is related to.
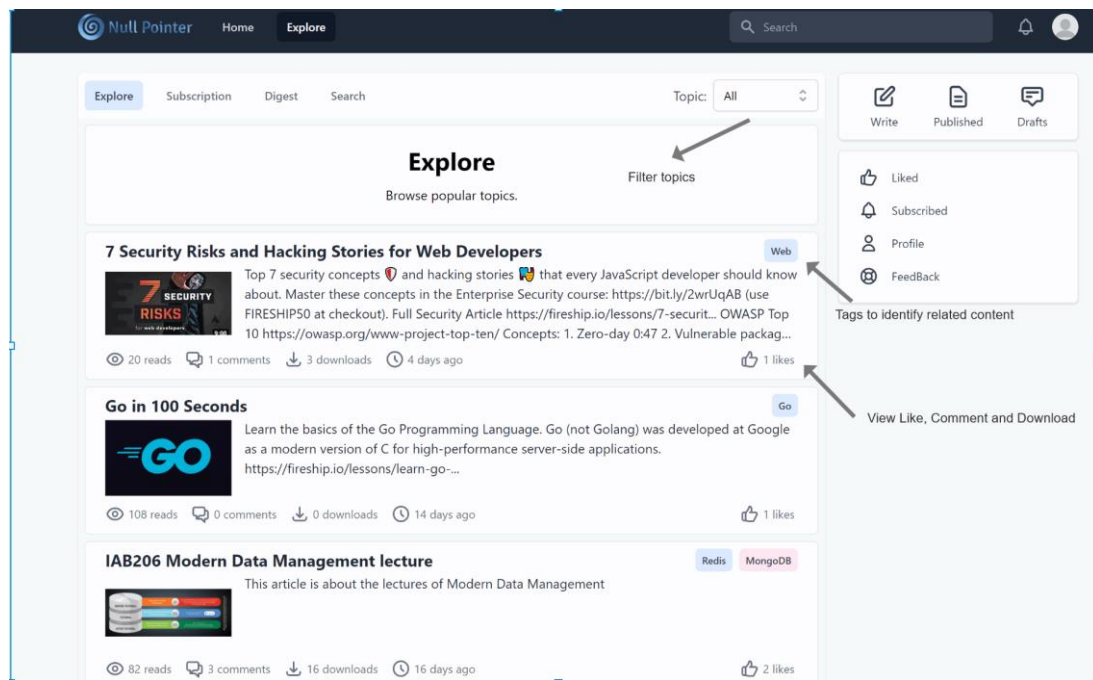
*Figure 4. Explore page overview*

Following, when you clicked onto one of the posts, a more detailed and organized content structure is provided for you to view and download attachments. This allows you to navigate and view the content easily and clearly, to locate the main content, video and download attachments. In this page, you can read deeper into what the creator has written, and they also may provide resources for you to download, this supports interested user to understanding and saving resources to their devices.
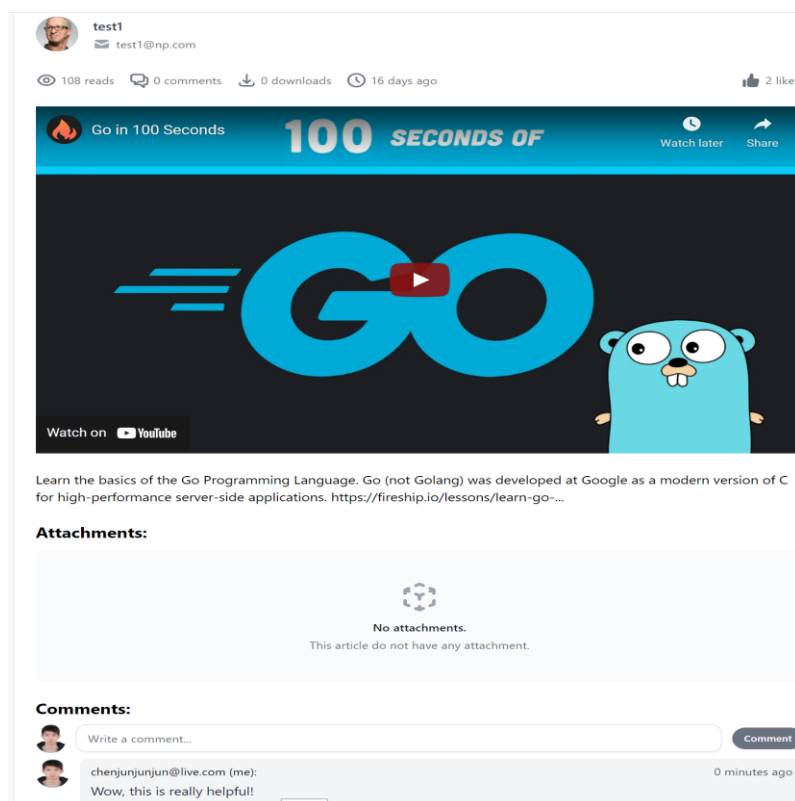


*Figure 5. Post details and attachments*

## 4.2 Subscription

Clicking the 'Subscription' page directs you to popular technologies and contents, this is for users to subscribe and keep up to contents they are interested. You will be able explore popular tags in languages and technologies area and be notified when new uploads of subscription appear at the explore page. In the subscription page, a short introduction to the language and technology is available for you to understand what it is about. Figure 6 shows the functionality and outlook of how you can perform subscription and view summary of programming language and technologies available.
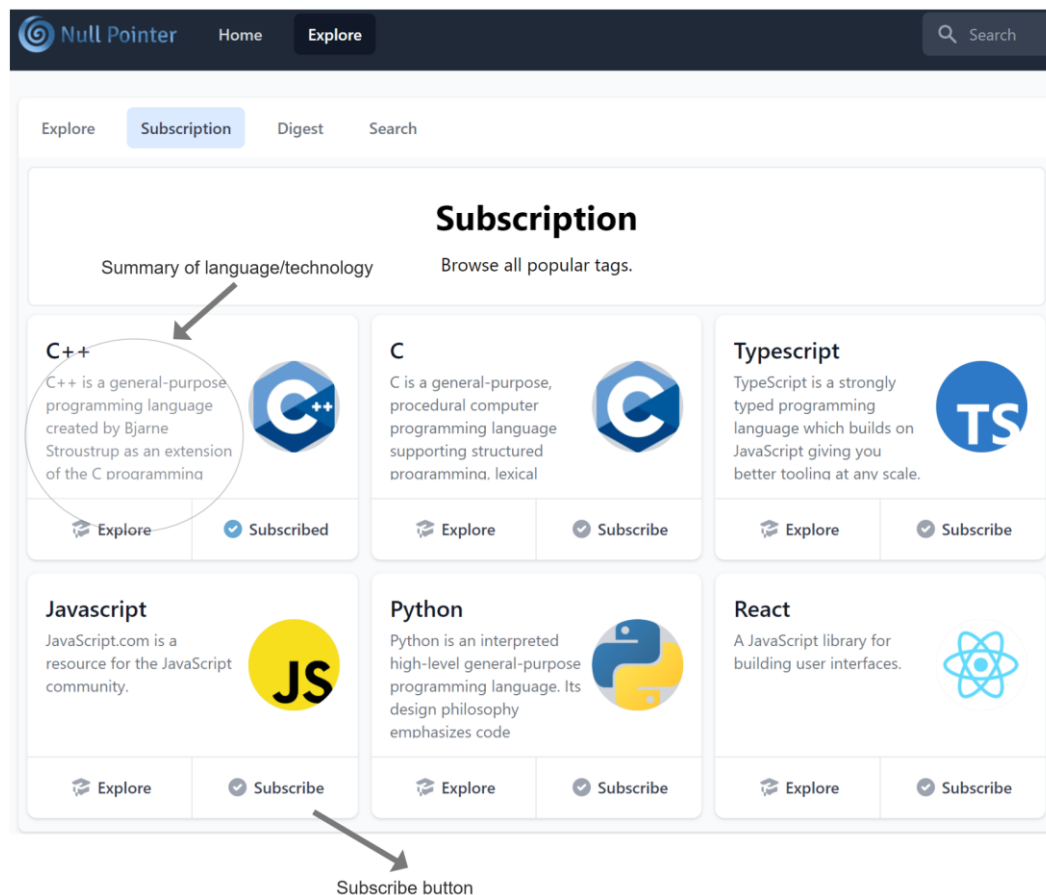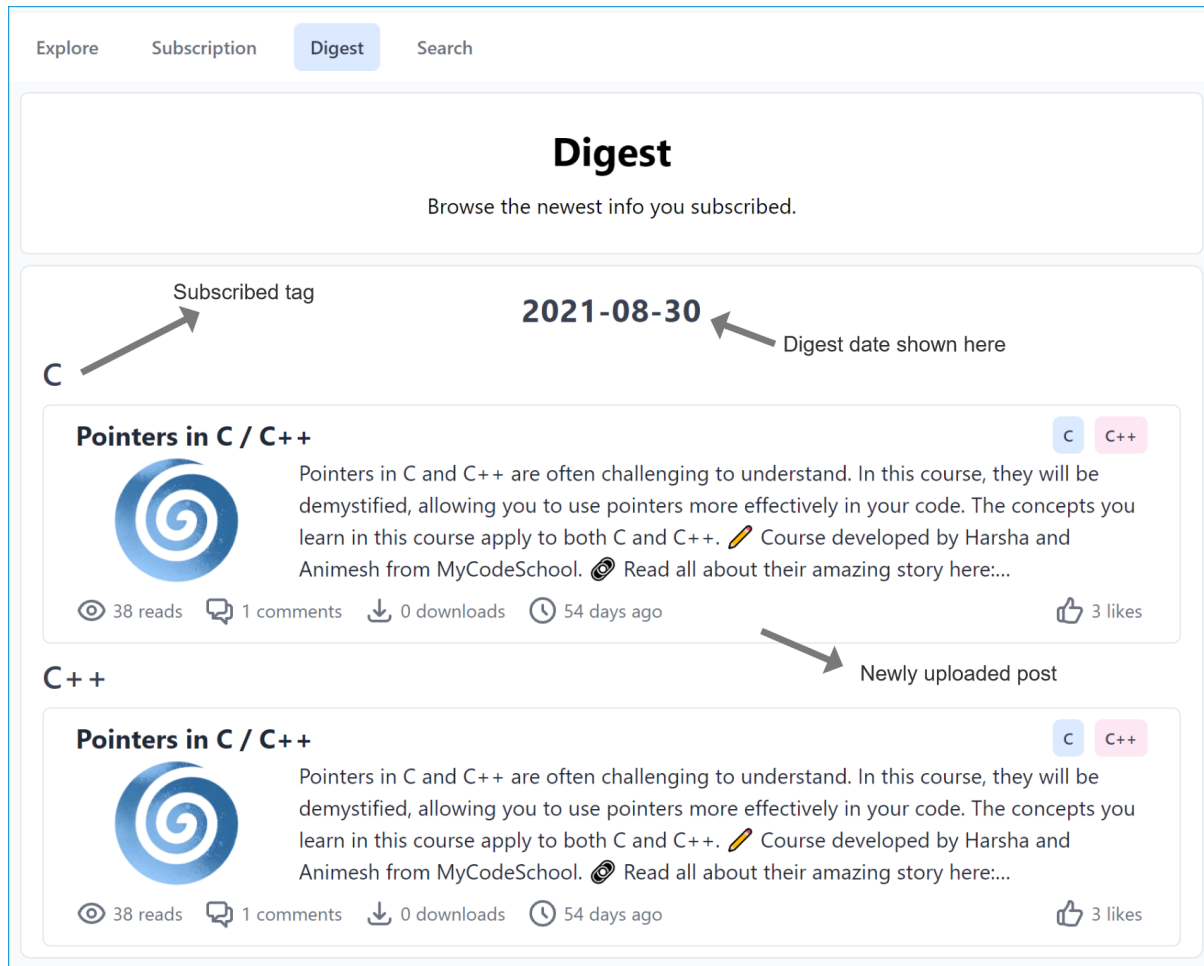


*Figure 6. Subscription page*

## 4.3 Digest

Click 'Digest' to view the newest contents of topic you have subscribed. Every time a new post posted will be made available in the Digest page with the dates shown. This allows you to view what tag and content is related to so you can easily check if you are interested to the content this is about. You can click onto the post to view a more detailed structure and be provided with downloadable attachments.



## 4.4 Search

Click 'Search' to search contents you are interested in when you are unable to find on the explore page. This approach allows easy filtering of files and article key word you are searching, you can click 'Search Files' to made available attachments and preview for you to view and download, or 'Search article' to list all article with the specific key word search. This search implementation saves trouble for you to browse explore to find interest topic and you can easily identify all resources related to the search key word, no matter its attachment or article. In this section, there is also history search for you to record and see what content you have attempted, and the findings will provide content summary and actions (Article, Preview, Download) for you to perform. They matched key word will also be highlighted in red for you to identify if it is related to your search area.
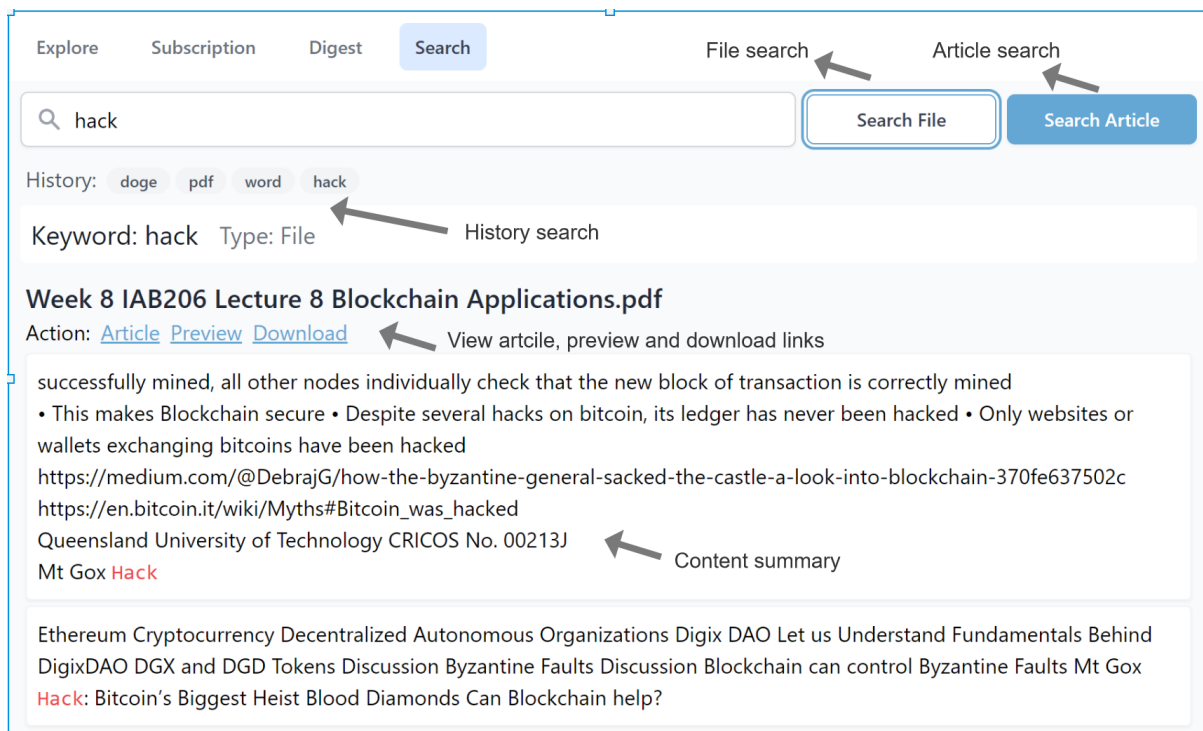
Explore    Subscription    Digest    **Search**

File search        Article search

🔍 hack                                    Search File    **Search Article**

History:   doge   pdf   word   hack

Keyword: hack   Type: File        ← History search

**Week 8 IAB206 Lecture 8 Blockchain Applications.pdf**
Action: Article Preview Download      ← View artcile, preview and download links

successfully mined, all other nodes individually check that the new block of transaction is correctly mined
• This makes Blockchain secure • Despite several hacks on bitcoin, its ledger has never been hacked • Only websites or wallets exchanging bitcoins have been hacked
https://medium.com/@DebrajG/how-the-byzantine-general-sacked-the-castle-a-look-into-blockchain-370fe637502c
https://en.bitcoin.it/wiki/Myths#Bitcoin_was_hacked
Queensland University of Technology CRICOS No. 00213J      ← Content summary
Mt Gox Hack

Ethereum Cryptocurrency Decentralized Autonomous Organizations Digix DAO Let us Understand Fundamentals Behind DigixDAO DGX and DGD Tokens Discussion Byzantine Faults Discussion Blockchain can control Byzantine Faults Mt Gox Hack: Bitcoin's Biggest Heist Blood Diamonds Can Blockchain help?

*Figure 7. File search function*

Explore    Subscription    Digest    **Search**

🔍 hack                                    Search File    **Search Article**

History:   doge   pdf   word   hack

Keyword: hack   Type: Article

**7 Security Risks and Hacking Stories for Web Developers**      Web

Top 7 security concepts 🛡️ and hacking stories 🦹 that every JavaScript developer should know about. Master these concepts in the Enterprise Security course: https://bit.ly/2wrUqAB (use FIRESHIP50 at checkout). Full Security Article https://fireship.io/lessons/7-securit... OWASP Top 10 https://owasp.org/www-project-top-ten/ Concepts: 1. Zero-day 0:47 2. Vulnerable packag...

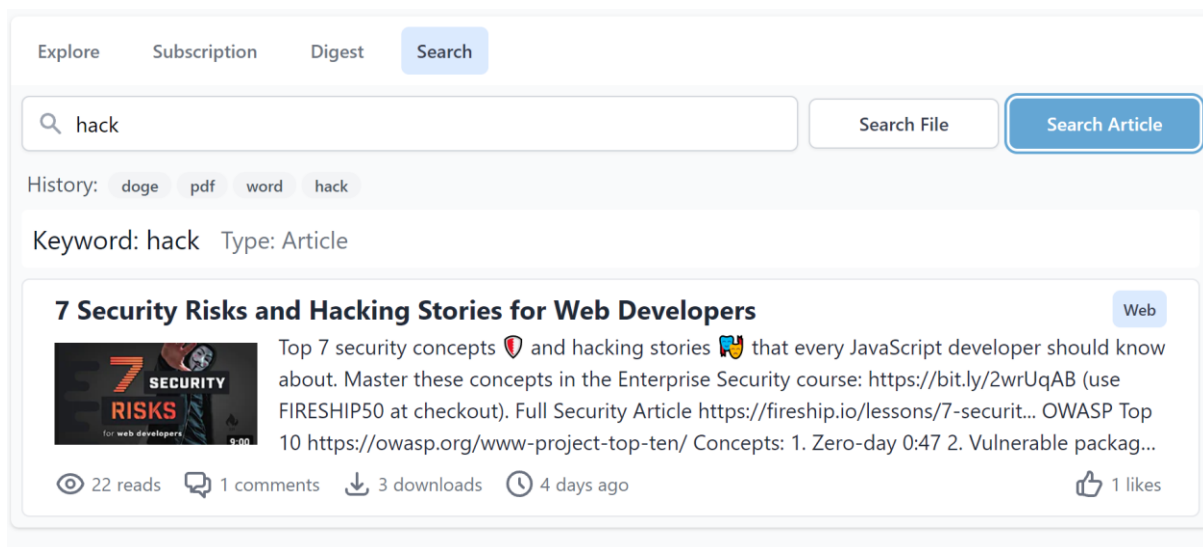👁 22 reads    💬 1 comments    ⬇ 3 downloads    🕐 4 days ago                    👍 1 likes

*Figure 8. Article search function*

# 5.0 Account

## 5.1 Write

To upload contents of your own, click on the 'Write' button to add image, content, video, and attachments. This provides you the structure to set up and create your own content, this includes Top image, header, content, video, tags and downloadable files. You can upload the image, phrase your content with markdown syntax and insert attachments. The maximum tags allowed is capped at 4 and attachments is capped at 9.  Figure 9 below shows the structure and input for you to key in.



*Figure 9. Upload content page*

## 5.2 Published

Click on the 'Published' page to view and edit articles you have created. The page allows you to view the content you published below in a list, every article shows the Read, Comment, Like and Download accumulated. This provides you an overview how you article is received by the public. You can manage you article with the options available (Remove, Edit, Delete). You are able to click on the

article to check what you had previously uploaded and when you feel you do not want you, you can remove it, helping you to manage your publication.
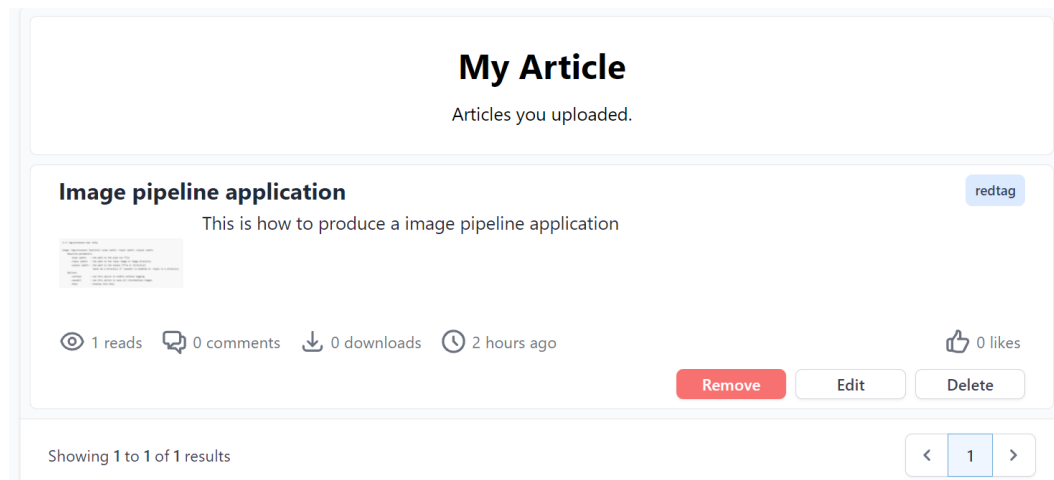


*Figure 10. Published page*

## 5.3 Drafts

Click on the 'Drafts' page to view the draft you previously created. For users who did not manage to complete their content or wants to take a break at editing, they can save their content as draft and put into 'Drafts' page for later completion. You can view what you have previously left on and edit the content. You can publish, edit, or delete your Drafts. This component makes saving and updating content more efficient, allowing you to store them in Drafts for you to view it.
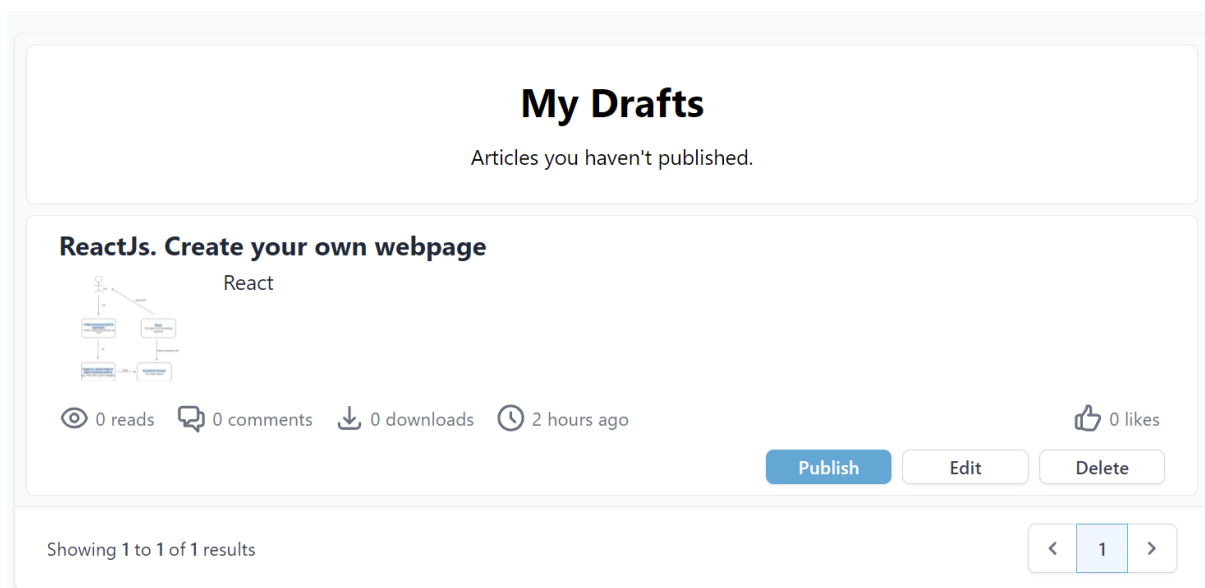


*Figure 11. Drafts page*

## 5.4 Notification

Click on the Notification bell to view notification and messages from another user. You can see the interaction or information of people reacting and commenting on your post. This includes Like, Comment and download information alert for you to keep track of how your content is being received by the public. In the 'Notification' tab, there is 3 tabs that shows 'All', 'Read' and 'Unread', this filters the messages you have read and received. The notification will highlight the message that is sent to you and the time posted by the user. Clicking on the message directs you to the article and

you can reply and view the comment. Figure 12 below shows the alert you received when user comment to one of your post with the date listed.
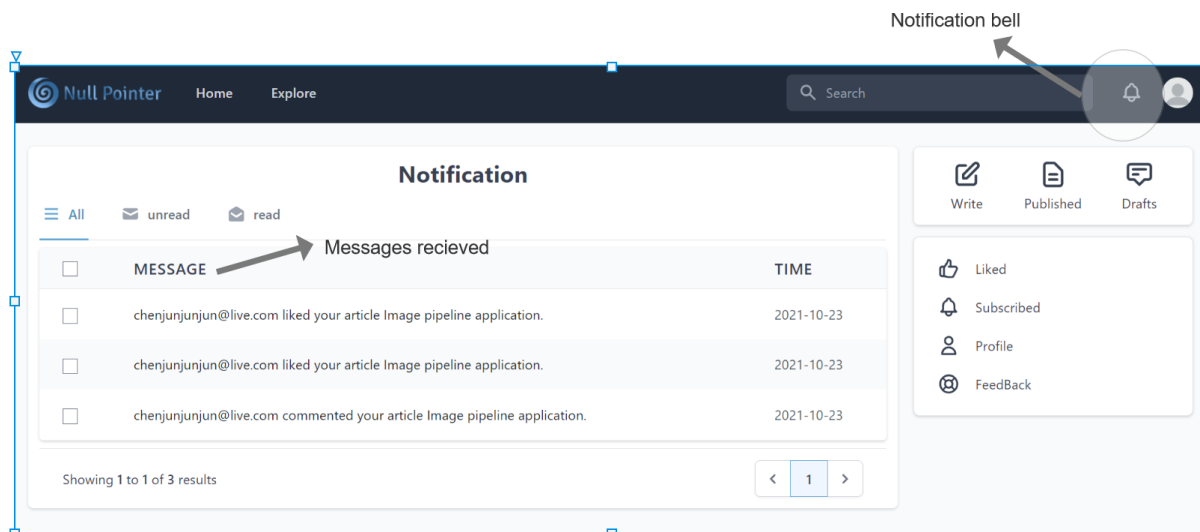


*Figure 12. Notification page*

## 5.5 Profile

Clicking on the 'Profile' page to view and edit your profile information for other users to view. This includes username, email, profile photo, and about me. When you decide to change and update, you can do it anytime you wish to provide a clearer introduction about yourself. This allows other user to know more about you and know what you are doing for them to trust the reliability of your content. Figure 13 below shows the text field area for you to edit or add the information.
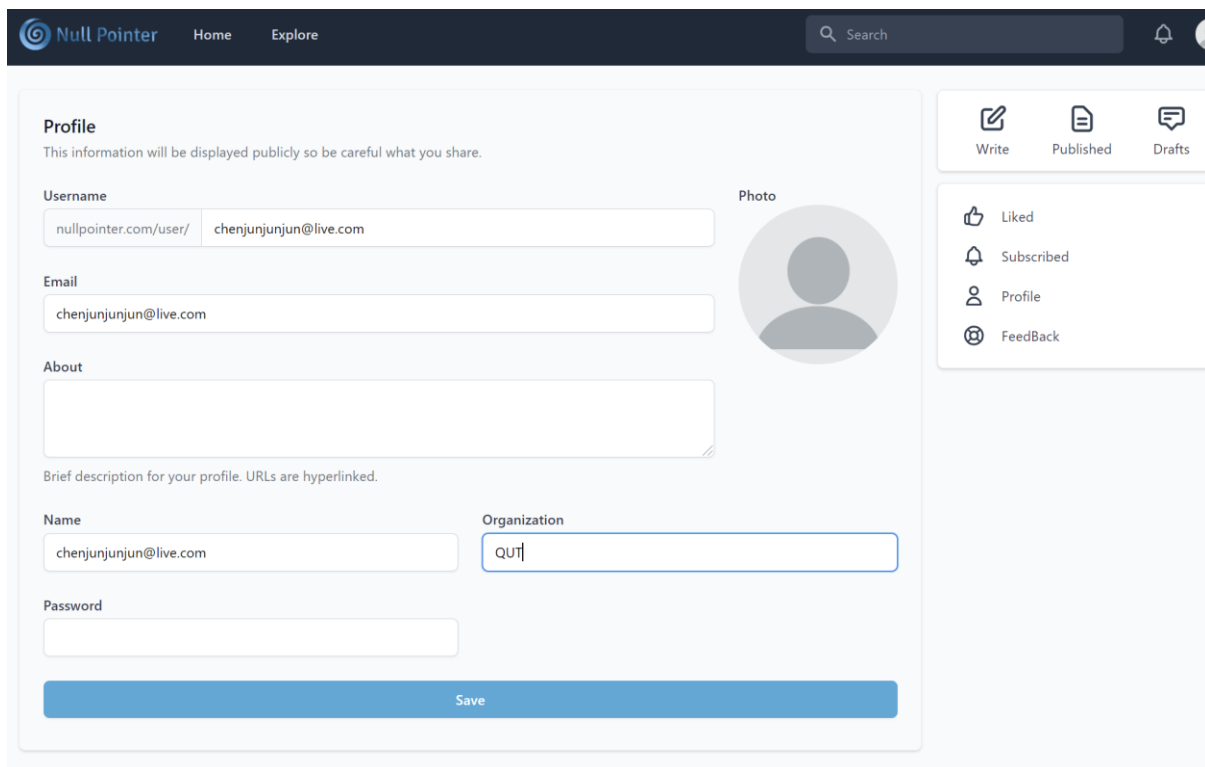


*Figure 13. Profile page*

## 5.6 Liked

Clicking on the 'Liked' page directs you to view the article you have liked and supported. This page shows the list of articles you previously liked. This also acts as a saved article for you to come back and view what the article is about when you cannot find it in the explore page. Figure 14 below shows the view of 'Liked' page for your account.
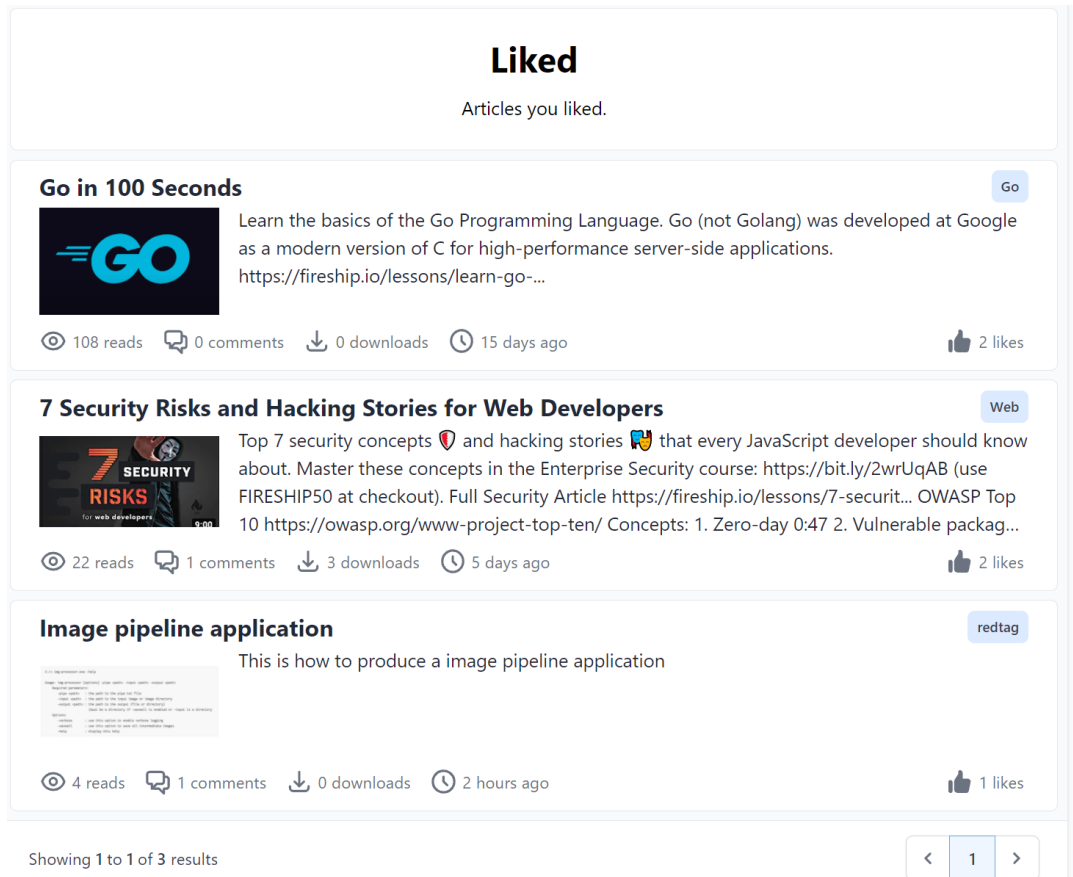


*Figure 14. Liked page*

## 5.7 Subscribed

Clicking on the 'Subscribed' page directs you to the subscribed channel page. You can view the subscribed tags or channels to view what contents you will be alerted or appeared in your explore page. This allows you to keep track of tags or channels you subscribed and made easier for you to unsubscribed when you do not want to receive their content. Figure 15 below shows the subscribed page for all your subscribed tags.
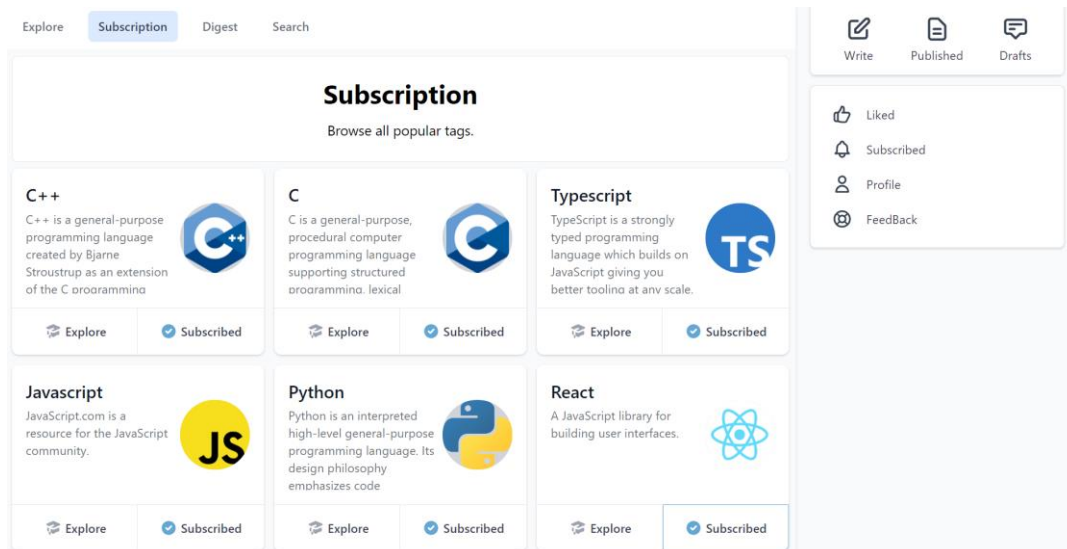
*Figure 15. Subscribed page*

## 5.8 Feedback

Clicking on the 'Feedback' tab directs you to the feedback forum for you to lodge feedback towards the website application. When you feel like the website application feature is not implemented correctly or feel it can be improved, you can write to the website admin using the feedback forum page. This page allows you to input your details and the feedback message you want to pass to the admin. The feedback forum also provides you the admin phone and email contact when you want to get a quicker response. The feedback will be received and replied to the email address you provided. Figure 16 below shows the feedback forum structure with the input boxes for you to fill in.



*Figure 16. Feedback forum*