PORTFOLIO

Implementation Kuantan Flood Information Management Portal

Nor Alyani Nazirah Bt Kamarulzaman

INTRODUCTION

The purpose of chapter implementation will be discuss more details of the development for Kuantan Flood Information Management Portal. The project using the Rapid Application Development method, this may shorten the development time which is take around 4 to 5 months. The process of implementation of Kuantan Flood Information Management Portal that including the code for the system in every function for this project and flow on how the Portal system works. The testing process and techniques also will be discussed in this chapter for Kuantan Flood Information Management Portal in implementation process. Furthermore, discussion on the result of finding based on testing process on several test case where the process test the functionality of the Portal system based on the specification. The functionality of the Portal system will be testing and acceptance testing will be used in the chapter to test the system. In this chapter, all design interfaces, development, tools and technology of Portal flow will be discussed further based on the implementation in more details.

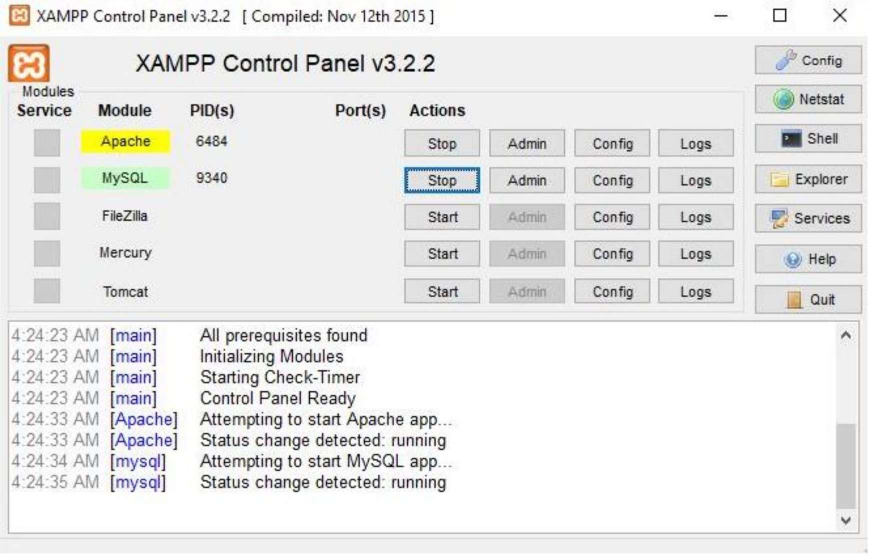
IMPLEMENTATION

This section, it will be discuss about the implementation of all task from the first implementation until the testing process. Developing this system will start installing tools Adobe Dreamweaver CC2018 that directly provide interface design of Portal directly after implement the code. Language using in implement the Portal system is PHP, CSS, Java and HTML code. Then, in order to store data for the Portal system will be using tools XAMPP Control Panel. Lastly, the main part of this portal system is development environment where it has been set up the configuration to become localhost of the system.

DEVELOPMENT ENVIRONMENT

To create a functional system of Kuantan Flood Information Management Portal, the most important part is to set up the computer to become a localhost server. XAMPP localhost is chosen to be the web server as it is free source application that stands for Cross-Platform(X), Apache (A), MariaBD (M), PHP (P) and Perl (P). XAMPP also easy to install and support PHP. Database server for this project using phpMyAdmin.

Figure 4.1 show the XAMPP control panel window that can run the server. Module apache and MySQL must allow to start to run the server. This two module will be switch on because MySQL module is the database for this Portal system.



XAMPP Control Panel v3.2.2 [Compiled: Nov 12th 2015]

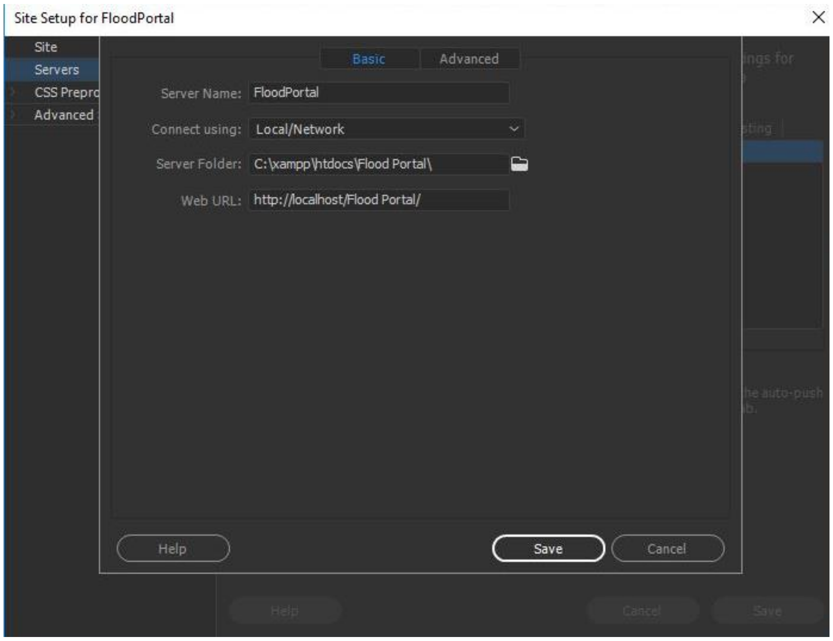
XAMPP Control Panel v3.2.2

Service	Module	PID(s)	Port(s)	Actions			
	Apache	6484		Stop	Admin	Config	Logs
	MySQL	9340		Stop	Admin	Config	Logs
	FileZilla			Start	Admin	Config	Logs
	Mercury			Start	Admin	Config	Logs
	Tomcat			Start	Admin	Config	Logs

```
4:24:23 AM  [main]      All prerequisites found
4:24:23 AM  [main]      Initializing Modules
4:24:23 AM  [main]      Starting Check-Timer
4:24:23 AM  [main]      Control Panel Ready
4:24:33 AM  [Apache]    Attempting to start Apache app...
4:24:33 AM  [Apache]    Status change detected: running
4:24:34 AM  [mysql]     Attempting to start MySQL app...
4:24:35 AM  [mysql]     Status change detected: running
```

Figure 1 XAMPP Control Panel

The challenging part was connection with phpMyAdmin and Dreamweaver that need connect the localhost with portal site that show in figure 4.2.Then, the problems solved by found the solution from YouTube as references because Dreamweaver is first experience using this tools. Files that store Portal site need connect with localhost in Dreamweaver server. Files that related with Portal system will locate in htdocs folder, will allow the system that directly connect with web server.



Site Setup for FloodPortal

Server Name: FloodPortal

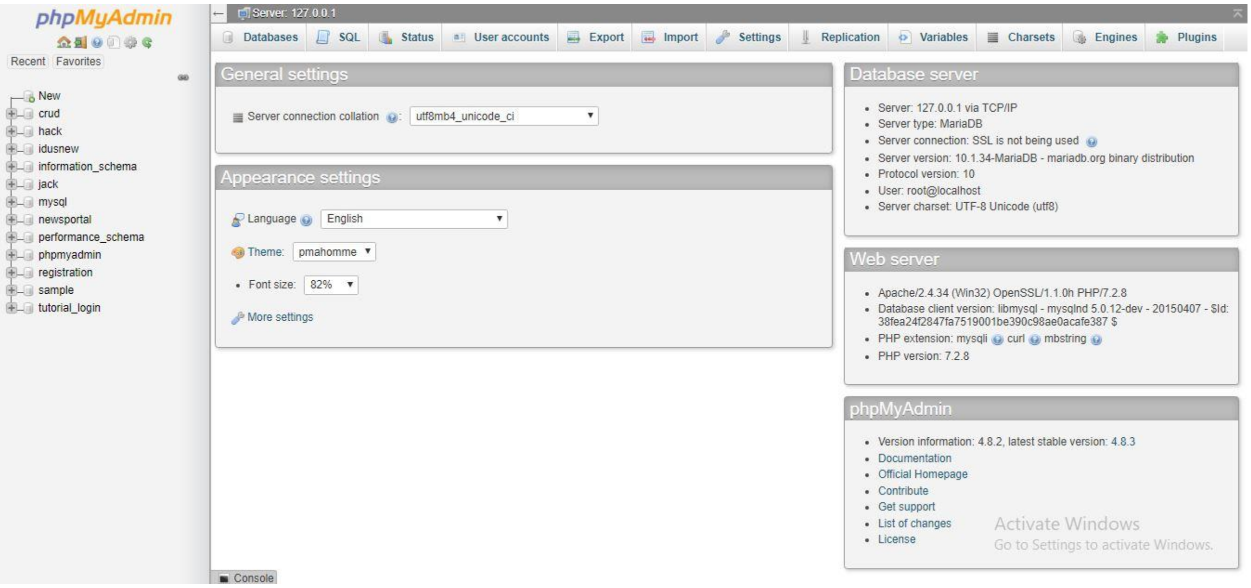
Connect using: Local/Network

Server Folder: C:\xampp\htdocs\Flood Portal\

Web URL: http://localhost/Flood Portal/

Figure 2 Site Setup for Kuantan Flood Information Portal connection server.

Figure 3 below show the phpMyAdmin working environment. Database name and table must be set up in order to create database connection. The database name be set up into any name and table in database can be set as many as function of the system that need to use. The connection Dreamweaver and database must stay connected before inserting any data into database table.



General settings

Server connection collation: utf8mb4_unicode_ci

Appearance settings

Language: English

Theme: pmahomme

- Font size: 82%

More settings

Database server

- Server: 127.0.0.1 via TCP/IP
- Server type: MariaDB
- Server connection: SSL is not being used
- Server version: 10.1.34-MariaDB - mariadb.org binary distribution
- Protocol version: 10
- User: root@localhost
- Server charset: UTF-8 Unicode (utf8)

Web server

- Apache/2.4.34 (Win32) OpenSSL/1.1.0h PHP/7.2.8
- Database client version: libmysql - mysqlnd 5.0.12-dev - 20150407 - $Id: 38fea24f2847fa7519001be390c98ae0acafe387 $
- PHP extension: mysqli curl mbstring
- PHP version: 7.2.8

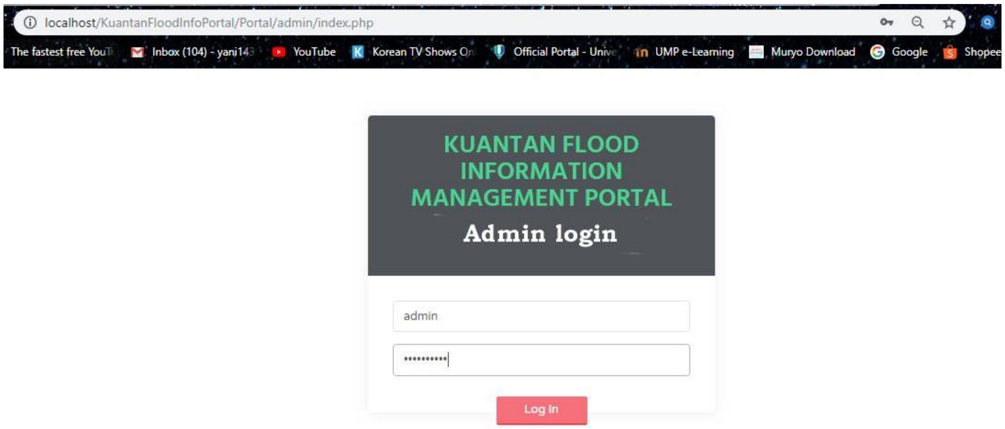
phpMyAdmin

- Version information: 4.8.2, latest stable version: 4.8.3
- Documentation
- Official Homepage
- Contribute
- Get support
- List of changes
- License

Activate Windows
Go to Settings to activate Windows.

Figure 3 PhpMyAdmin Working Environment

Figure 4 above shows the way address name the Portal system after make function in the code. The address name can be running on the browser by typing address name “localhost/KuantanFloodInfoPortal/Portal/admin/index.php” and right click on the open the browser that provide in Dreamweaver can choose either to open in Google Chrome, Mozilla Firefox or Internet Explorer. Admin login from my first developed, there just display text error message only, after try another method code will popup error messagei, if username or password wrong after user login. Then, popup message be able display in my admin login site.



localhost/KuantanFloodInfoPortal/Portal/admin/index.php

KUANTAN FLOOD INFORMATION MANAGEMENT PORTAL

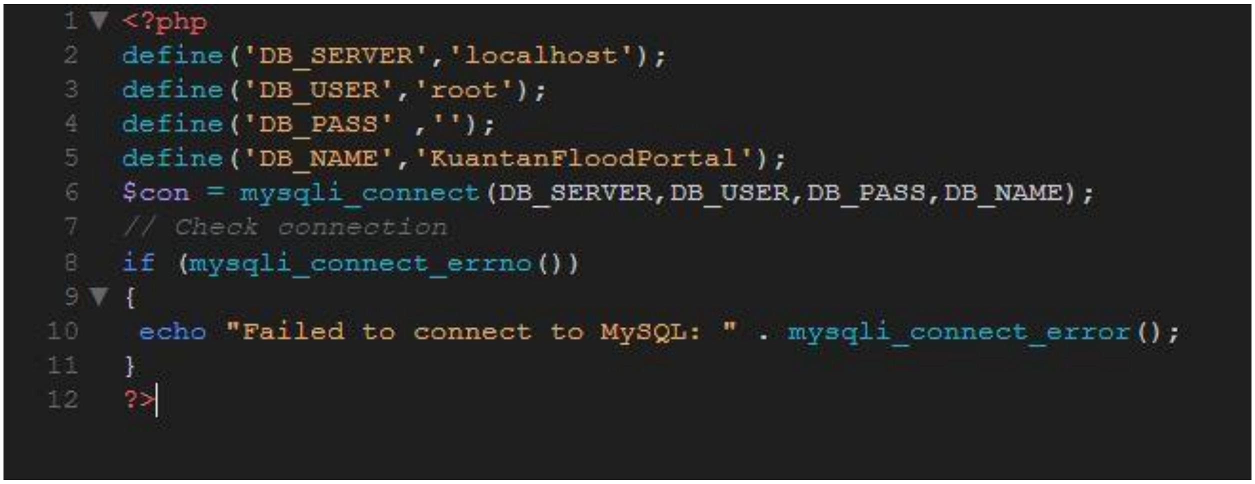
Admin login

admin

••••••••••

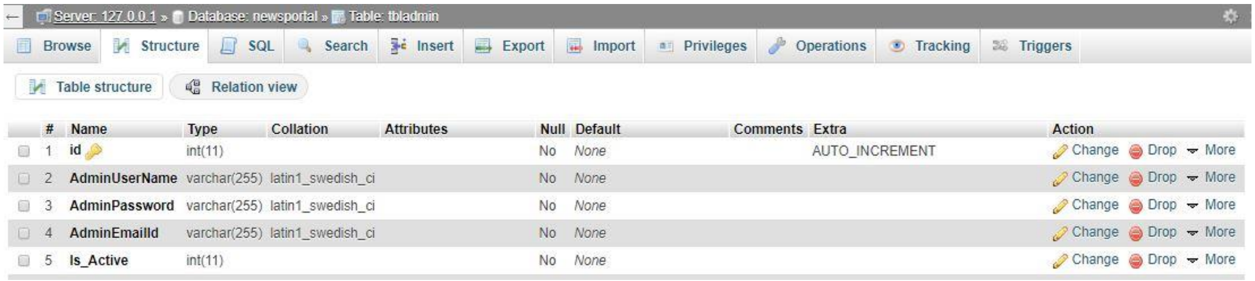
Figure 4 Address Name on the Running Server

Figure 5 above show connection database in PHP code to let information to store in database can connect with the server. The database application used for Kuantan Flood Information Management Portal is phpMyAdmin which the name given for database used is KuantanFloodPortal.



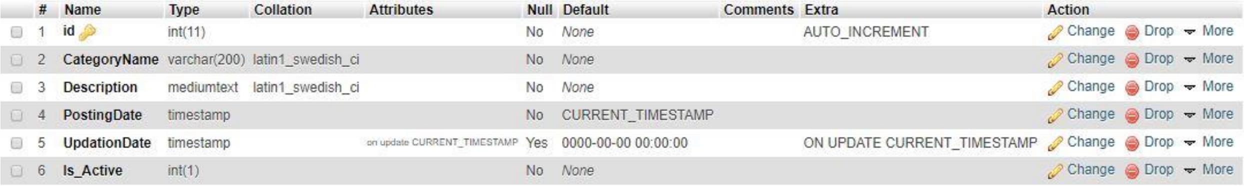
```php
<?php
define('DB_SERVER','localhost');
define('DB_USER','root');
define('DB_PASS' ,'');
define('DB_NAME','KuantanFloodPortal');
$con = mysqli_connect(DB_SERVER,DB_USER,DB_PASS,DB_NAME);
// Check connection
if (mysqli_connect_errno())
{
 echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
?>
```

Figure 5 Configuration database connection



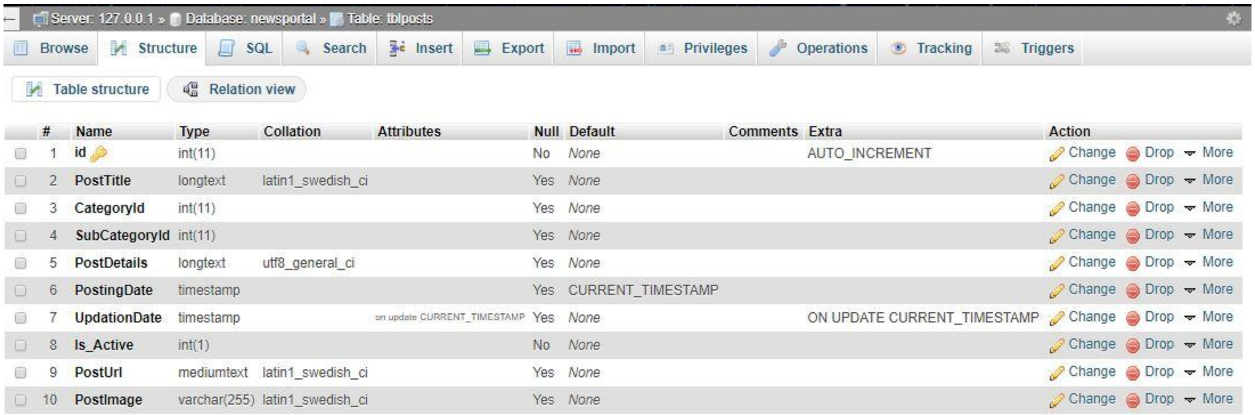
	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
□	1	id 🔑	int(11)			No	None		AUTO_INCREMENT	Change Drop More
□	2	AdminUserName	varchar(255)	latin1_swedish_ci		No	None			Change Drop More
□	3	AdminPassword	varchar(255)	latin1_swedish_ci		No	None			Change Drop More
□	4	AdminEmailId	varchar(255)	latin1_swedish_ci		No	None			Change Drop More
□	5	Is_Active	int(11)			No	None			Change Drop More

Figure 6 Administrator Table



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	*None*		AUTO_INCREMENT	Change Drop More
2	CategoryName	varchar(200)	latin1_swedish_ci		No	*None*			Change Drop More
3	Description	mediumtext	latin1_swedish_ci		No	*None*			Change Drop More
4	PostingDate	timestamp			No	CURRENT_TIMESTAMP			Change Drop More
5	UpdationDate	timestamp		on update CURRENT_TIMESTAMP	Yes	0000-00-00 00:00:00		ON UPDATE CURRENT_TIMESTAMP	Change Drop More
6	Is_Active	int(1)			No	*None*			Change Drop More

Figure 7 Category Table



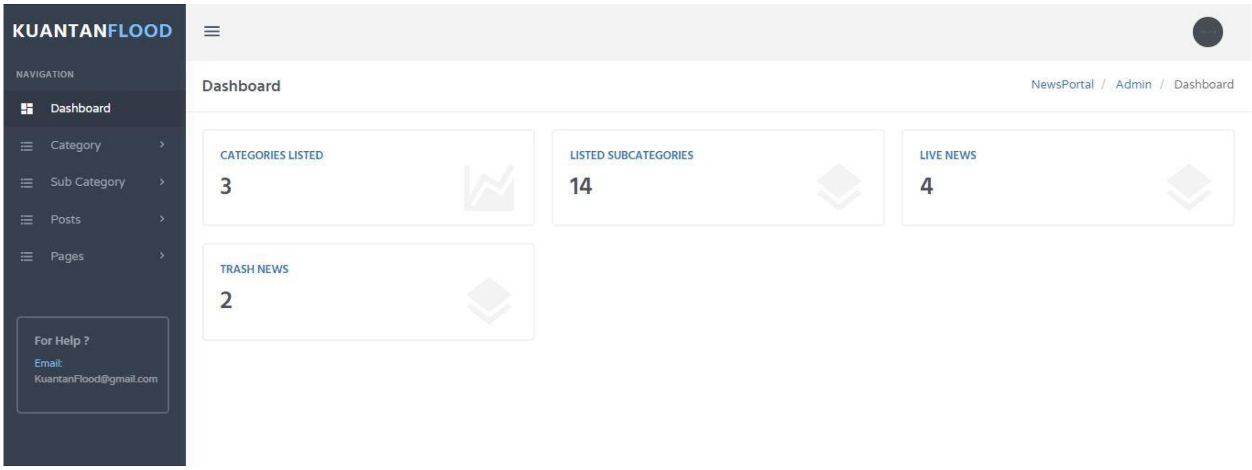
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	*None*		AUTO_INCREMENT	Change Drop More
2	PostTitle	longtext	latin1_swedish_ci		Yes	*None*			Change Drop More
3	CategoryId	int(11)			Yes	*None*			Change Drop More
4	SubCategoryId	int(11)			Yes	*None*			Change Drop More
5	PostDetails	longtext	utf8_general_ci		Yes	*None*			Change Drop More
6	PostingDate	timestamp			Yes	CURRENT_TIMESTAMP			Change Drop More
7	UpdationDate	timestamp		on update CURRENT_TIMESTAMP	Yes	*None*		ON UPDATE CURRENT_TIMESTAMP	Change Drop More
8	Is_Active	int(1)			No	*None*			Change Drop More
9	PostUrl	mediumtext	latin1_swedish_ci		Yes	*None*			Change Drop More
10	PostImage	varchar(255)	latin1_swedish_ci		Yes	*None*			Change Drop More

Figure8 Post Table

INTERFACE DESIGN DESCRIPTION

Administrator Interface

This interface that show in figure 4.9 list of sub menu for administrator as they can choose to click the selection. The selection menu are Dashboard, Category, Post, Page and Logout. The problem in developing this portal is about information “Forecast Flood” and “Evacuate plan” need to be separate but in developed the portal, “Forecast Flood” and “Evacuate Plan” combined in “Category” which is admin can create their own category that have information about “Forecast flood” and “Evacuate plan”.



CATEGORIES LISTED 3

LISTED SUBCATEGORIES 14

LIVE NEWS 4

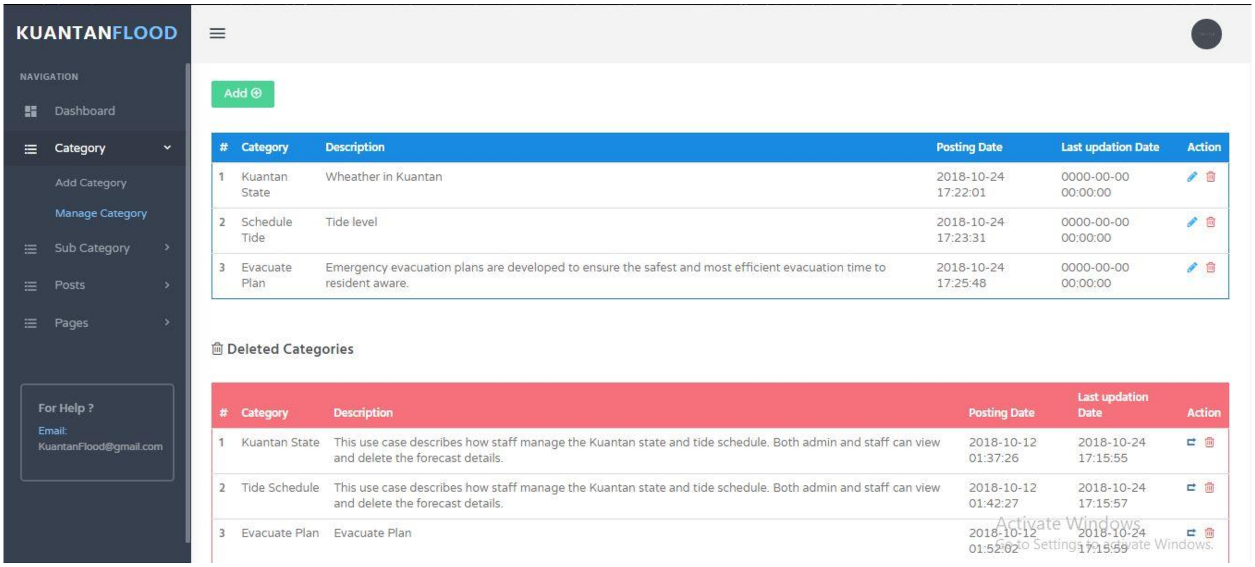
TRASH NEWS 2

For Help ?
Email:
KuantanFlood@gmail.com

Figure 9 Administrator main interface

Category Interface for Resident, Staff and Administrator.

This interface (Figure 10) show the list category that have sub menu in category which are add category and manage category can state information about Kuantan State, Schedule Tide and Evacuate Plan. This interface will give different access for each user. For resident, they can only view these information. Next, JPS and Administrator can create category by fill in form of Kuantan State, Schedule Tide and Evacuate Plan. They also can edit and delete the category too.

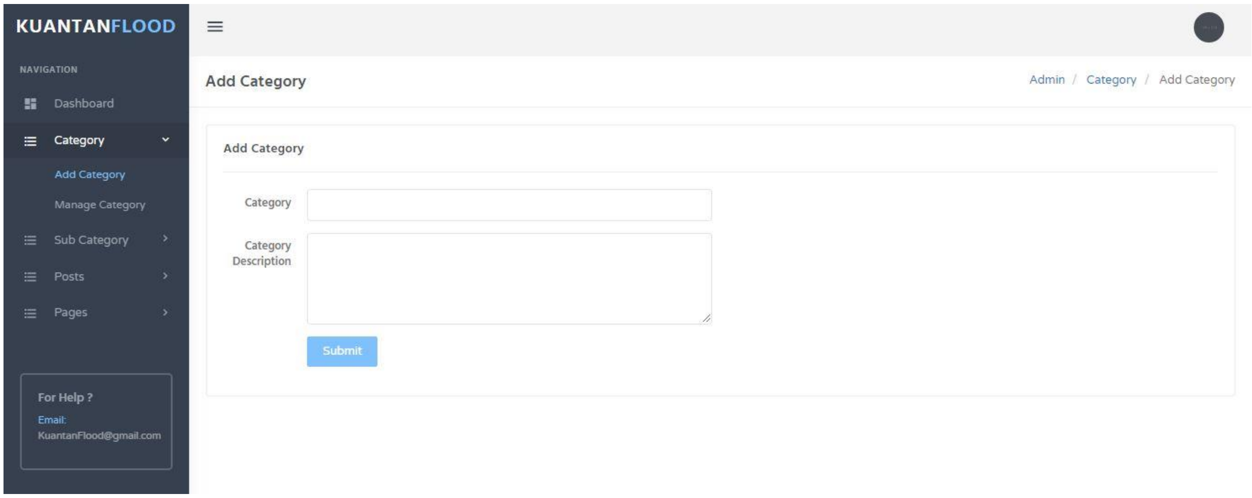


#	Category	Description	Posting Date	Last updation Date	Action
1	Kuantan State	Wheather in Kuantan	2018-10-24 17:22:01	0000-00-00 00:00:00	✎ 🗑
2	Schedule Tide	Tide level	2018-10-24 17:23:31	0000-00-00 00:00:00	✎ 🗑
3	Evacuate Plan	Emergency evacuation plans are developed to ensure the safest and most efficient evacuation time to resident aware.	2018-10-24 17:25:48	0000-00-00 00:00:00	✎ 🗑

🗑 Deleted Categories

#	Category	Description	Posting Date	Last updation Date	Action
1	Kuantan State	This use case describes how staff manage the Kuantan state and tide schedule. Both admin and staff can view and delete the forecast details.	2018-10-12 01:37:26	2018-10-24 17:15:55	↻ 🗑
2	Tide Schedule	This use case describes how staff manage the Kuantan state and tide schedule. Both admin and staff can view and delete the forecast details.	2018-10-12 01:42:27	2018-10-24 17:15:57	↻ 🗑
3	Evacuate Plan	Evacuate Plan	2018-10-12 01:52:02	2018-10-24 17:15:59	↻ 🗑

Figure 10 Category Interface



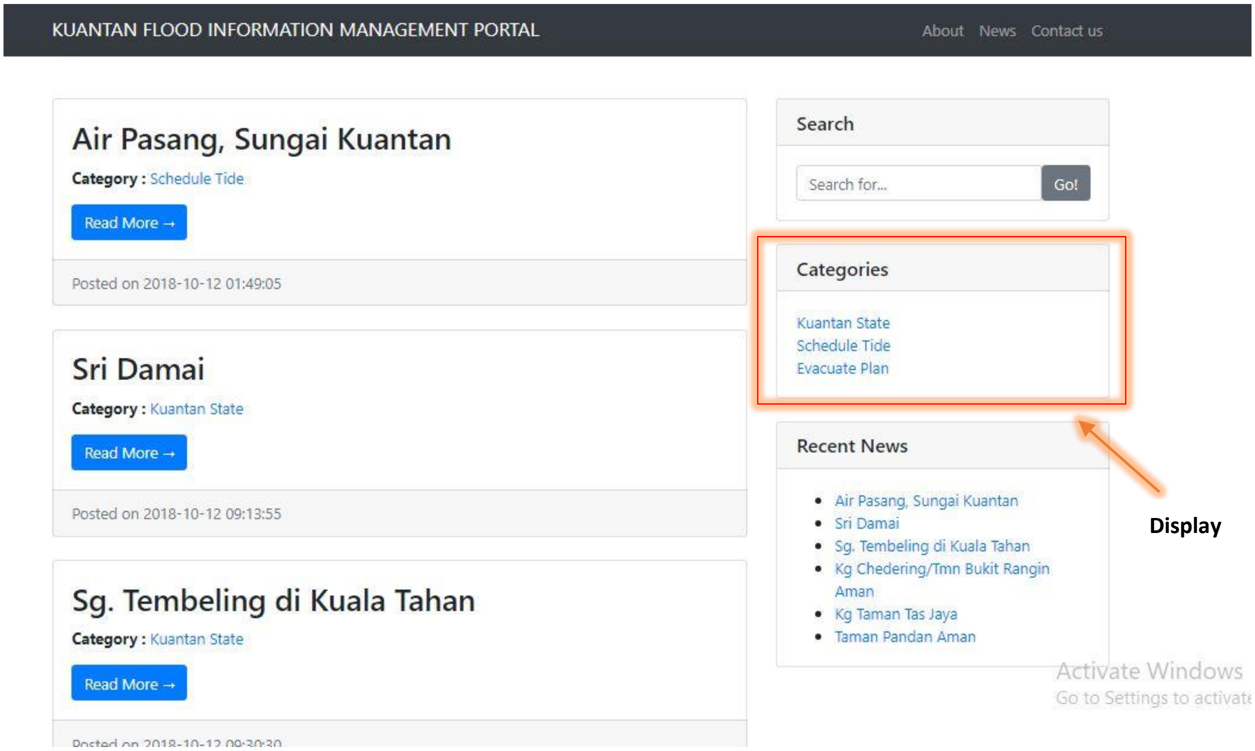
Add Category

Add Category

Category

Category Description

Figure 11 Add Category interface



Air Pasang, Sungai Kuantan

Category : Schedule Tide

Posted on 2018-10-12 01:49:05

Sri Damai

Category : Kuantan State

Posted on 2018-10-12 09:13:55

Sg. Tembeling di Kuala Tahan

Category : Kuantan State

Posted on 2018-10-12 09:30:30

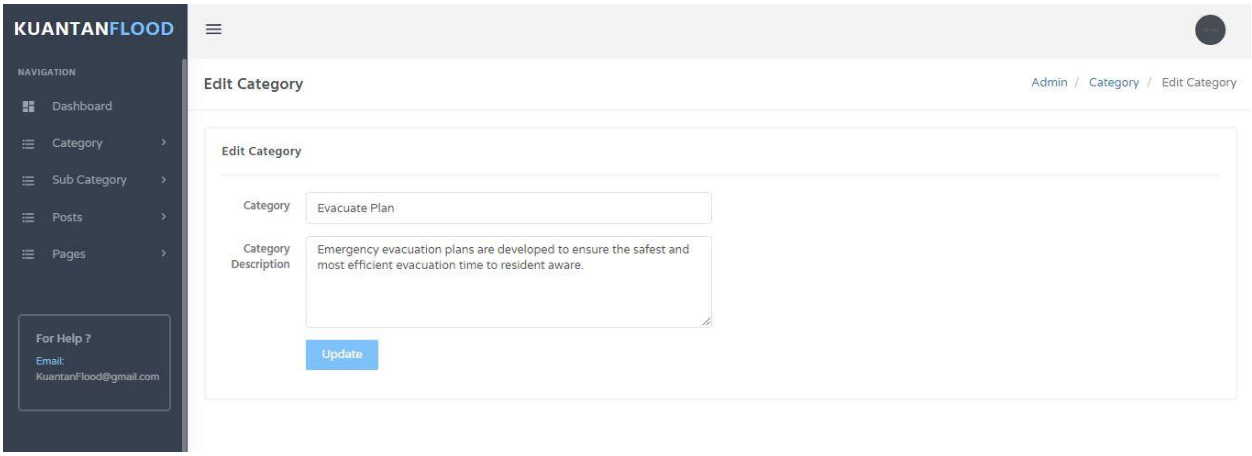
Categories

Kuantan State
Schedule Tide
Evacuate Plan

Recent News

- Air Pasang, Sungai Kuantan
- Sri Damai
- Sg. Tembeling di Kuala Tahan
- Kg Chedering/Tmn Bukit Rangin Aman
- Kg Taman Tas Jaya
- Taman Pandan Aman

Figure 12 View Category



Edit Category

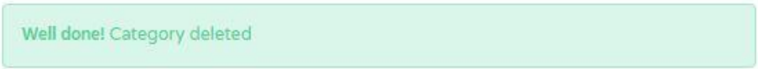
Edit Category

Category: Evacuate Plan

Category Description: Emergency evacuation plans are developed to ensure the safest and most efficient evacuation time to resident aware.

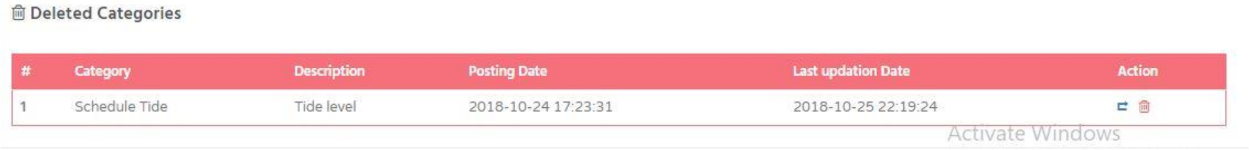
For Help ?
Email:
KuantanFlood@gmail.com

Figure 13 Update Category interface



Well done! Category deleted

Figure 14 Delete category temporarily



🗑 Deleted Categories

#	Category	Description	Posting Date	Last updation Date	Action
1	Schedule Tide	Tide level	2018-10-24 17:23:31	2018-10-25 22:19:24	⮌ 🗑

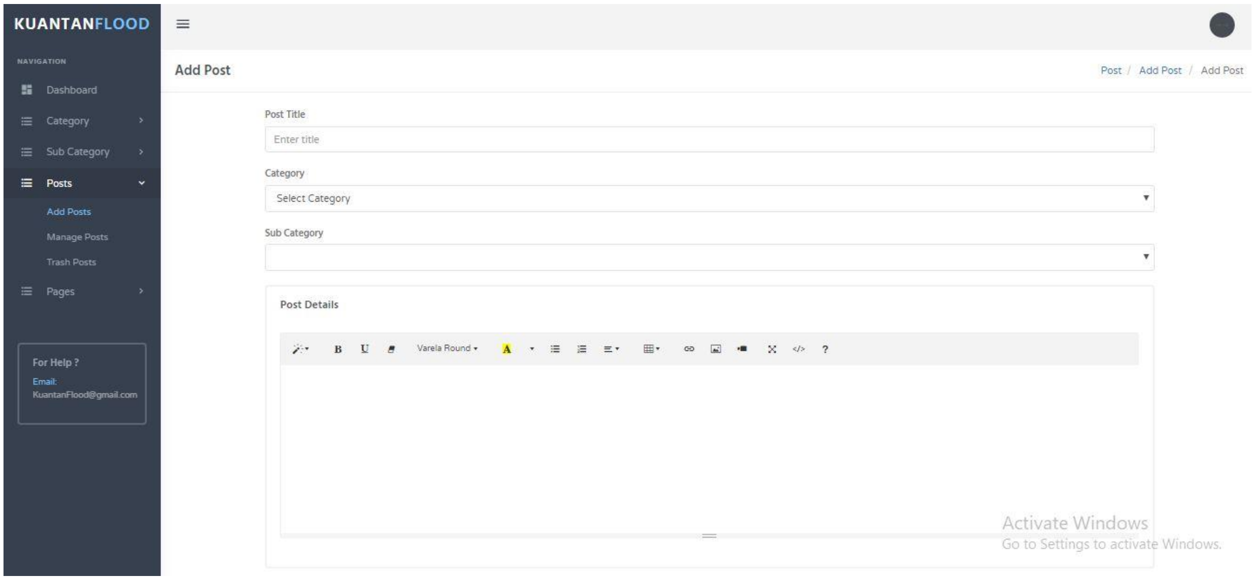
Figure 15 List delete category interface

Oh snap! Category deleted forever

Figure 16 Delete forever category interface

Posts Category information for resident, staff and Administrator.

Figure 4.17 only can be accesses by Staff JPS and administrator. They can create sub information from category information. The option add posts to allow staff JPS and administrator posts information about “Forecast Flood” and “Evacuate Plan” information. Figure 4.18 and 4.19 manage post that allow staff and administrator to update and delete posts. Then the information about Kuantan state, Schedule tide and Evacuate plan can view for resident after release by administrator.



Add Post

Post Title

Enter title

Category

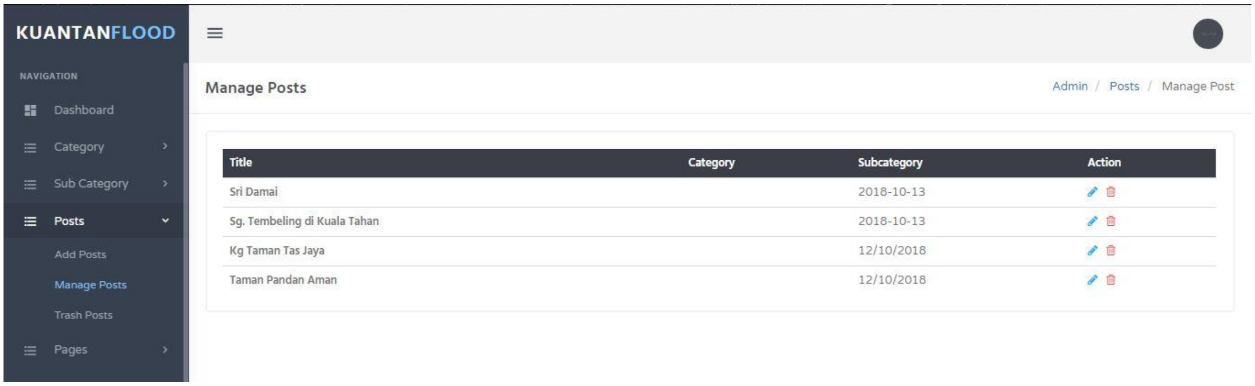
Select Category

Sub Category

Post Details

For Help ?
Email:
KuantanFlood@gmail.com

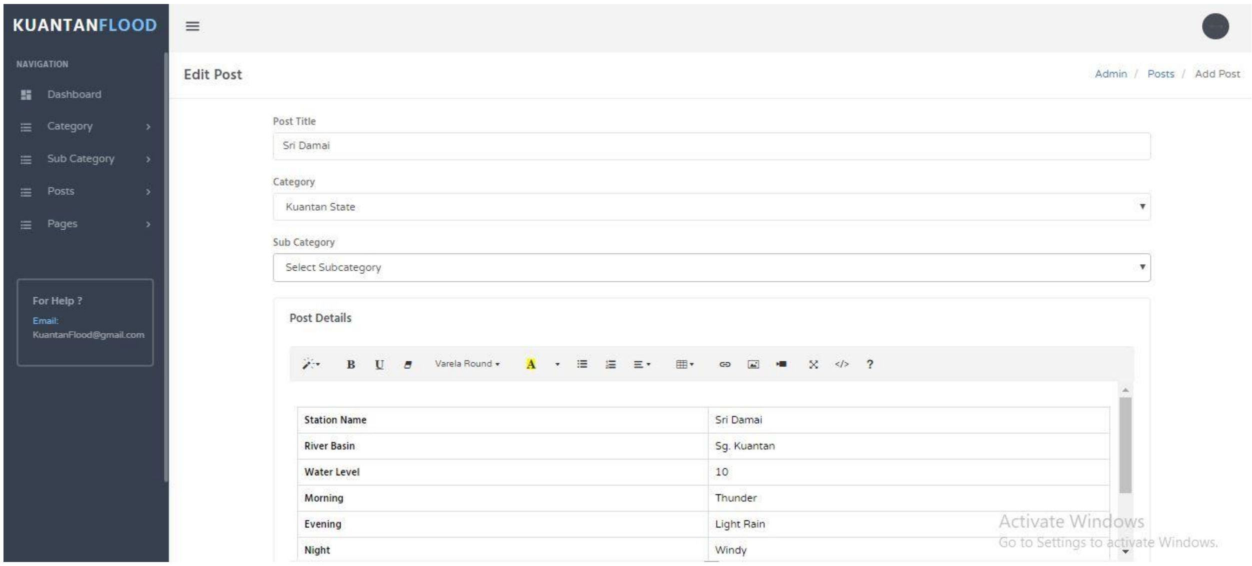
Figure 17 Add posts interface



Manage Posts

Title	Category	Subcategory	Action
Sri Damai		2018-10-13	
Sg. Tembeling di Kuala Tahan		2018-10-13	
Kg Taman Tas Jaya		12/10/2018	
Taman Pandan Aman		12/10/2018	

Figure 18 Manage Posts interface



Edit Post

Post Title: Sri Damai

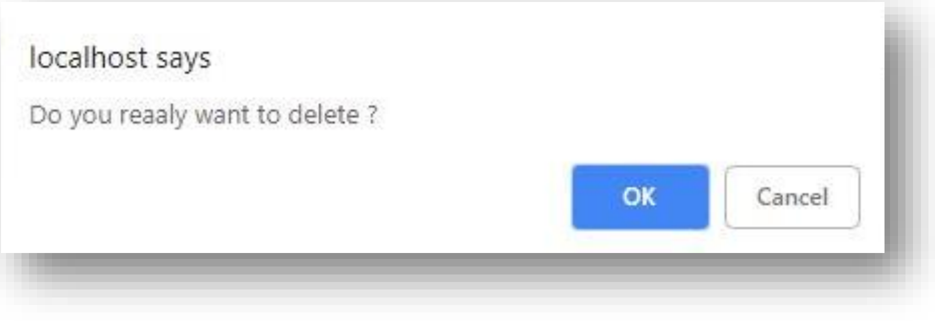
Category: Kuantan State

Sub Category: Select Subcategory

Post Details

Station Name	Sri Damai
River Basin	Sg. Kuantan
Water Level	10
Morning	Thunder
Evening	Light Rain
Night	Windy

Figure 19 Update posts interface

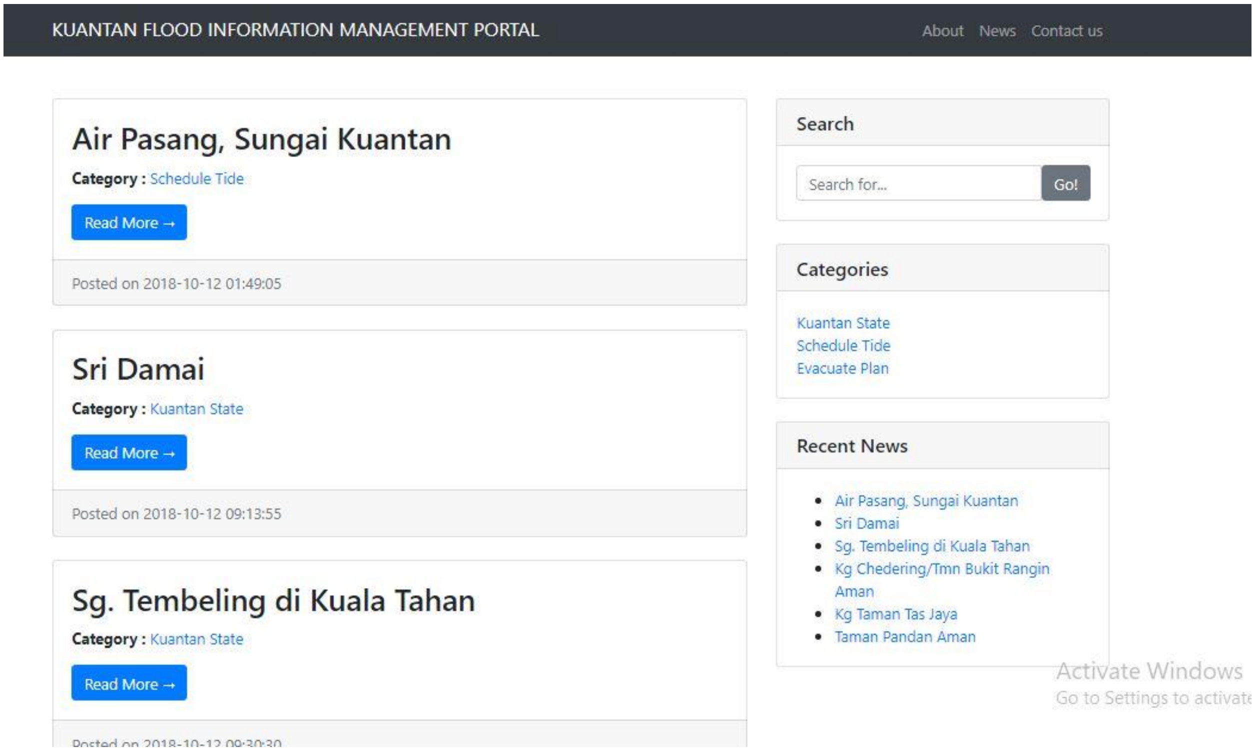

localhost says

Do you reaaly want to delete ?

Figure 20 Popup Message delete posts interface

Resident Kuantan View interface

Figure 21 show above main page for resident interface and can be access by all user. This interface release from JPS staff and administrator site where resident can get information about Kuantan Flood. Functions provide are view and search function in this resident site.



Air Pasang, Sungai Kuantan

Category : Schedule Tide

Posted on 2018-10-12 01:49:05

Sri Damai

Category : Kuantan State

Posted on 2018-10-12 09:13:55

Sg. Tembeling di Kuala Tahan

Category : Kuantan State

Posted on 2018-10-12 09:30:30

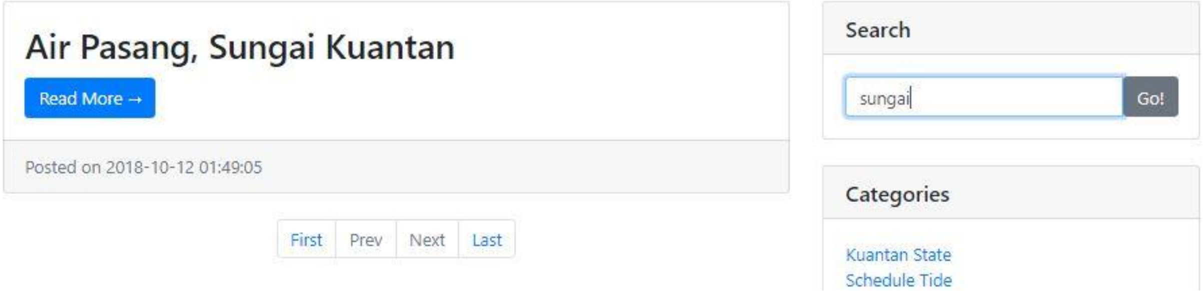
Categories

Kuantan State
Schedule Tide
Evacuate Plan

Recent News

- Air Pasang, Sungai Kuantan
- Sri Damai
- Sg. Tembeling di Kuala Tahan
- Kg Chedering/Tmn Bukit Rangin Aman
- Kg Taman Tas Jaya
- Taman Pandan Aman

Figure 21 Home Page for resident interface



Air Pasang, Sungai Kuantan

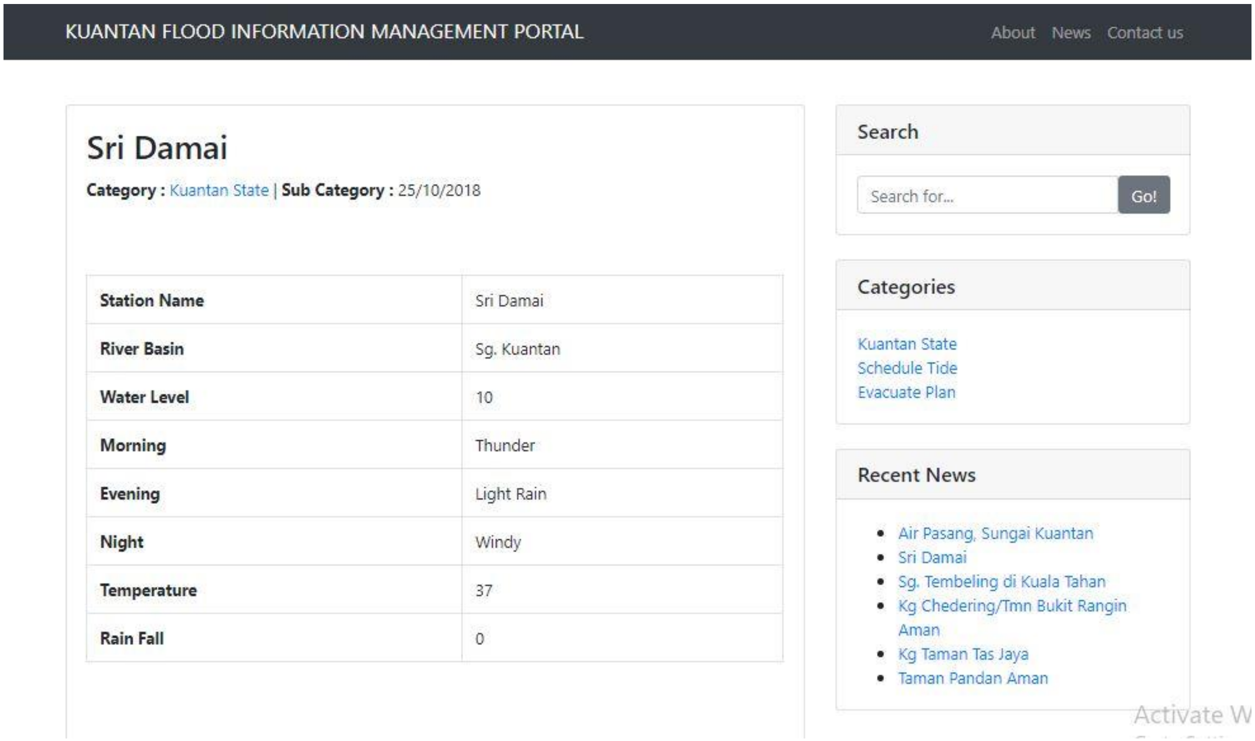
Posted on 2018-10-12 01:49:05

sungai

Categories

Kuantan State
Schedule Tide

Figure 22 Search function.



Sri Damai

Category : Kuantan State | **Sub Category :** 25/10/2018

Station Name	Sri Damai
River Basin	Sg. Kuantan
Water Level	10
Morning	Thunder
Evening	Light Rain
Night	Windy
Temperature	37
Rain Fall	0

- Air Pasang, Sungai Kuantan
- Sri Damai
- Sg. Tembeling di Kuala Tahan
- Kg Chedering/Tmn Bukit Rangin Aman
- Kg Taman Tas Jaya
- Taman Pandan Aman

Figure 22 View posts for Kuantan State category interface