

APP USAGE MANUAL

(USER MANUAL)



PREDICTING NEWS ARTICLE POPULARITY WITH MULTI
LAYER PERCEPTRON ALGORITHM

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1. INTRODUCTION

1.1 PURPOSE OF DOCUMENT CREATION

The user manual document of the Popularity News Prediction application is for the following purposes:

1. Describe and explain the use of the Popularity News Prediction application for users
2. As a guide to the use of this Popularity News Prediction application.

Interested parties who are entitled and entitled to use this document i.e. :

1. User Writer
User uses this document to find out how to use Popularity News Prediction application.

1.2 GENERAL DESCRIPTION OF THE SYSTEM

1.2.1 General Description of the Application

The general description of the application includes a general description of the developed Popularity News Prediction, the main functions of the Popularity News Prediction application that will be given to the user as well as user characteristics that include the sharing of access rights to the application

1.2.2 General Description of Application Needs

The general description of the application needs to be implemented includes all information of a technical nature that is a reference in application development

1.3 DOCUMENT DESCRIPTION

This document was created to provide guidance on the use of the Popularity News Prediction application, containing the following information:

1. BAB I
Contains general information that is part of the introduction, which includes the purpose of creating the document, the general description of the system as well as the description of the document

2. **BAB II**
Contains devices needed for the use of viat-map applications including software and hardware devices
3. **CHAPTER III**
Contains a user manual application Viat-Map both user manuals intended for users

2. RESOURCES NEEDED

2.1 SOFTWARE

The software used is:

1. Windows/Linux/Android/iOS as Operating System.
2. Firefox/Google Chrome as a Tools Explorer (Web Browser).

1.2 HARDWARE

The hardware used is:

1. Computer / Laptop / Smartphone
2. Mouse as interface equipment
3. Monitors as interface equipment
4. Keyboard as an interface equipment.

2.2 APPLICATION USERS

The application users who will use the application areas follows:

1. Have an understanding of computer interfaces
2. Have an understanding of the business process of the Popularity News Prediction application

3. MENU AND HOW TO USE

3.1 MENU STRUCTURE

The menu structure on the Popularity News Prediction application for prediction of news popularity is as follows :

1. Home Menu
 - Login
 - Forgot Password

- Register
 - Landing Page
2. Dashboard Menu
- Dashboard
 - User Management
 - Permissions
 - Roles
 - Users
 - News Prediction
 - Setting
 - Change Password
 - Logout

3.2 HOW TO USE

In this section, it will be explained about the menus in the Popularity News Prediction application and the procedures for entering data.

3.3 APPLICATION DISPLAY

3.3.1 Home Menu

1. Login Page

When user access website, they will be redirected to Login Page. User can login with email and password. If they didn't have an account, they need to register first

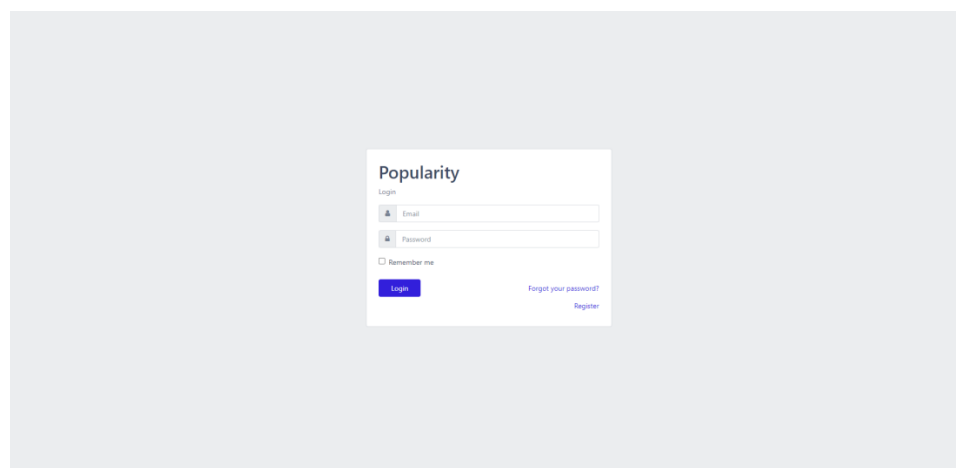


Figure 1 Login Page

Input email and password. For admin role, need to login with email : admin@admin.com and password : password .

Inside login page, there are button for Forgot Password and Register. If user forgot their password, they can reset it with Forgot Password button.

2. Forgot Password Page

If user forgot their password, they can reset it in Forgot Password Page.

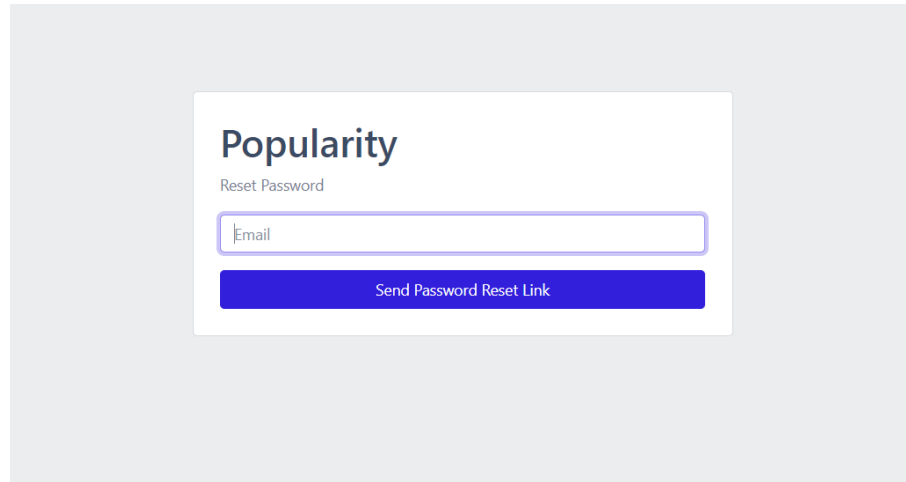


Figure 2 Forgot Password

User need to input their email and click button Send Password Reset Link. Check the email from popularity website and reset the password.

3. Register Page

If user doesn't have an account, they need to fill name, email, and password to logged in to the system. The email need to be unique, so if there is any duplication email on database, user need to register another email.

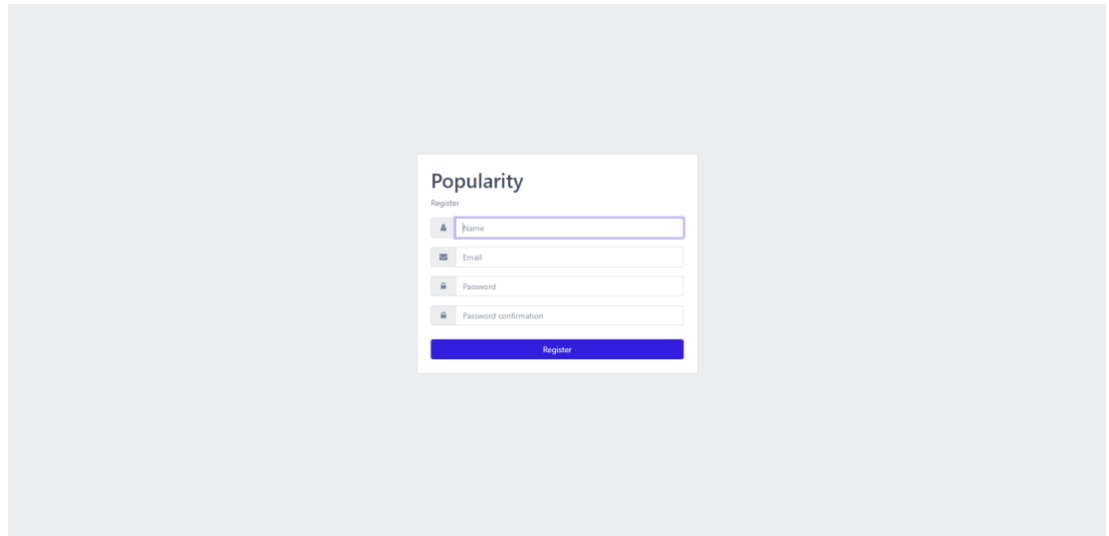


Figure 3 Register Page

4. Landing Page

The landing page is the first page when the user visits the website. In the landing page only provides input along with buttons for predictions.

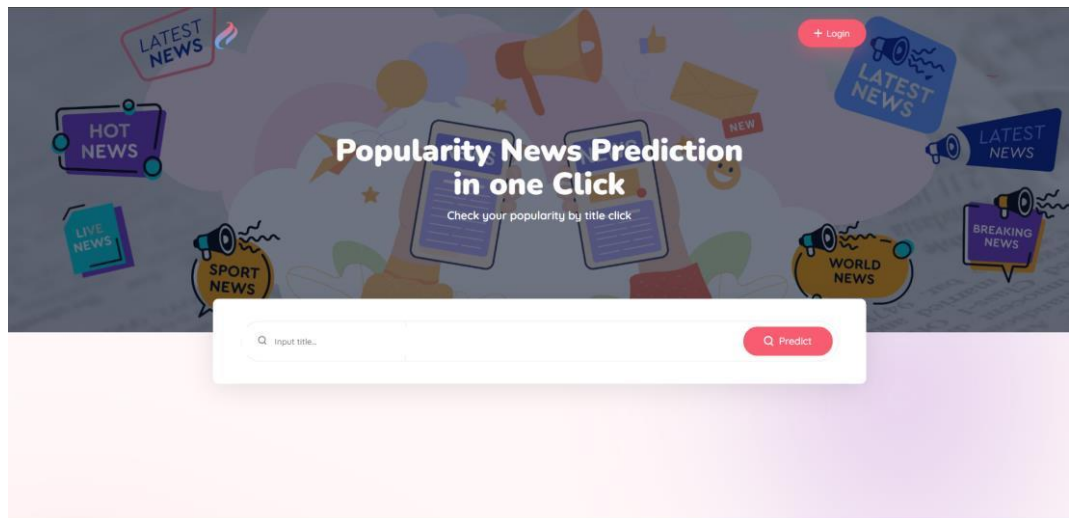


Figure 4 Landing Page

If user fill the input and click predict button, the result will be showed in the bottom of the form.

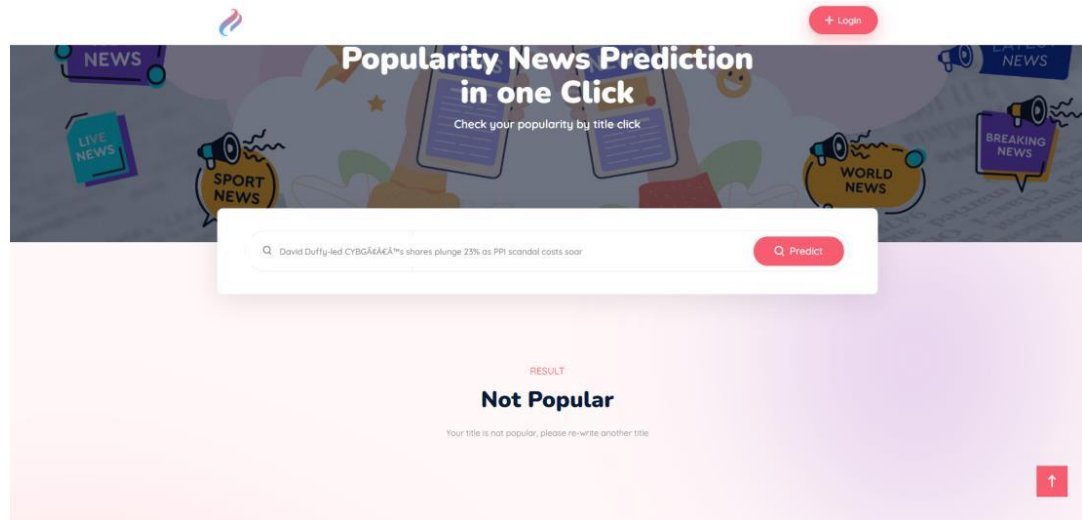


Figure 5 Landing Page Not Popular

If the prediction result is 0, the display will be Not Popular. User need to change the headline until the result is popular. Not Popular result only give the result without keyword suggestion.

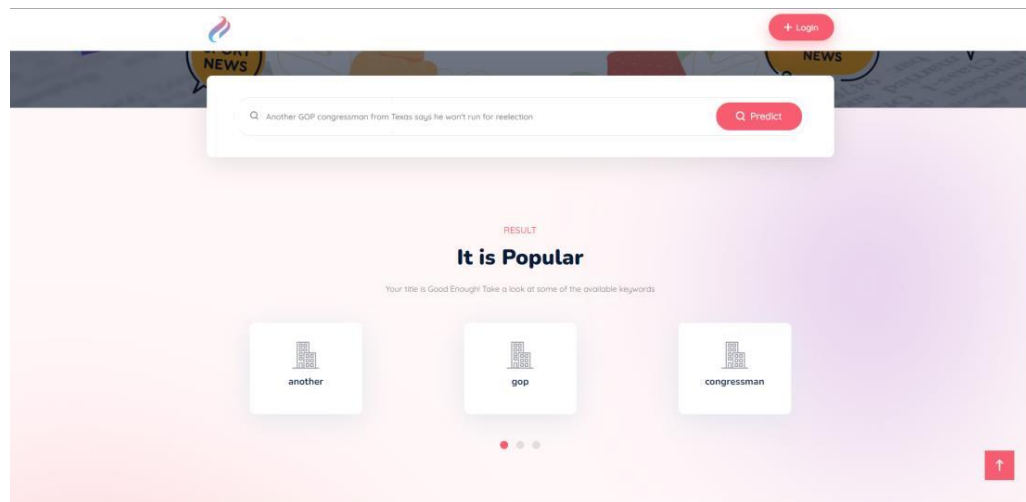


Figure 6 Landing Page Popular

The result is 1 it means its popular. The result of popular prediction also will show keyword suggestion in slider. So if the keyword suggestion is quite long, it will not distract the display because user can simply slide it

3.3.2 Dashboard Menu

1. Dashboard Page

After user success logged in, they will be redirected to Dashboard Page. Dashboard Page display all comparison result, which is consist of Classification Report (Precision, Recall, and F1-Score), Comparison Accuracy of 3 methods, and result of K-fold Cross Validation.

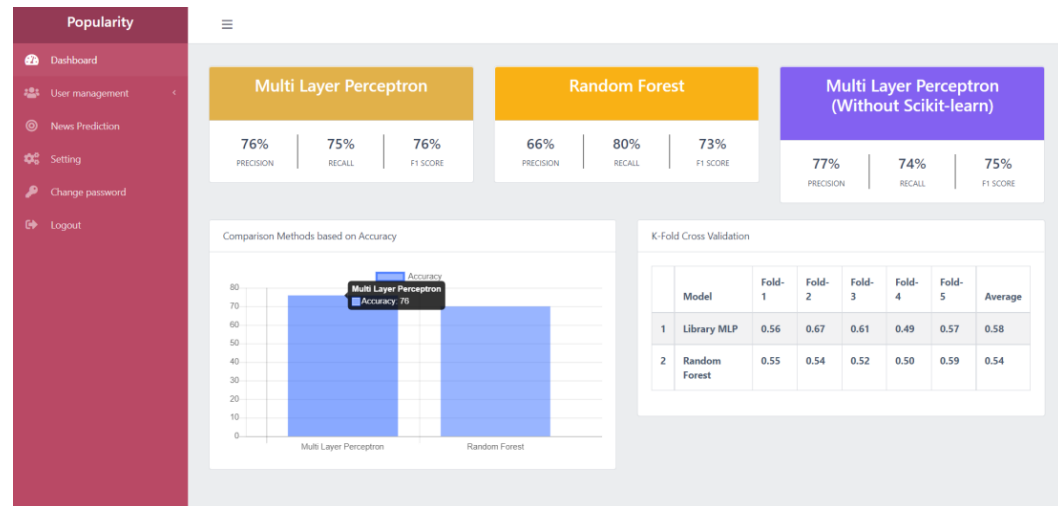


Figure 7 Dashboard Page

User can see the comparison of implementation Multi Layer Perceptron and Random Forest Algorithm. The result is MLP is better than Random Forest for this research.

2. Users Management – Permissions Page

Permission Page is page that manage all permissions in the system. Every module or feature have they own permission. For the example, news prediction module have 5 permission, consist of news_permission_access, news_permission_create, news_permission_edit, news_permission_show, and news_permission_delete.

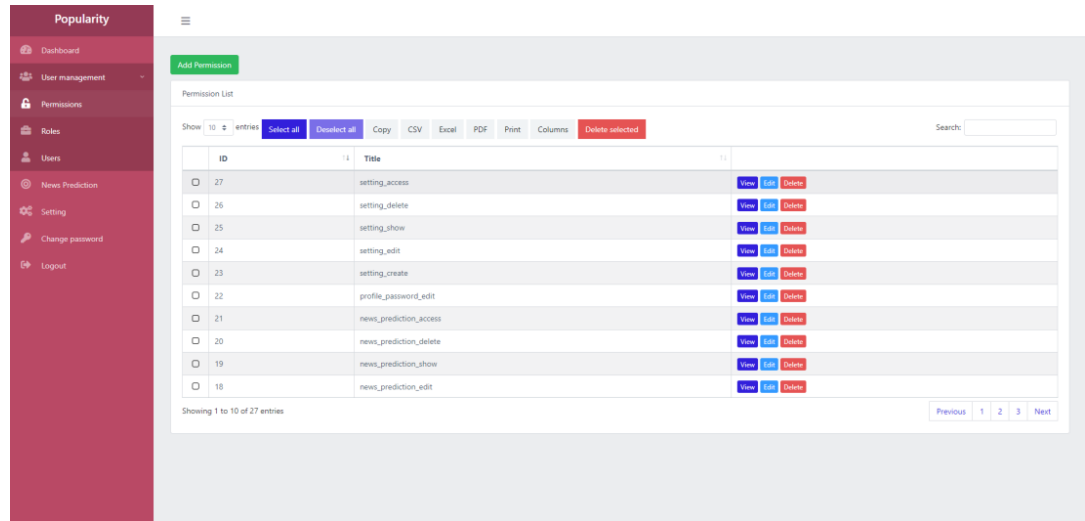


Figure 8 Permissions Page

Actually, as an admin also can create or update any permission. But this permission is connected with some of code program in Laravel. This feature help developers to edit program code or add some new features.

3. Users Management – Roles Page

Roles page is page that manage any role in this system. For now, the role is Admin and User. Every role have their own permissions to access this system. So if researcher logged in as Admin, the feature and menu will be different with user side.

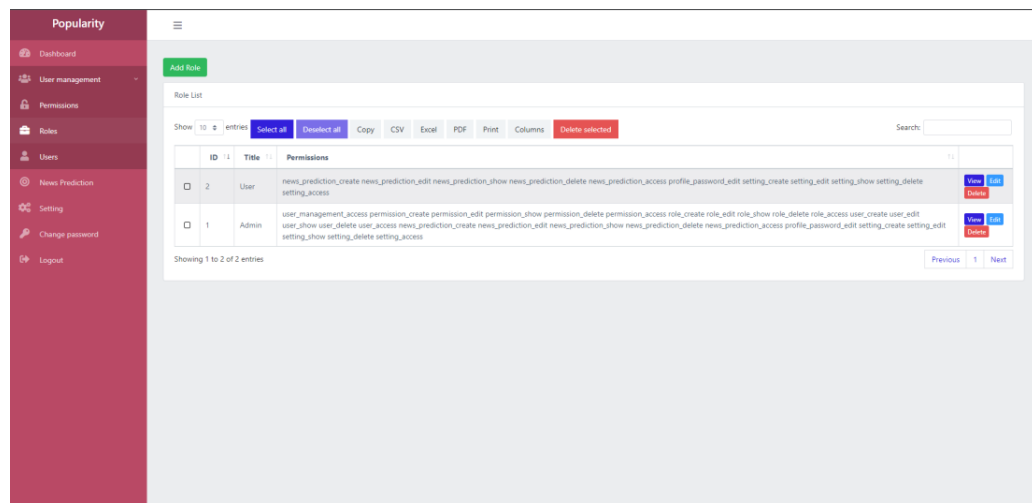


Figure 9 Roles Page

From figure 9, user and admin have different permission. Admin actually have all permissions of this system. Because admin have highest authority to access all menu in the system

4. Users Management – Users Page

If researcher logged in as Admin, the Users Page will be show. Users Page is page that manage all users data in this system. It means, Admin can also create, edit or delete any users data.

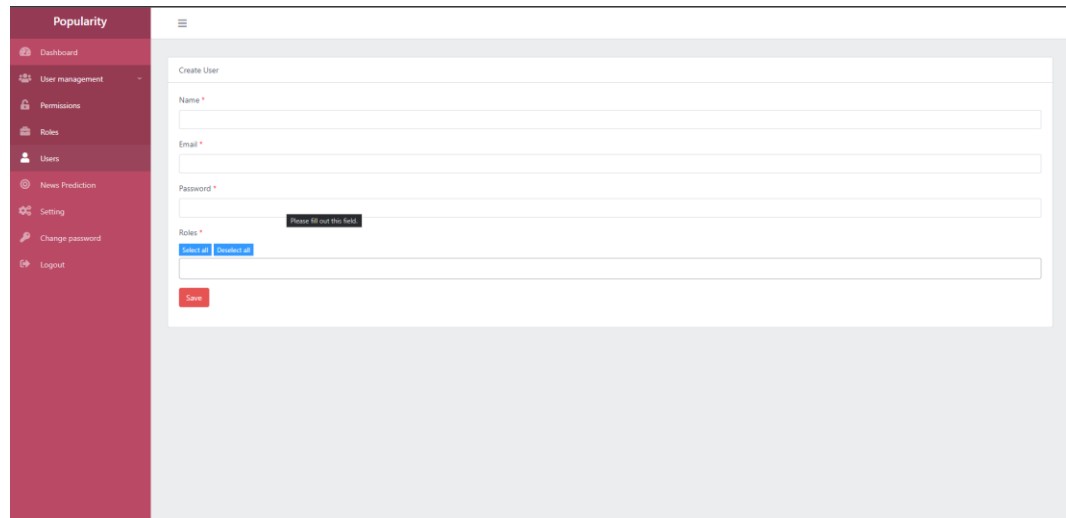


Figure 10 Users Page

From figure 10, Admin can also choose role(s) of the user. User can have more than 1 role. And the system will automatically set the feature based of permissions.

5. News Prediction Page

In News Prediction page, user can add data and save to database. This page will help user to manage the popular and not popular title. User also can export all data into different extension such as PDF, Excel, CSV, or simply print.

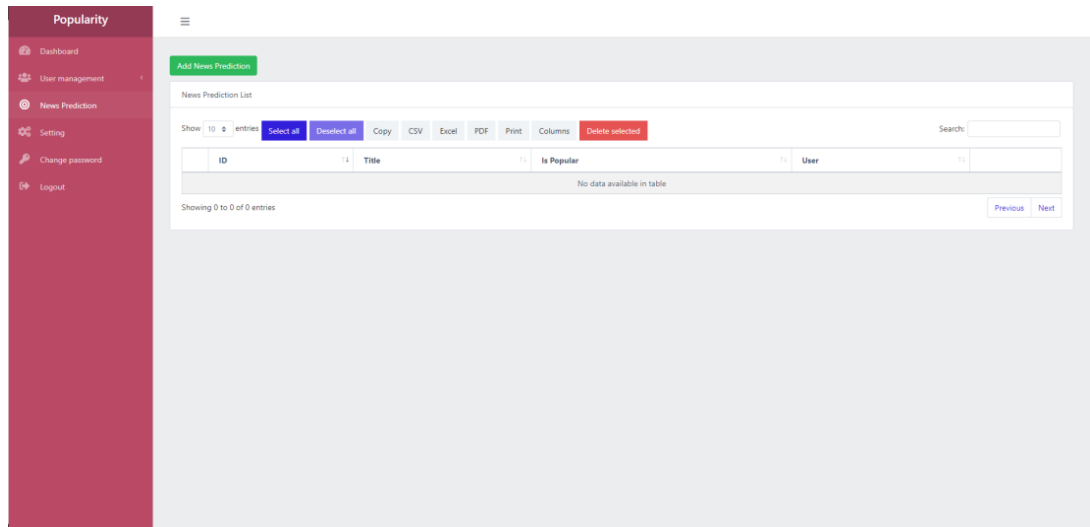


Figure 11 News Prediction Page

When user want to add any prediction from title, same as in landing page, the page will be show the prediction result first before its submitted. It will help users to add only popular title, so the user no need to change it if the title is not popular.

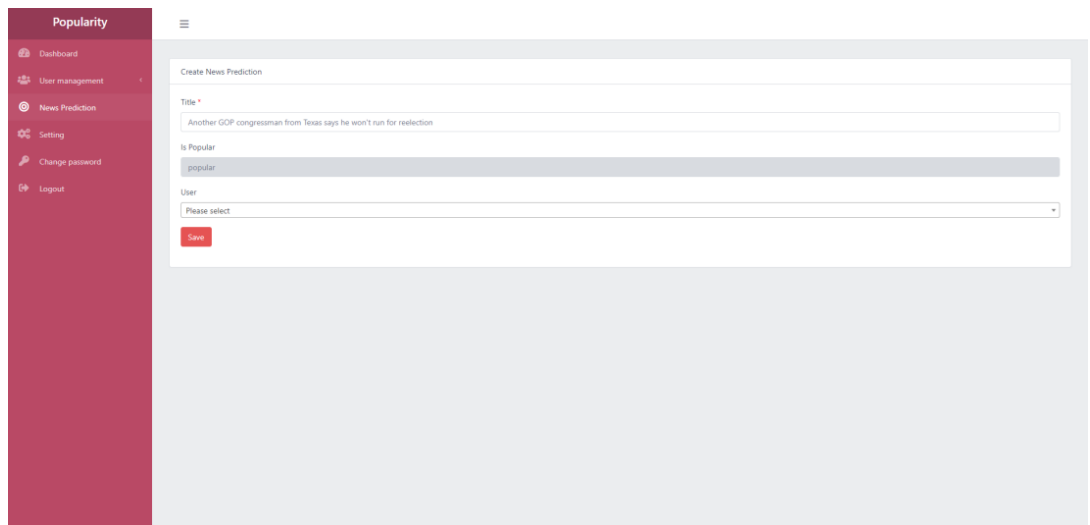


Figure 12 Add News Prediction Page

After it saved, user can manage their data. They can show, edit, also delete their data with the button in main page.

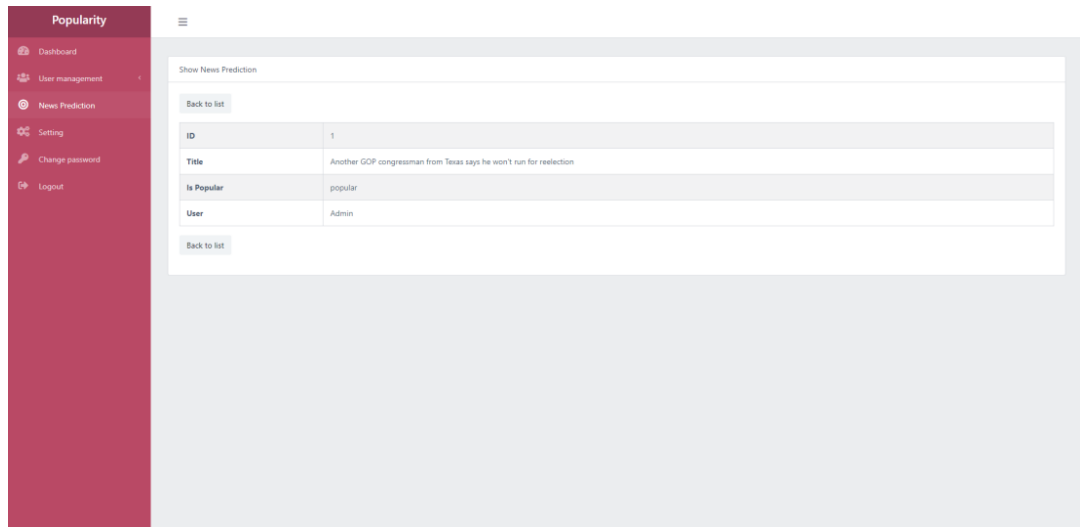


Figure 13 Show News Prediction Page

6. Setting Page

Settings Page is page that manage preferred methods. The default method is Library Multi Layer Perceptron. But also can set another method such as Manual Multi Layer Perceptron and Random Forest.

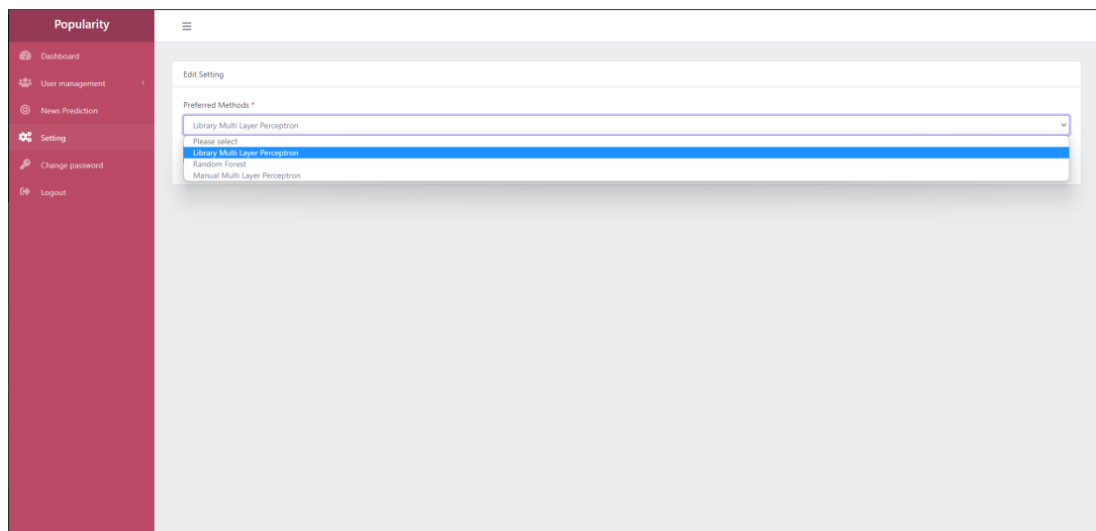


Figure 14 Setting Page

If choose different method, the method to predict news popularity will be change to selected method. Either landing and dashboard page, the method to predict will be automatically change same as preferred method.

7. Change Password Page

User also can edit their profile in Profile Edit page. In this page, user can update their password and personal information. User also can delete their own account with click button delete account form.

The screenshot shows a web application interface with a dark red sidebar on the left. The sidebar contains the following navigation items: Dashboard, User management, News Prediction, Setting, Change password (which is highlighted), and Logout. The main content area is light gray and contains three white form boxes. The first box is titled 'My profile' and has two input fields: 'Name *' with the value 'Admin' and 'Email *' with the value 'admin@admin.com'. Below these fields is a red 'Save' button. The second box is titled 'Change password' and has two input fields: 'New Password *' and 'Repeat New Password *'. Below these fields is a red 'Save' button. The third box is titled 'Delete account' and has a red 'Delete' button below it.

Figure 15 Change Password Page

Figure 15 is implementation of change password page. There are 3 forms that user can check. The first one is form to edit profile like name and email. The second one in left hand is change the password. The last one is delete account. If they delete their account, they can't to access their data anymore.